

# **NCATE Institutional Report ESPB Program Standards Supplement**

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## Introduction

This supplemental document provides information about how each NDSU Teacher Education degree program meets the North Dakota Educational Standards and Practices Board (ESPB) Program Approval Standards. For each program standard we list where the material is found in our degree program, and what performance evidence is provided by students to demonstrate their capability in relation to the standard. Specific examples of assessment items and samples of student work will be provided in the exhibits.

## MULTICULTURAL EDUCATION AND NATIVE AMERICAN STUDIES STANDARD

Teacher education candidates attain the standard of Multicultural Education and Native American studies predominantly through three courses in the teacher education program. The primary course is EDUC 489: Native American / Multicultural Education. Supporting Courses include EDUC 451: Instructional Planning, Methods and Assessment, and EDUC 381 Early Experience. In addition, teacher candidates are placed in a variety of settings in the Fargo-Moorhead area and beyond for student teaching experiences with diversity.

**Where in program:** EDUC 489, EDUC 381, EDUC 451, EDUC/H&CE 487 – Student teaching

### General content of EDUC 489

Textbooks used:

- *Collected Wisdom: American Indian Education*, by Cleary and Peacock, published by Allyn and Bacon
- *A Framework for Understanding Poverty*, by Payne, published by aha! Press

Other texts referenced in presentations by the instructor:

- *The Dreamkeepers: Successful Teachers of African American Children*, by Gloria Ladson-Billings, published by Jossey-Bass
- *Justice and Caring: The Search for Common Ground*, by Katz, Noddings, and Strike, published by Teachers College Press
- *The Intersection of Cultures: Multicultural Education in the United States and the Global Economy*, by Spring, published by McGraw-Hill
- *Multicultural Education: A Caring-Centered, Reflective Approach*, by Ooka Pang, published by McGraw-Hill
- *Barefoot Heart: Stories of a Migrant Child*, by Hart, published by Bilingual Press
- *Oglala Religion*, by Powers, published by University of Nebraska Press
- *Why Are All the Black Kids Sitting Together in the Cafeteria?*, by Tatum, published by Basic Books
- *Halfbreed*, by Campbell, published by University of Nebraska Press

**Evidence:** How do students demonstrate their knowledge?

1. Reflective writings: Students write a 3-5 page paper on each chapter of the Cleary and Payne tests using a series of writing prompts. The prompts require that the students approach the information from several different perspectives in order to demonstrate understanding of the text and ability to apply it in classroom and real-world situations. They are also required to

support their views with information from another reliable source. Most often this is one of the many internet sites dealing with Native American culture and education.

2. Presentations: The students give 2 presentations over the course of the semester, one on Native American culture and one on some other disadvantaged group in schools. These groups include: ELL/ESL, Special Education, Refugees, Immigrants, and GLBT among others. They are not exactly the same every semester as students are allowed to research areas of their own interest.
3. Programs attended: Students are encouraged to attend four hours of special programs relating to Multicultural Education. After attending, they answer two questions about the programs: (a) What did you see that relates to this class, and (b) How will you use this in your teaching career? Approved programs include the Powwow and speakers the University sponsors on campus.
4. In their EDUC 451 classes, students teach micro-lessons in which multicultural education needs to be embedded in the lesson. This is scored according to a rubric, and needs to include things like: use of names or examples from culturally diverse groups, appropriate adaptations for assessment strategies, consideration of homework possibilities, and ideas for improving motivation for students from varied socio-economic situations.
5. In their EDUC 381 classes, students work with children in the ESL/ELL program in the Fargo and West Fargo public schools. Here they encounter people from a large variety of ethnic and linguistic backgrounds, and actively work with them on the educational that the teacher has set for that time.
6. Teacher candidates complete a portfolio. In addition to course specific assignments which allow them to learn and practice concepts central to teaching agriculture, the portfolio provides further opportunity to demonstrate their knowledge, skills and dispositions. The portfolio which is based on the INTASC standards is a culmination of many assignments and activities of these teacher candidates.
7. During student teaching, teacher candidates address a variety of diversity issues. They also must teach in a matter conducive to student learning.

### **8.01 AGRICULTURE EDUCATION**

The Agriculture Education major is designed to combine general education studies, preparation for effective teaching, and a broad background in agriculture. The program provides teacher candidates with many opportunities to meet ESPB standards. In addition to course specific assignments which allow them to learn and practice concepts central to teaching agriculture, the portfolio provides further opportunity to demonstrate their knowledge, skills and dispositions. The portfolio which is based on the INTASC standards is a culmination of many assignments and activities of these teacher candidates. The teaching specialty courses in agriculture provide them with the broad topics that will be taught in a high school agriculture program. In addition, advising youth organizations and facilitating student leadership is included in the program. The

courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

### **8.1.1 The program requires the study of the biological, physical, and applied sciences and mathematics as basic to understanding their application to solving agricultural problems.**

**Where in program:** Department requirements identify key general education courses students take that are directed toward this standard. In addition, the content requirements include agriculture content courses that provide use of biological, physical, and applied sciences and mathematics processes. See attached (attached or in exhibits?) degree sheet for list of courses. In additions, the teaching methods in agriculture course incorporates student teaching presentations much which use the biological, physical, and applied sciences and mathematics processes in teaching agriculture.

**Evidence:** tests, presentations, lab activities, micro teaching

### **8.1.2 The program requires study and experiences in (1) agricultural engineering and mechanization; (2) plant and soil science and technology; (3) animal science and technology; (4) agricultural economics and business management, and technology related to these areas; and (5) leadership in agriculture.**

**Where in program:** The content courses required for this major address the topics outlined in this standard. Students are required to take the following: 10 credits of Agriculture economics, 10 credits of Agriculture Systems Management, 12 credits of Animal Science/Veterinary Science, 14 credits of plant science/soil science, 2 credits of electives. See exhibits for list of courses in teaching specialty. H&CE 341 – Leadership and Presentation provides opportunities in leadership. H&CE 481 – Teaching Methods in Agriculture provides opportunity to apply concepts learned in teaching specialty courses.

**Evidence:** tests, presentations, lab activities, micro teachings, parliamentary procedure demonstrations, cooperative learning activities, micro lessons, portfolios

### **8.1.3 The program requires experience in one or more of the specialized occupational areas related to agricultural production and marketing, agricultural equipment and supplies, occupational sales and services, agricultural products, horticultural sciences, agricultural business, natural resource management, or environmental science.**

**Where in program:** The content courses required for this major address the topics outlined in this standard. See attached degree sheet for list of courses. In addition, H&CE 444 – Planning the community program in Agriculture Education focuses on SAE activities and building community relationships. H&CE 481 – Teaching methods in Agriculture provides opportunity for students to demonstrate their abilities in content areas described in some of the performance assessments

**Evidence:** tests, presentations, lab activities, micro teaching, parliamentary procedure demonstrations, cooperative learning activities, program reviews of high school Agriculture Education programs, field trips to high school Agriculture Education programs.

#### **8.1.4 The program requires experiences designed to develop knowledge and involvement in agricultural youth organizations.**

**Where in program:** Predominantly in H&CE 444 – Planning the community program in Agriculture Education. Students are also provided opportunity to work with high school Agriculture Education programs in various FFA activities – the youth organization associated with Agriculture Education.

**Evidence:**

#### **8.1.5 The program requires studying the methods of teaching agriculture including current trends in agricultural education and safe and appropriate laboratory and classroom practices, with an examination of a variety of teaching methods and techniques.**

**Where in program:** Specifically taught in H&CE 481 – Methods of teaching agriculture. This course provides information on issues specific to Agriculture Education and assessment techniques. In addition, instructional strategies are developed in EDUC 451 – Instructional Strategies, Methods, and Assessments. Students further practice this in student teaching, H&CE 487.

**Evidence:** micro teachings, portfolios, rubric/assessment development, lesson/unit plans, curriculum mapping

#### **8.1.6 The program requires the study of current, appropriate instructional and agri-science technologies.**

**Where in program:** Specifically taught in H&CE 481 – Methods of teaching agriculture. This course provides information on issues specific to Agriculture Education and assessment techniques. In addition, instructional strategies are developed in EDUC 451 – Instructional Strategies, Methods, and Assessments. Students further practice this in student teaching, H&CE 487.

**Evidence:** micro teaching, portfolios

### **8.10 ENGLISH**

English Education candidates complete a variety of courses which address the ESPB standards. In addition, candidates complete a portfolio, based on the ten INTASC standards, which is a compilation of work from their English and education classes, as well as from their student teaching experience. Both teaching specialty courses and education courses provide opportunities for students to develop knowledge, skills and dispositions to prepare them for the teaching profession.

The courses with assignments and experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

### **8.10.1 GRAMMAR AND USAGE (MINIMUM 3 SEMESTER HOURS)**

**The program requires the study of English language content including a) language development, b) history of language, c) grammar, d) dialects and levels of usage, and e) the purpose of language; and uses a variety of performance assessments of candidates' understanding and ability to apply that knowledge.**

**Where in program:** ENGL 450 – Contemporary Linguistics, ENGL 451 – Advanced English Grammar, EDUC 482 – Methods of Teaching English II (Teaching Writing)

**Evidence:** Quizzes, exams, learning logs, micro lessons, portfolios, research units

### **8.10.2 DEVELOPMENTAL READING (MINIMUM 3 SEMESTER HOURS)**

**The program requires the study of reading, including a) ways of responding to written literature and other written material, b) reading for different purposes c) application of decoding and comprehension strategies; and d) methods of assisting secondary students with reading skills; and use a variety of performance assessments of candidates' understanding and ability to apply that knowledge.**

**Where in program:** EDUC 481 – Methods of teaching English I

**Evidence:** Create units for teaching short stories, poetry, drama, adolescent and classical novels for high school students; also create and teach a reading unit to 7<sup>th</sup>-grade students in a practicum experience; assessments, annotated portfolios

### **8.10.3 LITERATURE (MINIMUM. 9 SEMESTER HOURS)**

**The program requires the study of literature, emphasizing major representative works and writers in American, English, and world literature; including samplings from adolescent literature, works by female writers, works by writers of color and ethnic diversity, and works of analysis and criticism.**

**Where in program:** Required courses: ENGL 222 – Introduction to Poetry, ENGL 240 – World Literature Masterpieces, ENGL 251 – British Literature I or 252 – British Literature II, ENGL 261 – American Literature I or 262 – American Literature II, ENGL 271 – Literacy Analysis, ENGL 380 – Shakespeare. Two additional 3-credit, 300 or 400-level literature courses will be required beginning fall 2005 – selected from courses in multicultural literature, women writers, the short story, and the novel.

