**GenEd Course Certifications**

**Fall 2019 • as of 12/5/19**

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| **NMHED APPROVED** | **APPROVALS NEEDED** |