**Evidence:** portfolios, create short story unit, drama unit, reading unit, assessments, annotated portfolios of different poetry types and different periods, present lessons on poetry, short stories, drama, and two novels; tests and papers

#### **8.10.4 COMPOSITION (MINIMUM 6 SEMESTER HOURS)**

**The program requires the study of composition including a) understanding of the composition processes, b) understanding and practicing composition for different purposes and audiences; and uses a variety of performance assessments of candidates' understanding and ability to apply that knowledge.**

**Where in program:** EDUC 482 – Methods of teaching English II (Teaching Writing), ENGL 358 – Intermediate Composition, ENGL 458 – Advanced Writing Workshop

**Evidence:** learning logs, micro lessons, portfolios of writing that satisfy three department outcomes in writing, research units,

#### **8.10.5 SPEECH (MINIMUM 3 SEMESTER HOURS)**

**The program requires the study of speaking and listening, and offers experiences in communication, such as public speaking, oral interpretation, group decision making, television, film, print, interpersonal communication, and organizational communication.**

**Where in program:** COMM 110 – Speech Communication, EDUC 481

**Evidence:** speech presentations, lesson presentations, incorporation of speaking in all units for EDUC 481

#### **8.10.6 MEDIA**

**The program requires the study of non-print media including a) the comparisons of non-print and print media and b) analysis of non-print media; and uses a variety of performance assessments of candidates' understanding and ability to apply that knowledge.**

**Where in program:** EDUC 451 – Instructional Planning, Methods, Assessment, EDUC 481 – Methods of teaching English I (Teaching Reading & Literature), EDUC 482 – Methods of teaching English II (Teaching Writing)

**Evidence:** learning logs; micro lessons using art, music, PowerPoint; portfolios in PowerPoint on CD-ROMs; research units; create short story unit, drama unit, reading unit, all incorporating various forms of media; assessments, annotated portfolios

#### **8.10.7 METHODS (MINIMUM 3 SEMESTER HOURS)**

**The program requires the study of teaching English language arts including current trends in English language arts with an examination of a variety of teaching methods and techniques; and uses a variety of performance assessments of candidates' understanding and ability to apply that knowledge.**

**Where in program:** EDUC 481 – Methods of teaching English I (Teaching Reading & Literature), EDUC 482 – Methods of teaching English II (Teaching Writing) , EDUC 451 – Instructional Strategies, Methods and Assessment, EDUC 487 – Student teaching

**Evidence:** presentations, micro teachings, creating lessons & units, portfolios, learning logs, assessment assignments/create rubrics

### **8.10.8 INSTRUCTIONAL TECHNOLOGY**

**The program requires the study of current, appropriate instructional technologies.**

**Where in program:** EDUC 481 – Methods of teaching English I, (Teaching Reading & Literature), EDUC 482 – Methods of teaching English II (Teaching Writing), EDUC 451 – Instructional Strategies, Methods and Assessment, EDUC 487 – Student teaching

**Evidence:** presentations, micro teachings, creating lessons & units, portfolios, assessment assignments/create rubrics

## **8.12 FOREIGN LANGUAGES**

Foreign Languages Education candidates are given many opportunities to learn material required by the ND ESPB teacher education standards and to demonstrate their capabilities in those areas. The Teacher Education Portfolio provides a comprehensive overview of demonstrated candidate capabilities in relation to these standards. Student portfolios include (a) a reflective statement about each of the 10 INTASC Standards, (b) two artifacts for each, along with (c) a rationale for their inclusion. Additionally, candidates demonstrate capabilities relating to each of these ESPB Standards in a variety of Education and Foreign Languages (Spanish and French) courses that are required by the Foreign Languages Education program. The courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

**8.12.1 The program requires study designed to develop skill in the use of the target language, including: (a) understanding the spoken language; (b) oral proficiency sufficient to be understood by native speakers; (c) reading the language with comprehension; and (d) writing proficiency sufficient for everyday tasks.**

### **Where in program:**

SPAN 311 (Spanish Conversation and Composition), SPAN 312 (Conversation and Composition), SPAN 315 (Spanish/Latin American Culture and Civilization), all advanced courses (SPAN 401 Advanced Grammar and Composition, SPAN 410 Introduction to Spanish Literature, SPAN 412 Contemporary Latin American Literature, SPAN 498 courses Seminar: Miguel De Cervantes Saavedra; Seminar: Introduction to Chicano Literature), SPAN 492 Capstone Study Abroad, SPAN 489 Capstone Thesis, one year of another language. FREN 311 (French Conversation and Composition I), FREN 312 (French Conversation and Composition II), FREN 315 (Introduction to French Civilization), all advanced courses (FREN 350 Introduction to French Linguistics and Pronunciation, FREN 410 French Literature to 1600, FREN 411 17<sup>th</sup> and 18<sup>th</sup> Century French Literature, FREN 412 19<sup>th</sup> and 20<sup>th</sup> Century French Literature), FREN 492 Capstone Study Abroad, FREN 489 Capstone Thesis, one year of another language.

**Evidence:**

Exams, quizzes, class participation, homework, final exam, oral performance, compositions, reaction papers, mini-essays, abstracts, oral interviews, and autobiographies.

**8.12.2 The program requires study designed to develop skill in language analysis, including: (a) the development and syntax of the language, (b) the clarification of the differences and similarities between the language and English, (c) using the knowledge derived from applied linguistics in studying the language.**

**Where in program:**

SPAN 401; FREN 350

**Evidence:**

Spanish: Exams, quizzes, presentations, written work, class performance, final exam. French: oral and written tests, daily participation and preparation, cassette tape recordings, transcriptions

**8.12.3 The program requires study designed to provide knowledge of the culture(s), including: (a) classifying the principal ways in which the culture(s) resemble(s) and differ(s) from that of the United States; (b) understanding geography, history, social customs, literature, art, and music, and their roles in the contemporary civilization of the culture(s); and (c) displaying knowledge of representative literary works.**

**Where in program:**

SPAN 315, all advanced courses (SPAN 401, SPAN 410, SPAN 412, SPAN 498 courses), SPAN 492, SPAN 489.

FREN 315, all advanced courses (FREN 350, FREN 410, FREN 411, FREN 412), FREN 492, FREN 489.

**Evidence:**

Spanish: daily exercises reacting to assigned readings; preparing questions for group discussions; presentations in class on articles and readings from current Latin American newspapers and websites, mini-essays on videos, films, readings, and discussions; outside classroom activities, term paper.

French: tests, research papers on several topics, oral presentations, summaries, reaction papers, participation in class discussions, in-class exams, cumulative final

**8.12.4 The program requires studying methods of teaching foreign language including current trends in foreign language with an examination of a variety of teaching methods, techniques and theory.**

**Where in program:**

EDUC 451 (Instructional Planning, Methods, and Assessment), EDUC 481 (Spanish Education Methods), EDUC 481 (French Education Methods), EDUC 486 (Classroom Management of Diverse Learners), and EDUC 487 (Student Teaching).

**Evidence:**

Syllabi describe the evidence of microteaching lessons, teaching lessons in local area classrooms, lesson and unit plan development, case studies, videotaped analyses of teaching, examining students work, developing and giving assessments.

**8.12.5 The program requires the study of current, appropriate instructional technologies.****Where in program:**

EDUC 451, EDUC 481, EDUC 486, EDUC 487

**Evidence:**

Language labs; grading, record keeping, and reporting software, class presentation software, Internet, and audio and video programs.

**8.13 HEALTH EDUCATION**

The courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

**8.13.1 The program requires study of personal health over the life span.**

**The program includes the dimensions of health (social, physical, intellectual, emotional, spiritual) including the changes that occur throughout life and how these changes differ among individuals. It includes (a) emotional and mental health; (b) physical fitness; (c) nutrition; and (d) the effects of substance abuse on emotional, physical, and social health.**

**Where in program:**

HNES 160 Foundations of Health Professions  
HNES 341 Psychosocial Aspects of Health,  
HNES 355 International Health  
HPER 217 Personal and Community Health  
NUTR 240 Principles of Nutrition  
HNES 250 Nutrition Science  
HNES/PSYC212 Psychological Aspects of Drug Use and Abuse

**Evidence:**

Assignments, discussion, in-class activities, research and exams

**8.13.2 The program requires study of health promotion and disease prevention including: communicable diseases (including HIV/AIDS, Sexually Transmitted Infections) and non-communicable diseases (including chronic and degenerative).**

**Where in program:**

HNES 355 International Health  
HPER 217 Personal and Community Health

**Evidence:**

Assignments, discussions, in-class activities, research and exams

**8.13.3 The program requires study of decision-making skills related to the ability to access and evaluate health related information, including consumer selection of health products and professional services.****Where in program:**

HNES 345 Materials and Concepts of Health Education  
HNES 420 Evaluation in Health Education  
HNES 445 Organization and Administration of Coordinated Health Programs  
HPER 217 Personal and Community Health

**Evidence:**

Assignments, discussions, in-class activities, lesson plans, portfolios, research and exams

**8.13.4 The program requires study of the physical, social and emotional aspects of human sexuality and parenting.****Where in program:**

HNES 341 Psychosocial Aspects of Health  
HNES/PSYC 210 Human Sexuality

**Evidence:**

Assignments, discussions, exams

**8.13.5 The program requires study of human growth and development, including: structure and function of the human body: the principles of human physiology and anatomy, body chemistry, and genetics.****Where in program:**

HNES 250 Nutrition Science  
NUTR 240 Principles of Nutrition  
BIOL 220,220L Human Anatomy and Physiology I, Lab  
BIOL221,221L Human Anatomy and Physiology II, Lab

**Evidence:**

Assignments, labs, and exams

**8.13.6 The program requires study of safety issues, first aid/CPR, and emergency care.****Where in program:**

HPER 210 First Aid and CPR

**Evidence:**

Assignments, labs and exams

**8.13.7 The program requires study of personal, family, community and environmental health.**

**Where in program:**

HNES 341 Psychosocial Aspects of Health

**Evidence:**

Discussions, assignments, portfolios and exams

**8.13.8 The program requires study of common physical and mental adaptations necessary to accommodate special needs students.**

**Where in program:**

HNES 355 International Health

HNES 420 Evaluation in Health Education

HNES 445 Organization and Administration of Coordinated Health Programs

**Evidence:**

Assignments, discussion, in-class activities, portfolios, research, and exams

**8.13.9 The program requires the study of development, implementation, administration, and evaluation of health education programs in conjunction with voluntary, community, and other health agencies.**

**Where in program:**

HNES 345 Materials and Concepts of Health Education

HNES 420 Evaluation in Health Education

HNES 445 Organization and Administration of Coordinated Health Programs

EDUC 481 Methods of Teaching Health Education K-12

EDUC 487 Student teaching

**Evidence:**

Assignments, discussion, research, lesson plans, portfolios, exams, observations and student teaching

**8.13.10 The program requires the study of teaching health and current trends in health education including skills involved in problem-solving, decision-making, communication, and goal setting; with an examination of a variety of teaching methods and techniques.**

**Where in program:**

HNES 355 International Health

HNES 420 Evaluation in Health Education

HNES 445 Organization and Administration of Coordinated Health Programs

EDUC 481 Methods of Teaching Health Education K-12

EDUC 487 Student teaching

**Evidence:**

Assignments, discussion, portfolios, research, exams, observations and student teaching

**8.13.11 The program requires the study of current, appropriate instructional technologies.****Where in program:**

HNES 345	Materials and Concepts of Health Education
HNES 420	Evaluation in Health Education
HNES 445	Organization and Administration of Coordinated School Health Programs
EDUC 451	Instructional Strategies, Methods and Assessment
EDUC 481	Methods of Teaching Health Education K-12
EDUC 487	Student teaching

**Evidence:**

Assignments, discussion, research, lesson plans, micro teachings, portfolios, exams, observations and student teaching

**8.14 FAMILY AND CONSUMER SCIENCES (FACS)**

The Family and Consumer Sciences candidates are prepared with a comprehensive subject matter background. In addition to course specific assignments which allow them to learn and practice concepts central to teaching FACS, the portfolio provides further opportunity to demonstrate their knowledge, skills and dispositions. The portfolio which is based on the INTASC standards is a culmination of many assignments and activities of these teacher candidates. The courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

**8.14.1 The program requires study of the following areas in relation to individuals and families: (a) family living, parenting, stages of development from birth to death, family interaction, communication and coping skills, impact of culture on growth and development; (b) factors involved in selection, care, use and construction of clothing and textile products; (c) selection of housing, furnishings and equipment and the creation of living environments to meet personal needs; (d) nutrition and wellness; food selection, conservation, and preparation; (e) consumer decision-making and resource management; (f) interpersonal relationships; (g) personal, family, and community health, disease prevention, emergency preparedness and wellness through the life span; and (h) career preparation and career opportunities.**

**Where in program:** The content courses required for this major address the topics outlined in this standard. See attached degree sheet for list of courses in teaching specialty. FACS education courses H&CE 468 – Family and Adult Education Programs, H&CE 482 – Methods of Teaching FSCE, and H&CE 487 – Student teaching provide additional opportunities to apply concepts learned in teaching specialty courses.

**Evidence:** quizzes, exams, lab activities, individual and group presentations, projects, create handbooks, article reviews, internet activities, reports and papers, class activities, micro lessons, student teaching, portfolios

**8.14.2 The program requires practical experience in implementing FACS content in laboratory or simulated work environments, or through work experience/internship in industry and/or the community that is planned and supervised as part of the teacher education program.**

**Where in program:** ADFH 155 – Apparel Construction and Fit, HNES 261L – Food Selection & Preparation Principles Lab, H&CE 468 – Family and Adult Education Programs, H&CE 482 – Methods of Teaching FSCE, H&CE 487 – Student teaching

**Evidence:** lab activities, micro lessons, student teaching, portfolios, individual and group presentations

**8.14.3 The program requires experience designed to develop knowledge, involvement, and leadership in Family and Consumer Sciences student organizations.**

**Where in program:** H&CE 232 – Philosophy and Policy, H&CE 341 – Leadership and Presentation, H&CE 482 – Methods of Teaching FSCE, H&CE 468 – Family and Adult Education Programs, H&CE 487 – Student teaching

**Evidence:** quizzes, exams, individual and group presentations, projects, class activities, micro lessons, student teaching, portfolios

**8.14.4 The program requires studying methods of teaching Family and Consumer Sciences, including current trends in FACS, the impact of these trends on individuals and families, management of laboratory and other hands-on instruction, and an examination of a variety of teaching methods and techniques.**

**Where in program:** H&CE 482 – Methods of Teaching FSCE, H&CE 487 – Student teaching

**Evidence:** individual and group presentations, projects, class activities, create unit and lesson plans, micro lessons, student teaching, portfolios, quizzes

8.14.5 The program requires the study of methods to foster collaborative relationships with other educators, families, business, industry, government, and the local community, in order to extend and enrich opportunities for learners.

**Where in program:** CDFS – Children, Families and Public Policy, H&CE 468 – Family and Adult Education Programs, H&CE 482 – Methods of Teaching FSCE, H&CE 487 – Student teaching

**Evidence:** quizzes, exams, individual and group presentations, projects, class activities, create unit and lesson plans, micro lessons, student teaching, portfolios

#### **8.14.6 The program requires the study of current, appropriate instructional technologies.**

**Where in program:** EDUC 451 – Instructional Strategies, Methods and Assessment, H&CE 482 – Methods of Teaching FSCE, H&CE 487 – Student teaching

**Evidence:** individual and group presentations, projects, class activities, create unit and lesson plans, micro lessons, student teaching, portfolios, quizzes

### **8.17 MATHEMATICS EDUCATION**

Mathematics Education candidates are given many opportunities to learn material required by the ND ESPB teacher education standards and to demonstrate their capabilities in those areas. The Teacher Education Portfolio provides a comprehensive overview of demonstrated candidate capabilities in relation to these standards. Student portfolios include (a) a reflective statement about each of the 10 INTASC Standards, (b) two artifacts for each, along with (c) a rationale for their inclusion. Additionally, candidates demonstrate capabilities relating to each of these ESPB Standards in a variety of Education, Mathematics, Statistics, and Computer Science courses that are required by the mathematics education program. The courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

#### **8.17.1 The program requires problem solving and mathematical reasoning.**

**Where in program:**

All mathematics courses, particularly Math 270 (Intro to Abstract Math), Math 440 (Axiomatic Geometry), Math 478 (History of Mathematics), and Math 374 (Special Problems in Math); Education 481 (Classroom Prac/Methods of Teaching Math)

**Evidence:**

Tests and assignments, lesson plans, portfolio.

#### **8.17.2 The program includes the study of mathematical connections, communication and representation.**

**Where in program:**

Mathematics courses for teachers, particularly Math 440 (Axiomatic Geometry) and Math 478 (History of Mathematics); EDUC 481 (Classroom Prac/Methods of Teaching Math).

**Evidence:**

Assignments including problem sets in Math 440 and Math 478, term paper in Math 478, lesson plans and unit plan in EDUC 481, Portfolio artifacts.

#### **8.17.3 The program requires candidates to demonstrate an understanding of the concepts of school mathematics including algebra and function, number and operation, geometry, statistics, probability, and measurement.**

**Where in program:**

University Calculus I-III sequence: Math 165, 166, 265; Math 440 (Axiomatic Geometry); Stat 367 (Probability), Stat 368 (Statistics), Math 429 (Linear Algebra), Math 420 (Abstract Algebra), Math 450 (Real Analysis I); EDUC481 (Classroom Prac/Methods of Teaching Math)

**Evidence:**

Tests and assignments, references to NCTM Standards in EDUC 481 assignments, portfolio.

**8.17.4 The program requires the study of the core mathematics content including calculus, axiomatic geometry, linear and abstract algebra, analysis, statistics, probability and computer programming.****Where in program:**

All Mathematics courses, particularly University Calculus I-III sequence: Math 165, 166, 265; Math 440 (Axiomatic Geometry); Stat 367 (Probability), Stat 368 (Statistics), Math 429 (Linear Algebra), Math 420 (Abstract Algebra), Math 450 (Real Analysis I); Math 374 (Special Problems), EDUC 481 (Classroom Prac/Methods of Teaching Math); CSCI 160 (Computer Science I)

**Evidence:**

Tests and assignments, portfolio

**8.17.5 The program requires the study of the history and philosophy of mathematics.****Where in program:**

Elements appear in most of the mathematics courses. Particular attention to historical ideas is given in Math 440 (Axiomatic Geometry) and Math 478 (History of Mathematics).

**Evidence:**

Exams and assignments, particularly the summary papers, term paper and examinations for Math 478. Elements are also included in student portfolios.

**8.17.6 The program requires the appropriate use of technology. It requires the study, selection, and use of concrete materials to help students build understanding of mathematical concepts.****Where in program:**

University Calculus I-III sequence (Math 165, 166, 265 with Personal Response System and graphing calculators); Math 266 (Differential Equations with Mathematica/Maple/Matlab); Math 440 (Axiomatic Geometry with Geometers Sketchpad); EDUC 481 (Classroom Prac/Methods of Teaching Math emphasizes use of technologies including calculators, computers, internet, video)

**Evidence:**

Tests, assignments, labs, lesson plans and units prepared by students.

**8.17.7 The program requires the study of a variety of teaching methods and strategies.**

**Where in program:**

Specific instruction in EDUC 451 (Instructional Planning, Methods & Assessment) and 481 (Classroom Prac/Methods of Teaching Math). A variety of appropriate instructional strategies are consciously demonstrated in the University Calculus I-III sequence, Math 440 (Axiomatic Geometry) and Math 478 (History of Mathematics); EDUC 486 (Classroom Management for Diverse Learners) and EDUC 487 (Student Teaching).

**Evidence:**

Syllabi for courses describe the use of group work and projects; Student lesson plans and units demonstrate ability to use a variety of strategies; portfolios provide artifacts.

**8.17.8 The program requires the study of formative and summative assessment strategies to determine students' understanding of mathematics and to help candidates monitor their own teaching effectiveness.**

**Where in program:**

EDUC 451 (Instructional Planning, Methods & Assessment), EDUC 481 (Classroom Prac/Methods of Teaching Math)

**Evidence:**

Student lesson plans and units; portfolios provide artifacts.

## 8.19 MUSIC EDUCATION

Music Education candidates are given many opportunities to learn material required by the ND ESPB teacher education standards and to demonstrate their capabilities in those areas. The Teacher Education Portfolio provides a comprehensive overview of demonstrated candidate capabilities in relation to these standards. Student portfolios include (a) a reflective statement about each of the 10 INTASC Standards, (b) two artifacts for each, along with (c) a rationale for their inclusion. Additionally, candidates demonstrate capabilities relating to each of these ESPB Standards in a variety of Music and Education courses that are required by the music education program. The courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

**8.19.1 The program requires study of language/grammar of music.**

**Where in program:** MUSC 103 - Introduction to Music History. MUSC 340 - Music History I, MUSC 341 - Music History II

**Evidence:** Comprehension of reading assignments through exams, written observations of live performances, research papers, exams, written and oral analysis of musical examples

**8.19.2 The program requires study of common elements of music--rhythm, melody, harmony, timbre, texture, dynamics, form--and their interaction; and experiences in applying these elements in both aural and visual analysis.**

**Where in program:** MUSC 130 - Elementary Harmony I, MUSC 131 - Elementary Harmony II, MUSC 132 - Elementary Ear Training I, MUSC 133 - Elementary Ear Training II, MUSC 230 - Advanced Harmony I, MUSC 231 - Advanced Harmony II, MUSC 232 - Advanced Ear Training I, MUSC 233 - Advanced Ear Training II

**Evidence:** Daily assignments, written exams, in-class discovery and problem solving, aural and written examinations, singing examinations, daily aural and singing exercises

**8.19.3 The program requires study and experiences designed to develop the following: (a) basic conducting skills, score reading, and rehearsal techniques; (b) ability to compose, arrange, and adapt music from a variety of sources to meet the needs and ability levels of school performing groups and classroom situations; (c) ability to guide creative experiences and improvise in an extemporaneous performance; (d) proficiency on piano, guitar, or other appropriate keyboard or fretted instruments sufficiently advanced for demonstration and accompaniment; (e) advanced ability sufficient to assure accurate and musically expressive performance; and (f) ability to perform in large ensembles and a variety of small ensembles.**

**Where in program:** a) MUSC 250- Basic Conducting; b) MUSC 331- Instrumental Arranging, MUSC 332 - Choral Arranging; c)MUSC 358 - Jazz Methods, MUSC 351 - Instrumental Conducting and Literature, MUSC 352 - Choral Conducting and Literature; d) MUSC 160 - Class Piano I, MUSC 161 - Class Piano II; e) MUSC 480 – Recital; f) MUSC 303 - Concert Band, MUSC 306 - Concert Choir, MUSC 317 - Madrigal Singers, MUSC 311 - Jazz Band

**Evidence:** Conducting skills test, conducting small ensembles, evaluation of written projects, knowledge of scales and jazz idioms, improvisation evaluations, transposition skills examination, conducting terms examination, listening log evaluation, skills test, solo public performance demonstrating knowledge of literature and musical interpretation, ensemble public performance demonstrating knowledge of literature and musical interpretation

**8.19.4 Emphasizing the relationship of music to other arts and humanities in a variety of contemporary and past cultures, the program requires study of music history and literature. In addition, the placing of the compositions in historical and stylistic perspectives is studied.**

**Where in program:** MUSC 103 - Introduction to Music History, MUSC 340 - Music History I, MUSC 341 - Music History II, EDUC 483 - Elementary Music Methods

**Evidence:** Comprehension of reading assignments through exams, written observations of live performances including historical and stylistic perspectives, research paper on historical and stylistic perspectives, exams, written and oral analysis of musical examples, study of

multicultural music, lesson plans including multicultural music, micro-teaching using multicultural music

**8.19.5 The program requires study designed to develop knowledge of a comprehensive music curriculum based upon sound philosophy and an understanding of what music to teach and how to teach it at any every level. (K-12)**

**Where in program:** EDUC 481 - Secondary Instrumental Music Methods, EDUC 482 - Secondary Choral Music Methods, EDUC 483 - Elementary Music Methods

**Evidence:** Evaluation of article summaries, teaching unit evaluation, evaluation of article summaries, evaluation of literature project for varying age and ability levels, micro teaching at various age-level groups, evaluation of National Standards for each age group, philosophy of Music education research paper, study of scope and sequence for each grade level

**8.19.6 The program requires studying methods of teaching music including current trends in music with an examination of a variety of teaching methods and techniques.**

**Where in program:** EDUC 481 - Secondary Instrumental Music Methods, EDUC 482 - Secondary Choral Music Methods, EDUC 483 - Elementary Music Methods

**Evidence:** Evaluation of article summaries, evaluation of method book summary, teaching unit evaluation, micro teaching at various age-level groups, evaluation of National Standards for each age group, philosophy of Music education research paper, method book comparison for specific grade levels, study of scope and sequence for each grade level

**8.19.7 The vocal/choral music program requires study and experiences designed to develop the following: (a) knowledge and performance ability on keyboard and fretted instruments sufficient to employ these instruments as teaching tools; (b) ability to transpose and improvise accompaniments; and (c) basic knowledge of vocal/choral problems and strategies as well as sufficient vocal skill to assure effective use of the voice in demonstrating vocal technique.**

**Where in program:** (a) MUSC 160 - Class Piano I, MUSC 161 - Class Piano II, EDUC 482 - Secondary Choral Music Methods, EDUC 483 - Elementary Music Methods, (b) MUSC 160 - Class Piano I, MUSC 161 - Class Piano II, (c) MUSC 150 - Vocal Methods and Pedagogy I, EDUC 482 - Secondary Choral Music Methods, MUSC 167, 167, 367, 467 - Applied Voice lessons

**Evidence:** Skills test, evaluation of warm-up project using piano, evaluation of micro-teaching using piano, evaluation of guitar skills, evaluation of transposition and accompaniment improvisation skills, article evaluation, peer teaching, written exams, micro teaching evaluation, performance evaluation

**8.19.8 The vocal/choral music program requires experiences in the following; (a) performing vocally in solo and in ensemble; (b) using wind, string, and percussion**

**instruments, which develop the knowledge and skills necessary to conduct instrumental as well as choral ensembles; and (c) teaching various vocal/choral types of classes such as choruses and general music.**

**Where in program:** (a) MUSC 167, 167, 367, 467 Applied Voice lessons, MUSC 306 - Concert Choir, MUSC 317 - Madrigal Singers, (b)MUSC 306 - Concert Choir, (c) EDUC 482 - Secondary Choral Music Methods, EDUC 483 - Elementary Music Methods, MUSC 306 - Concert Choir, MUSC 317 - Madrigal Singers, MUSC 103 - Introduction to Music History

**Evidence:** Solo performance evaluation, ensemble public performance demonstrating knowledge of literature and musical interpretation, small ensemble public performance demonstrating knowledge of literature and musical interpretation, performance of major choral works using orchestral accompaniment or band accompaniment, micro teaching at various age-level groups, examinations of general knowledge of musical periods

**8.19.9 The instrumental music program requires study and experiences designed to develop knowledge of and performance ability on wind and percussion instruments. This knowledge and performance needs to be sufficient to teach students in heterogeneous and homogeneous groups.**

**Where in program:** MUSC 353 - Woodwind Methods I, MUSC 354 - Woodwind Methods II, MUSC 355 - Brass Methods, MUSC 359 - Percussion Methods

**Evidence:** Skills test, evaluation of peer teaching

**8.19.10 The instrumental music program requires experiences in the following: (a) performing on an instrument in solo as well as in small and large ensembles; (b) using the singing voice as a teaching tool and conducting choral as well as instrumental ensembles; and (c) teaching instrumental students individually as well as in small and large groups.**

**Where in program:** (a) MUSC 168, 268, 368, 468 Applied Lessons, MUSC 112 - Varsity Band, MUSC 303 - Concert Band, MUSC 311 - Jazz Band, (b) MUSC 150 - Vocal Methods and Pedagogy I, MUSC 162 - Voice Class, MUSC 352 - Choral Conducting and Literature, MUSC 351 - Instrumental Conducting and Literature, (c) MUSC 168, 268, 368, 468 Applied Lessons, MUSC 310 - Brass Ensemble, MUSC 313 - Trombone Ensemble, MUSC 314 Brass Chamber Ensemble, MUSC 315 Woodwind Chamber Ensemble

**Evidence:** Solo performance evaluation, ensemble public performance demonstrating knowledge of literature and musical interpretation, article evaluation, peer teaching, written exams, conducting skills examination, score analysis evaluation, conducting terms examination, literature project evaluation, evaluation of rehearsal techniques, transposition skills examination, small group performance evaluation

**8.19.11 The program requires the study of current, appropriate instructional technologies.**

**Where in program:** MUSC 130, 131 Elementary Harmony, MUS 132,134 Elementary Ear Training, MUSC 332 Choral Arranging, MUSC 331 Instrumental Arranging, EDUC 451 – Instructional Strategies, Methods and Assessment, EDUC 487 – Student teaching

**Evidence:** Produce assignments using music software, complete ear training assignments on computer, produce assignments with notation software, micro teachings, student teaching, portfolios

**8.19.12 The elementary music program requires study and experiences designed to develop knowledge of appropriate instructional methodologies. This knowledge and performance needs to be sufficient to teach diverse students.**

**Where in program:** EDUC 483 Elementary Music Methods, EDUC 451 – Instructional Strategies, Methods and Assessment, EDUC 487- Student teaching

**Evidence:** Use Kodaly methods in the classroom, notate an Orff orchestration, adapt lessons for special learners, utilize the concepts of multiple intelligences, incorporate the National Standards into lessons, produce clear, useful bulletin boards, micro teachings, reflections, student teaching, portfolios

**8.19.13 The program requires music student teaching at both the elementary and secondary levels, supervised by music education faculty. Elementary student teaching must be in general music and should include a broad range of elementary grades.**

**Where in program:** EDUC 487 - Student Teaching

**Evidence:** Teach effectively at all elementary grade levels, use the voice well to demonstrate and lead, have skill at the keyboard to lead and accompany, produce lesson plans that are age appropriate, include singing, playing, moving, creating, and listening skills in lesson plans, portfolios

## **8.20 PHYSICAL EDUCATION**

### **Standard 8.20.1 Content Knowledge**

**The program requires the study of physical education content and disciplinary concepts related to the development of a physically educated person.** To meet this standard, institutions will require a study of the biological sciences pertaining to the structure and function of the human body including the principles of human movement, exercise physiology, and bio-mechanical analysis. This standard also requires the study of first aid, injury prevention and the principles of sport and exercise psychology.

#### **Where in program:**

HNES 210 First Aid and CPR  
HNES 253 Motor Learning and Performance  
HNES 367 Principles of Conditioning  
HPER 217 Personal and Community Health

Biol 220/220L Human Anatomy and Physiology I and Lab I  
Biol 221/221L Human Anatomy and Physiology II and Lab II

**Evidence:**

CPR certification, power point presentation, essay, tests, case study, portfolio artifacts

**Standards 8.20.2 Growth and Development**

**The program requires the study of how individuals learn, develop and provide opportunities that support their physical, cognitive, social, and emotional development.** The focus of this standard is the application of growth and development concepts to create learning experiences such as the development of fundamental motor skills, individual/dual and team sports, movement, dance, aquatics, outdoor pursuits, and health-related fitness. Teacher candidates will demonstrate the ability to plan and implement developmentally appropriate learning experiences based on expected developmental levels.

**Where in program:**

HNES 152 Professional Preparation in Middle School Activity  
HNES 153 Professional Preparation in High School Activity  
HNES 154 Professional Preparation in Elementary Physical Ed  
HNES 253 Motor Learning and Performance  
Educ 322 Educational Psychology

**Evidence:**

Lesson plans, creating lead up activities, portfolio of elem. activities, unit plans, portfolio artifacts, quizzes, exams

**Standard 8.20.3 Diverse Learners**

**The program requires the study of how individuals differ in their approaches to learning and creates appropriate instruction adapted to these differences.** Through this standard, teacher candidates demonstrate their ability to plan and implement learning experiences that are sensitive to diverse learners, and that will enable learners to develop qualities of respect and responsibility. The program requires study of state and federal laws dealing with the education of students with special needs.

**Where in program:**

HNES 150 Foundations of Physical Education  
HNES 300 Curriculum, Standards and Assessment in Physical Education  
HNES 350 Fitness Education Activities and Materials  
HNES 352 Physical Education Activities and Materials  
HNES 461 Administrative and Social Aspects of Physical Education  
EDUC 486 Classroom Management of Diverse Learners  
EDUC 489 Native American/Multicultural Instructional Strategies  
EDUC 482 Methods of Teaching Physical Education K-12

**Evidence:**

Reflection of observations (HS and Elem), philosophy paper, unit plans, rubrics, grading philosophy, lesson plans, classroom rules and consequences, reflection of lessons, peer teaching,, tests, reading list, evaluation, teacher interviews, teacher observations, portfolio artifacts

**Standard 8.20.4 Management and Motivation**

**The program requires the study of individual and group motivation and behavior to create a safe learning environment, recognizing legal responsibilities and encouraging positive social interaction, active engagement in learning, and self-motivation.** This standard is concerned with the teacher candidate's use of a variety of strategies to institute behavior change, manage resources, (to include selection, purchase, care and maintenance of facilities, equipment and supplies) promote mutual respect and self-responsibility, and motivate students. Teacher candidates whose performance is acceptable will be effective in helping learners develop behaviors related to respect, responsibility, and enjoyment of physical activity.

**Where in program:**

HNES 350 Fitness Education Activities and Materials  
HNES 352 Physical Education Activities and Materials  
HNES 461 Administrative and Social Aspects of Physical Education  
EDUC 482 Methods of Teaching Physical Education K-12  
EDUC 486 Classroom Management of Diverse Learners

**Evidence:**

Lesson plans, classroom rules and consequences plan, reflection of lessons, peer teaching, essay, case study, reading list, portfolio artifacts

**8.20.5. Communication**

**The program requires the study of effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in physical activity settings.** Teacher candidates demonstrate sensitivity to all learners, and model appropriate behavior.

**Where in program:**

COMM 110 Fundamentals of Public Speaking  
HNES 350 Fitness Education Activities and Materials  
HNES 352 Physical Education Activities and Materials  
HNES 461 Administrative and Social Aspects of Physical Education  
EDUC 482 Methods of Teaching Physical Education K-12  
EDUC 487 Student Teaching

**Evidence:**

Lesson plans, classroom rules and consequences plan, peer teaching, essay, case study, reflect on their teaching, portfolio artifacts

**Standard 8.20.6 Planning and Instruction**

The program requires the study of how to plan and implement a variety of developmentally appropriate instructional strategies to develop physically educated individuals, based on state and national standards. This standard deals specifically with pedagogical knowledge and application.

The core of this standard will be a series of sequential and progressive field experiences that allow teacher candidates to refine, extend, and apply their teaching skills.

**Where in program:**

HNES 300 Curriculum, Standards and Assessment  
HNES 350 Fitness Education Activities and Materials  
HNES 352 Physical Education Activities and Materials  
EDUC 451 Instructional Planning, Methods and Assessment  
EDUC 482 Methods of Teaching Physical Education K-12  
EDUC 487 Student Teaching

**Evidence:**

Lesson plans, unit plans, peer teaching, field experience observation and teaching, reflect on their teaching, portfolio artifacts, student teaching

**8.20.7. Learner Assessment**

The program requires the study of assessment to foster physical, cognitive, social, and emotional development of learners in physical activity. Teacher candidates will use various forms of authentic and traditional assessment to determine achievement, provide feedback to students, and guide instruction. Critical to this process will be an analysis of the appropriateness of various assessments.

**Where in program:**

HNES 300 Curriculum, Standards and Assessment  
HNES 350 Fitness Education Activities and Materials  
HNES 352 Physical Education Activities and Materials  
EDUC 451 Instructional Planning, Methods and Assessment  
EDUC 482 Methods of Teaching Physical Education K-12  
EDUC 487 Student Teaching

**Evidence:**

Lesson plans, rubrics, peer teaching, sport skills and fitness testing, field experience observation and teaching, reflect on their teaching, portfolio artifacts, student teaching

**8.20.8. Reflection.**

The program requires the study of reflective practice, with evaluation of the effects of the educator's actions on others (e.g., learners, parents/guardians, fellow professionals). Teacher candidates seek opportunities to grow professionally. This standard can be met through a series of learning experiences that promote self-reflection on the part of teacher candidates.

**Where in program:**

HNES 350 Fitness Education Activities and Materials  
HNES 352 Physical Education Activities and Materials  
EDUC 321 Introduction to Education  
EDUC 451 Instructional Strategies, Methods and Assessment  
EDUC 486 Classroom Management for Diverse Learners

- EDUC 489 Native American/Multicultural Instructional Strategies  
EDUC 482 Methods of Teaching Physical Education K-12

**Evidence:**

Lesson plans, unit plans, peer teaching, field experience observation and teaching, reflect on their teaching, portfolio artifacts, journals, writing reflections, presentations

**8.20.9. Technology**

The program requires the study of current, appropriate instructional technologies to enhance learning and to enhance personal and professional productivity.

**Where in program:**

- HNES 350 Fitness Education Activities and Materials  
HNES 352 Physical Education Activities and Materials  
HNES 461 Administrative and Social Aspects of Physical Education and Athletics  
EDUC 451 Instructional Strategies, Methods and Assessment  
EDUC 487 Student Teaching

**Evidence:**

Trifit testing, use of heart rate monitors and pedometers, PowerPoint presentations, portfolio artifacts, develop electronic portfolio, student teaching

**8.20.10. Collaboration**

**The program requires the study of how to foster relationships with colleagues, parents or guardians, and community agencies to support learners' growth and well-being.** This standard encompasses the teacher candidate's opportunities to interact and advocate for physical activity both in school and the larger community. Inclusion of learning experiences that involve teacher candidates with community agencies would be appropriate.

**Where in program:**

- HNES 350 Fitness Education Activities and Materials  
HNES 352 Physical Education Activities and Materials  
EDUC 482 Methods of Teaching Physical Education K-12  
EDUC 487 Student Teaching

**Evidence:**

Lesson plans, unit plans, peer teaching, portfolio artifacts

## 8.21 SCIENCE EDUCATION

Science Education candidates are given many opportunities to learn material required by the ND ESPB teacher education standards and to demonstrate their capabilities in those areas. The Teacher Education Portfolio provides a comprehensive overview of demonstrated candidate capabilities in relation to these standards. Student portfolios include (a) a reflective statement about each of the 10 INTASC Standards, (b) two artifacts for each, along with (c) a rationale for their inclusion. Additionally, candidates demonstrate capabilities relating to each of these ESPB Standards in a variety of Education, Biology, Chemistry, Earth Science, Physics, Mathematics, and Statistics courses that are required by the various science education programs. The courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program.

### 8.21.1.A BIOLOGY

The biology program requires study of zoology, botany, anatomy/morphology, physiology, genetics, ecology/environment, microbiology, cell biology/biochemistry, and evolution. This study includes:

1. Laboratory and field experiences using a variety of living materials and instrumentation;
2. Identification of biological phenomena;
3. Characteristics of living organisms and their relationship with their physical and biotic environment;
4. Interaction of biology and technology with the ethical and human implications;
5. General chemistry I & II with labs (8 semester hours minimum);
6. Physics and earth science (4 semester hours each);
7. Study of mathematics through the pre-calculus level (college algebra and above) and statistics.

The program uses varied and authentic assessments of candidate's understanding and ability to apply that knowledge. Examples of performance assessments in which this content knowledge could be demonstrated appear in standards 8.21.2 through 8.21.10 which apply to all science education programs.

#### **Where in the program:**

1. All introductory courses have laboratory courses. Most upper-division courses have laboratory/field experiences.
2. All biological sciences courses.
3. All biological sciences courses.
4. Biology 440 (Biotechnology and Ethics), Biology 124 (Environmental Science), Biology 126 (Human Biology)
5. – 7. met with required courses on Curriculum Guides

#### **Evidence:**

Tests and assignments, field trips, laboratory experiences.

### **8.21.1.B CHEMISTRY**

The chemistry program requires study of organic, inorganic, analytical, physical chemistry, and biochemistry. This study includes:

1. Systematic and quantitative fundamentals of chemistry;
2. Interaction of chemistry and technology and the associated ethical, environmental and human implications;
3. Physics, biology, and earth science (minimum of 16 semester hours with at least four semester hours in each discipline);
4. Study of mathematics through calculus (minimum of one semester of calculus) and statistics.

The program uses varied and authentic assessments of candidate's understanding and ability to apply that knowledge. Examples of performance assessments in which this content knowledge could be demonstrated appear in standards 8.21.2 through 8.21.10 which apply to all science education programs.

#### **Where in the program:**

1. All chemistry courses.
2. Chemistry 117 (Chemical Concepts and Applications), Chemistry 140 (Organic Chemical Concepts and Applications), Chemistry 435 (Chemical History)
3. – 4. Met with required courses in the Curriculum Guide.

#### **Evidence:**

Tests and assignments, laboratory experiences

### **8.21.1.C EARTH SCIENCE**

The earth science program requires study including:

1. The interdisciplinary nature of earth and space science, including lithosphere, atmosphere, hydrosphere, space and their relationships to humans and the environment;
2. Specialization in one of the earth and space sciences: astronomy, geology, meteorology, or oceanography;
3. Minimum of eight semester hours in geology (physical geology with lab and historical geology with lab)
4. Minimum of one semester each in astronomy and meteorology;
5. The impact of technologies on the lithosphere, atmosphere, and hydrosphere;
6. General chemistry I & II with labs (8 semester hours minimum);
7. Physics and biology with labs (4 semester hours each);
8. Study of mathematics through pre-calculus (college algebra and above) and statistics.

The program uses varied and authentic assessments of candidate's understanding and ability to apply that knowledge. Examples of performance assessments in which this content knowledge could be demonstrated appear in standards 8.21.2 through 8.21.10, which apply to all science education programs.

#### **Where in the program:**

1. All introductory courses have laboratory experiences. Most upper-division courses have laboratory/field experiences. All courses teach the interrelationships among the field.

2. Geology
3. Geology 105/105L (Physical Geology), 106/106L (Historical Geology)
4. Soil Science 217 (Meteorology), Physics 110/110L (Astronomy w/lab)
5. Integrated into every Geology course.
6. – 8. met with required courses on Curriculum Guide.

**Evidence:**

Tests and assignments, field trips, laboratory experiences

**8.21.1.D 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 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;
2. Study of mathematics through the pre-calculus level (college algebra and above) and statistics.

The program uses varied and authentic assessments of candidate’s understanding and ability to apply that knowledge. Examples of performance assessments in which this content knowledge could be demonstrated appear in standards 8.21.2 through 8.21.10, which apply to all science education programs.

**Where in the program:**

Met through a variety of requirements on curriculum guide.

**8.21.1.F PHYSICS**

The physics program requires:

1. Systematic and quantitative study of physics including modern physics, mechanics, electricity and magnetism, thermodynamics, optics, and electronics (minimum 32 semester hours);
2. Laws of physics and their application to various areas of physics and modern technology;
3. Interaction of physics and technology with the ethical and human implications;
4. Chemistry, biology, and earth science (minimum 16 semester hours; at least four semester hours in each area);
5. Study of mathematics through calculus (minimum 2 semesters) including an introduction to differential equations.

The program uses varied and authentic assessments of candidate’s understanding and ability to apply that knowledge. Examples of performance assessments in which this content knowledge could be demonstrated appear in standards 8.21.2 through 8.21.10, which apply to all science education programs.

**Where in the program:**

1. Met in all undergraduate physics courses.
2. Met in all undergraduate physics courses.
3. Physics 120 (Fundamentals of Physics), Physics 211/212 (College Physics I and II), Physics 251/252 (University Physics I and II), Physics 350 (Modern Physics)
4. – 5. Met with required courses on Curriculum Guide

**Evidence:**

Tests and assignments, laboratory experiences.

**8.21.2 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.

Examples of performance assessments may include how to:

- assist students in understanding that the study of science is a continuous and integrated process of observing, questioning, investigating, and reflecting;
- construct age-appropriate learning activities that assist students' understanding of common scientific concepts such as systems, evidence, models, constancy and change, or form and function;
- engage students in comparing and contrasting scientific and nonscientific ways of knowing; integrating criteria of science in investigations and case studies;
- develop learning experiences for students which demonstrate an interdisciplinary understanding of science;
- develop student understanding of the relationships which exist among science, technology, societal needs, and community issues.

**Where in the program:**

Biology 124 (Environmental Science) required by all science education majors; Biology 150, 151 (General Biology I and II), Educ 481 (Secondary Science Teaching Methods)

**Evidence:**

lesson plans, portfolio, teaching assistant roles

**8.21.3 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. These may include how to:

- locate resources, design and conduct inquiry-based, open-ended investigations, interpret findings, communicate results, and make judgments based on evidence;
- use listening and questioning strategies that encourage inquiry and probe for divergent student responses;
- plan and implement data-based activities requiring students to reflect upon their findings, make inferences, and link new ideas to preexisting knowledge;

- encourage productive peer interactions and plan both individual and small group activities to facilitate inquiry;
- promote student use of scientific process, decision-making, and analysis skills for investigating science-related real-life problems.

**Where in the program:**

Biology 220/221 (Human Anatomy and Physiology I and II), Biology 124/L Environmental Science/lab), Biology 126 (Human Biology), Biology 310 (Methods in Cell and Molecular Biology), Biology 459 (Evolution), Botany 372 (Structure and Diversity of Plant and Fungi), Botany 381/L (Plant Physiology/Laboratory), Zoology 475 (Conservation Biology), Zoology 477 (Wildlife Management Techniques), All chemistry labs (117, 121, 122, 160, 161, 341, 342, 431, 432) Education 481 (Secondary Science Methods)

**Evidence:**

Develop/conduct laboratory experiments during semester projects, research projects, question taxonomies, lesson plans.

**8.21.4 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. Examples of performance assessments may include how to:

- engage students in activities and projects in which they examine important social or technological issues and implications related their discipline(s);
- analyze how ethics and values affect scientific knowledge and its applications in technology and society;
- relate science to the personal lives and interests of students, to potential careers, and to knowledge in other domains;
- use data relevant a variety of communities, their culture, and their resources to relate science lessons that are appropriate for those communities.

**Where in the program:**

Biology 124, 126, 220, 221, 440 (Biotechnology and Ethics), 459; Botany, 372, 380, 471 (Phycology), 472 (Lichenology); Zoology 280 (Comparative Chordate Morphology, 360 (Animal Behavior), 370 (Cell Biology), Education 481.

**Evidence:**

Tests and assignments, lesson plans, portfolio, microteachings.

**8.21.5 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. Examples of performance assessments may include the candidates being able to:

- foster competency in the use of scientific processes to investigate phenomena, interpret findings, and communicate results;
- engage all students in the study of science, providing for differences in gender, socioeconomic background, culture, ethnicity, academic ability and disabilities;
- select and use a variety of age-appropriate instructional strategies, materials, and assessment methods for teaching and evaluating student success in science;
- identify goals, objectives and related assessment in science instruction;
- be able to state a philosophy and provide a rationale for choosing particular science teaching strategies.
- identify common student misconceptions or naïve conceptions in the content field, their source, and appropriate teaching responses;
- reinforce the learning and understanding of key concepts from several perspectives;
- apply grade-level appropriate mathematical and computer skills to the scientific investigation of phenomena and the analysis of data.

**Where in the program:**

EDUC 481

**Evidence:**

Microteaching, lesson plan development, TA requirement for Biol 124 for all science majors during 481.

**8.21.6 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. Examples of performance assessments may include how to:

- relate instructional goals, materials, and actions to state and national science education standards, analyzing strengths and weaknesses in a particular classroom context;
- identify, evaluate and assemble science curriculum and instructional materials from a variety of sources, including the Internet;
- develop and implement long-range and unit plans, with clear rationales, goals, methods, materials and assessments;
- understand the role of technology in education and define a rationale and long-range strategy for including technology in science education;
- design and implement learning activities that thematically relate science with other school subjects and community resources.

**Where in the program:**

EDUC 481

**Evidence:**

lesson plans, portfolio, TA experience

### **8.21.7 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. Examples of performance assessments may include experience with and knowledge of how to:

- identify and use the most appropriate methods for gathering information about student learning;
- align assessment with instructional objectives;
- demonstrate the ability to use multiple strategies to assess teaching and learning authentically, consistent with national standards and goals for science education;
- engage in reflective self-assessment and develop a system for self-assessment as a practicing teacher.

#### **Where in the program:**

Education 481

#### **Evidence:**

lesson plans, portfolio, TA experience

### **8.21.8 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. Examples of performance assessments may include how to:

- maintain a positive classroom environment conducive to the learning of science;
- identify and promote the elements of an engaging and stimulating science learning environment;
- plan and develop opportunities for students to investigate and learn from resources, artifacts, exhibits, events, displays and the environment;
- structure age-appropriate laboratory and field experiences for students;
- help students understand the appropriate use of scientific equipment and materials;
- set up procedures for safe handling, labeling and storage of chemicals, electrical equipment, and other materials and know actions to take to prevent or report an emergency;
- demonstrate knowledge of legal responsibilities and know how to act to prevent potential problems with liability and negligence, especially as applied to science teaching;
- practice the safe and ethical use and care of animals for science instruction within the standards and recommendations of the science community and applicable regulations.

#### **Where in the program:**

EDUC 481

#### **Evidence:**

TA experience

### **8.21.9 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.

Examples of performance assessments may include:

- developing and stating personal goals and a philosophy of teaching based on research and contemporary values of the science education community;
- demonstrating understanding of the concept of a community of learners and interacting with instructors and peers as a member of such a community;
- documenting and reflecting upon personal strengths and weaknesses in an effort to improve their preparation to teach science;
- taking personal responsibility for growth and assisting others who are preparing to teach science;
- demonstrating the ability to handle problems and tension calmly and effectively, and relating to students, peers, instructors, and supervisors with integrity;
- participating in professional associations and activities and reading professional journals in an effort to improve teaching and stay abreast of current events and needs in the field.

#### **Where in the program:**

Educ 481 and 487

#### **Evidence:**

Reflective essays on TA experience and Student teaching experience.

### **8.21.10 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. Examples of performance assessments may include how to:

- demonstrate appropriate use of various technologies within their teaching;• select and use appropriate technology tools specific to their content area(s);
- use technology to effectively manage communications, instructional planning, record keeping and data management;
- use instructional technologies, including computers, interactive video, telecommunications, and other new technologies to promote use of scientific processes and problem-solving skills.

#### **Where in the program:**

Educ 481 and 487

#### **Evidence:**

Lesson plans developed for TA experience and student teaching experience.

## **8.22 SOCIAL STUDIES**

History Education candidates complete courses in their teaching specialty and professional education. Students combine knowledge and skills learned in each in the process. In addition, candidates complete a portfolio. The portfolio which is based on the ten INTASC standards is a

compilation of work from a variety of classes. Both teaching specialty courses and education courses provide opportunity for students to develop knowledge, skills and dispositions to prepare them for the teaching profession.

The courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

### **8.22.1 A History.**

**In the subject major curriculum, the program requires beyond the introductory level the study of the nature and scope of history including North Dakota, United States, and the world. The study of a second social science beyond the introductory level is also required.**

**Where in program:** HIST 101 – Western Civilization I, HIST 102 – Western Civilization II, HIST 103 – US to 1877, HIST 104 – US since 1877, World History electives

**Evidence:** papers, senior capstone projects

**8.22.2 The program requires study of the structures, key concepts, methodology, and generalizations that connect the various social studies, including the examination of professional standards and expectations for P-12 education.**

**Where in program:** EDUC 451 – Instructional Strategies, Methods, and Assessments, EDUC 481 – Teaching methods in Social Sciences, EDUC 487 – Student teaching

**Evidence:** micro lessons, portfolios, creating lessons and units, student teaching, deciphering standards

**8.22.3 The program requires study of multi-cultural, cross-cultural, diversity, global issues, and multiple perspectives.**

**Where in program:** EDUC 489 – Native American & Multi-cultural Instructional Strategies, EDUC 481 – Teaching methods in Social Sciences, HIST 422 – 424 – US History sequence

**Evidence:**

**8.22.4 The program requires study of current events including controversial issues.**

**Where in program:** EDUC 481 – Teaching methods in Social Sciences, EDUC 489 – Native American/Multicultural Instructional Practices

**Evidence:**

**8.22.5 The program requires studying methods of teaching social studies including current trends in social studies with an examination of various teaching methods and techniques.**

**Where in program:** EDUC 451 – Instructional Strategies, Methods, and Assessments, EDUC 481 – Teaching methods in Social Sciences, EDUC 487 – Student teaching

**Evidence:** create lessons & units, micro teachings, portfolios, student teaching

#### **8.22.6 The program requires the study of current, appropriate instructional technologies.**

**Where in program:** EDUC 481 – Methods of teaching Social Science, EDUC 451 – Instructional Strategies, Methods and Assessment, EDUC 487 – Student teaching

**Evidence:** presentations, micro teachings, creating lessons & units, portfolios, assessment assignments/create rubrics

### **8.22 SOCIAL STUDIES**

Institutions will be expected to demonstrate the use of performance assessments within their programs. Examples of such assessments will be provided by the Education Standards and Practices Board as guidelines. Institutions are not restricted to using the given examples, but may develop others that demonstrate candidates' ability to apply what they have learned in the K-12 school setting. The social studies program usually follows one of two patterns: (1) the subject major pattern emphasizes one or more areas of the social studies, supplemented by work in cognate areas, or (2) **the composite major pattern embraces a broad base of social studies including history, political science and civics, economics, geography, and sociology or psychology or cultural anthropology or global studies. Programs must meet the appropriate section of Standard 8.22.1 and also Standards 8.22.2 through 8.22.6 Social studies programs will meet the minimum semester hour requirements defined by ESPB. Secondary teachers with majors in history, geography, civics and government, economics, or composite social studies will be licensed to teach in each specific social studies discipline in which the individual has a minimum number of semester hours aligned with the ND standards for the area: history 18 SH (a minimum of 6 SH of U.S. and 6 SH of non-U.S. history), geography 12 SH, civics and government 12 SH, and economics 12 SH, or a minimum of 6 SH aligned with the ND standards for any other specific social studies discipline.**

#### **8.22.1 A History.**

**In the subject major curriculum, the program requires beyond the introductory level the study of the nature and scope of history including North Dakota, United States, and the world. The study of a second social science beyond the introductory level is also required.**

#### **8.22.1 B Political Science and Civics.**

**In the subject major curriculum, the program requires the study of how political institutions develop and function; the study of the role of the citizen in society. The study of a second social science beyond the introductory level is also required.**

### **8.22.1 C Economics.**

**In the subject major curriculum, the program requires the study of principles and processes underlying problems and practices in various economic systems. The study of a second social science beyond the introductory level is also required.**

### **8.22.1 D Geography.**

**In the subject major curriculum, the program requires the study of people, places, environments, and global connections. The study of a second social science beyond the introductory level is also required.**

### **8.22.1 E Sociology or Psychology or Anthropology or Global Studies.**

**In the subject major curriculum, the program requires the study of diverse global culture traits, or individual development and identity, or ethnography. The study of a second social science beyond the introductory level is also required.**

### **8.22.1F Social Studies Composite.**

**In the social studies composite major curriculum the program requires the study of a broad base of social studies including history (18SH)**

**NDSU Program** (3 credits each): HIST 456 Europe 1815-1914, HIST 457 Europe Since 1914, One year of US HIST at 400 level, 6 credits of HIST electives

**Evidence** (May include, but not limited to the following): Research and writing on historically significant people, places, and events (All courses listed above), Discussions on the causes and effects of historical people and events (All courses listed above); Exploration of primary documents related to significant historical people, places, and events (All courses listed above), Presentation of research and writing (All courses listed above), Groups, each representing an element in European society will speak for one of the three orders of society (HIST 456)

**and at least two of the following three core areas: political science and civics (12SH),**

**NDSU Program** (3 credits each): POLS 110 Intro to Political Science, POLS 115 American Government, POLS 420 Political Behavior/Exec. Legis. Process, POLS 421 Political Behavior: Political Parties, POLS elective (Total credits = 15)

**Evidence** (May include, but not limited to the following): Research and writing on relevant topics (All courses listed above), Discussions based on relevant topics (All courses listed above), Presentations of research and writing (All courses listed above), Exploration of primary documents related to significant events (All courses listed above), Analysis and interpretation of current events as relevant to course (All courses listed above)

**economics (12SH),**

**NDSU Program** (3 credits each): ECON 201 Prin. Of Microeconomics, ECON 202 Principles of Macroeconomics, ECON 341 Intermediate Microeconomics, ECON elective (Total credits = 12)

**Evidence** (May include, but not limited to the following): Research and writing on relevant topics (All courses listed above), Discussions based on relevant topics (All courses listed above), Presentations of research and writing (All courses listed above), Exploration of primary documents related to significant events (All courses listed above), Analysis and interpretation of current events as relevant to course (All courses listed above)

**and geography (12SH)**

**NDSU Program** (3 credits each): GEOG 151 Human Geography, GEOG 161 World Regional Geography, GEOG 262 Geography of North America, GEOG 315 Upper Midwest Geography (Total credits = 12)

**Evidence** (May include, but not limited to the following): Research and writing on relevant topics (All courses listed above), Discussions based on relevant topics (All courses listed above), Presentations of research and writing (All courses listed above), Exploration of primary documents related to significant events (All courses listed above), Analysis and interpretation of current events as relevant to course (All courses listed above)

**Additional electives to the social studies composite may include: sociology (6SH) or psychology (6SH) or anthropology (6SH) or global studies (6SH).**

**NDSU Program** (3 credits each): PSYC or SOC 300-400 elective, PSYC 250 Developmental Psychology, SOC 110 Intro to Sociology, PSYC 111 Intro to Psychology, ANTH 111 Intro to Anthropology

**Evidence** (May include, but not limited to the following): Research and writing on relevant topics (All courses listed above), Discussions based on relevant topics (All courses listed above), Presentations of research and writing (All courses listed above), Exploration of primary documents related to significant events (All courses listed above), Analysis and interpretation of current events as relevant to course (All courses listed above)

**8.22.2 The program requires study of the structures, key concepts, methodology, and generalizations that connect the various social studies, including the examination of professional standards and expectations for P-12 education.**

**NDSU Program:** EDUC 321 Intro to Teaching, EDUC 322 Educational Psychology, EDUC 381 Early Experience, EDUC 389 Native American & Multicultural Instructional Practices, EDUC 451 Instruction, Planning, Methods & Assessment, EDUC 481 Classroom Practice/Methods of Teaching Social Science, EDUC 485 Student Teaching Seminar, EDUC 486 Classroom Management for Diverse Learners, EDUC 487 Student Teaching

**Evidence** (May include, but not limited to the following): Inquiry-Based Integrated Thematic Unit (EDUC 389), Written reflections on professional standards (EDUC 321), Presentation on issues in education (EDUC 321), Design and present lessons based on multiple intelligences (EDUC 322), Microteaching and corresponding reflections using content specific methods (EDUC 451 and 486),

**8.22.3 The program requires study of multi-cultural, cross-cultural, diversity, global issues, and multiple perspectives.**

**NDSU Program:** EDUC 389 Native American & Multicultural Instructional Practices, SOC 110 Intro to Sociology, ANTH 111 Intro to Anthropology, EDUC 486 Classroom Management for Diverse Learners

**Evidence** (May include, but not limited to the following): Dialogue Journal (EDUC 389), Cultural Inquiry (EDUC 389), Design and presentation of a classroom management plan (EDUC 486), Research and writing on relevant topics (All courses listed above), Discussions based on relevant topics (All courses listed above), Presentations of research and writing (All courses listed above), Exploration of primary documents related to significant events (All courses listed above), Analysis and interpretation of current events as relevant to course (All courses listed above)

**8.22.4 The program requires study of current events including controversial issues.**

**NDSU Program:** This encompasses all social science and education courses

**Evidence** (May include, but not limited to the following): Discussions based on analysis and interpretation of current events as they related to the courses

**8.22.5 The program requires studying methods of teaching social studies including current trends in social studies with an examination of various teaching methods and techniques.**

**NDSU Program:** EDUC 481 Classroom Practice/Methods of Teaching Social Science, EDUC 451 Instructional Planning, Methods & Assessment, EDUC 489 Native American/Multicultural Instructional Practices

**Evidence** (May include, but not limited to the following): Inquiry-Based Integrated Thematic Unit (EDUC 489), Microteaching (EDUC 481 and 451)

**8.22.6 The program requires the study of current, appropriate instructional technologies.**

**NDSU Program:** Embedded throughout education sequence

**Evidence** (May include, but not limited to the following): Electronic portfolio, Blackboard, Electronic Dialogue Journal,

## 8.23 SPEECH

Speech Communication Education candidates are given many opportunities to learn material required by the ND ESPB teacher education standards and to demonstrate their capabilities in those areas. The Teacher Education Portfolio provides a comprehensive overview of demonstrated candidate capabilities in relation to these standards. Student portfolios include (a) a reflective statement about each of the 10 INTASC Standards, (b) two artifacts for each, along with (c) a rationale for their inclusion. Additionally, candidates demonstrate capabilities relating to each of these ESPB Standards in a variety of Education and Speech Communication courses that are required. The courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

**8.23.1 The program requires study of basic communication concepts including: Theories of communication, the function of the individual as initiator and receiver of communication, language acquisition and development, and contextual variables.**

**Where in program:** This standards is addressed throughout the teaching specialty courses. Courses include: COMM 112 – Understanding Media and Social Change, COMM114 – Human Communication, COMM 312 Oral Performance Studies, COMM 314 – Argumentation and Debate, COMM 315 – Small Group Communication, COMM 320 – Communication Analysis, COMM 401 – Survey of Rhetorical Theory, and COMM 451 – Directing Forensics

**Evidence:** speech presentations, exams, group and individual presentations, radio show, reflections, consulting projects, interviews, debates, essays, threaded discussions

**8.23.2 The program requires study of communication media such as: media changes as a result of technological and social development, different media as enablers and constrainers of communication, and consideration of various communication genre.**

**Where in program:** COMM 112 – Understanding Media and Social Change, COMM 312 Oral Performance Studies

**Evidence:** exams, papers, presentations

**8.23.3 The program requires study of critical skills associated with communicative arts including: critical stances such as comparison, motive, and form; relationship characterization between critic and critical object; identification of the social value of criticism; and application of assorted critical stances to various communicative acts.**

**Where in program:** COMM 112 – Understanding Media and Social Change, COMM114 – Human Communication, COMM 314 – Argumentation and Debate

**Evidence:** speech presentations, exams, group and individual presentations, reflections, debates, essays, threaded discussions

**8.23.4 The program requires study of responsible communication including; the philosophies of communication and the impact of the concepts of free speech, fairness, and objectivity have upon communicative acts.**

**Where in program:** COMM114 – Human Communication, COMM 312 Oral Performance Studies, COMM 315 – Small Group Communication, COMM 401 – Survey of Rhetorical Theory

**Evidence:** speech presentations, exams, group and individual presentations, radio show, reflections, consulting projects, interviews, debates, essays, threaded discussions

**8.23.5 The program offers experiences in communication such as; public speaking, oral interpretation, group decision making, television, film, print, interpersonal communication, and organizational communication, as well as co-curricular activities such as directing student experiences in areas of debate, forensics, radio management, film society.**

**Where in program:** COMM 110 – Fundamentals of Public Speaking (GE course), COMM 312 Oral Performance Studies, COMM 315 – Small Group Communication, COMM 314 – Argumentation and Debate, COMM 451 – Directing Forensics

**Evidence:** speech presentations, exams, group and individual presentations, radio show, reflections, consulting projects, interviews, debates, essays, threaded discussions

**8.23.6 The program requires studying methods of teaching speech including current trends in speech with an examination of various teaching methods and techniques.**

**Where in program:** EDUC 451 – Instructional Strategies, Methods and Assessment, EDUC 481 – Methods of Teaching Speech, EDUC 487 – Student teaching

**Evidence:** micro lessons, lesson & unit plans, presentations, reflections, portfolios, student teaching

**8.23.7 The program requires the study of current, appropriate instructional technologies.**

**Where in program:** EDUC 451 – Instructional Strategies, Methods and Assessment, EDUC 481 – Methods of Teaching Speech, EDUC 487 – Student teaching

**Evidence:** micro lessons, lesson & unit plans, presentations, reflections, portfolios, student teaching

## 9.5 ADVANCED PROGRAMS FOR TEACHERS

The graduate program in Teacher Education is committed to the further development of educational leaders who are dedicated to educational equity for all persons. The Teacher Education graduate program is aligned with the National Board for Professional Teaching Standards (NBPTS) to reflect the importance of applied research and content development of educators. Programs offered in Teacher Education focus on the development of educational leaders and are designed for the practitioner. Students will engage in action research as a component of the program. Due to the unique nature of the program, candidates must have access to a teaching setting.

The courses with experiences most directly related to each standard are listed below, along with a brief description of the evidence that candidates would provide to demonstrate their proficiency as they move through the program. Our exhibits will include sample assessments and samples of candidate work to illustrate how they demonstrate these performance capabilities.

### STANDARDS FOR ALL ADVANCED PROGRAMS FOR TEACHERS

**9.5.1 Advanced program courses are designed to result in advanced knowledge, skills, and dispositions. The program reflects consideration of the standards for advanced study of the National Board for Professional Teaching Standards (NBPTS), professional specialty associations, and the National Council for the Accreditation of Teacher Education (NCATE).**

**Where in program:** The advanced programs in Teacher Education contain a mandatory core of education courses. These offerings began Fall 2004. Those courses are based on NBPTS. Those courses are: EDUC 750 - Reflective Practice and Research in Education, EDUC 751 – Students and their Learning, EDUC 752 – Curriculum Design and Delivery, and EDUC 753 – Managing and Monitoring Learning. In addition, candidates complete 18 credits in a concentration area, and 3-6 credits in practicum/action research. See following site for list of education elective courses

[http://www.ndsu.nodak.edu/ndsu/education/teacher\\_education/Graduate%20Info/courses\\_offered/education.html](http://www.ndsu.nodak.edu/ndsu/education/teacher_education/Graduate%20Info/courses_offered/education.html)

**Evidence:** create portfolios based on the NBPTS principles, write reflections, papers, class presentations, present action research projects

**9.5.2 The program requires candidates develop the ability to apply research and research methods relevant to the advanced field of study. The program uses a variety of performance assessments of candidates' understanding and ability to apply that knowledge.**

**Where in program:** EDUC 750 - Reflective Practice and Research in Education, all candidates must take either EDUC 702 – Educational Statistics or STAT 725 – Applied Statistics

**Evidence:** develop and conduct research projects, use statistical programs, write reflections to analyze practice

### **9.5.3 The program requires study of the role of schools in society and the development of positive relationships with families and the larger community.**

**Where in program:** The program is designed to run the thread of schools and society throughout core education courses: EDUC 750 - Reflective Practice and Research in Education, EDUC 751 – Students and their Learning, EDUC 752 – Curriculum Design and Delivery, and EDUC 753 – Managing and Monitoring Learning. Candidates also have access to a variety of electives and concentration courses that may incorporate this standard. See following site for list of education elective courses

[http://www.ndsu.nodak.edu/ndsu/education/teacher\\_education/Graduate%20Info/courses\\_offered/education.html](http://www.ndsu.nodak.edu/ndsu/education/teacher_education/Graduate%20Info/courses_offered/education.html)

**Evidence:** create portfolios based on the NBPTS principles, write reflections, papers, class presentations, present action research projects

### **9.5.4 The program requires study of advanced teaching strategies and models of teaching relevant to the advanced field of study.**

**Where in program:** EDUC 751 – Students and their Learning, EDUC 752 – Curriculum Design and Delivery, and EDUC 753 – Managing and Monitoring Learning. In addition, specialty areas in education offer an advanced methods course specific to that area – H&CE 781 – Methods in (specialty area).

**Evidence:** create portfolios based on the NBPTS principles, write reflections, papers, class presentations, present action research projects, self-assessments, student work samples

### **9.5.5 The program requires the use of current, appropriate instructional technologies.**

**Where in program:** Core education courses: EDUC 750 - Reflective Practice and Research in Education, EDUC 751 – Students and their Learning, create portfolios based on the NBPTS principles, write reflections, papers, class presentations, present action research projects, and EDUC 753 – Managing and Monitoring Learning. Candidates also have access to a variety of electives and concentration courses that may incorporate this standard. See following site for list of education elective courses toward concentration

[http://www.ndsu.nodak.edu/ndsu/education/teacher\\_education/Graduate%20Info/courses\\_offered/education.html](http://www.ndsu.nodak.edu/ndsu/education/teacher_education/Graduate%20Info/courses_offered/education.html)

**Evidence:** development of electronic portfolio, action research presentations, class presentations

### **9.5.6 The program requires a field experience related to the area of advanced study. At least a portion of the practicum experience is designed to demonstrate potential impact on P-12 student learning.**

**Where in program:** All candidates are required to have access to a teaching situation. Each of the core education courses requires some field experience. In addition, the action research project is based on situations in the learning/teaching environment.

**Evidence:** develop and conduct research projects, present action research, student work samples, observations

### **9.5.7 A. ADVANCED STUDY IN SPECIALTY AREA EDUCATION**

**1. The program's advanced content area specialization study is designed to reflect the standards of the National Board for Professional Teaching Standards and professional specialty association recommendations for advanced study.**

**Where in program:** The advanced programs in Teacher Education contain a mandatory core of education courses. These offerings began Fall 2004. Those courses are based on NBPTS. Those courses are: EDUC 750 - Reflective Practice and Research in Education, EDUC 751 – Students and their Learning, EDUC 752 – Curriculum Design and Delivery, and EDUC 753 – Managing and Monitoring Learning. Specialty areas also require 18 credits in advanced study coursework. Courses are selected with advisor/committee approval. See degree sheets for all programs at

[http://www.ndsu.nodak.edu/ndsu/education/teacher\\_education/Graduate%20Info/programs\\_offered.html](http://www.ndsu.nodak.edu/ndsu/education/teacher_education/Graduate%20Info/programs_offered.html)

**Evidence:** create portfolios based on the NBPTS principles, write reflections, papers, class presentations, present action research projects,

**2. The program's advanced content area specialization study provides for breadth in the field or for detailed study of one or more specialized aspect of the field, and for access to new research and developments.**

**Where in program:** Specialty areas require 18 credits in advanced study coursework. Courses are selected with advisor/committee approval. See degree sheets for all programs at

[http://www.ndsu.nodak.edu/ndsu/education/teacher\\_education/Graduate%20Info/programs\\_offered.html](http://www.ndsu.nodak.edu/ndsu/education/teacher_education/Graduate%20Info/programs_offered.html)

**Evidence:** create portfolios based on the NBPTS principles, write reflections, papers, class presentations, present action research projects,

### **B. ADVANCED STUDY IN PROFESSIONAL EDUCATION**

**1. The program requires advanced study of students as learners and of the learning environment.**

**Where in program:** EDUC 751 – Students and their Learning, choice of education electives that address this standard.

**Evidence:** write reflections, papers, class presentations, student work samples, create portfolios based on the NBPTS principles

**2. The program requires advanced study of curriculum theory, design, and delivery.**

**Where in program:** EDUC 752 – Curriculum Design and Delivery, choice of education electives that address this standard.

**Evidence:** write reflections, papers, class presentations, student work samples, create portfolios based on the NBPTS principles

**3. The program requires advanced study of multiple means of assessing and evaluating diverse students' learning.**

**Where in program:** EDUC 753 – Managing and Monitoring Learning, choice of education electives that address this standard.

**Evidence:** write reflections, papers, class presentations, student work samples, create portfolios based on the NBPTS principles

**4. Programs designed to prepare teachers for different roles in schools, as supervisors or curriculum and instruction specialists, must also require professional experience in schools as a criterion for admission and include study of educational leadership and supervision of personnel with emphasis on professional growth.**

**Where in program:** The School of Education also offers advanced degrees in Counselor Education, both school and community, and Educational Leadership. The Counselor Education Masters program does not require previous teaching experience in schools as a criterion for admission based on Council for Accreditation of Counseling and related Education Programs (CACREP) requirements. Further, few states require school counselors to hold a teaching license. For Educational Leadership principal and superintendent educational leadership programs, consideration for admission requires a minimum of two years of teaching experience.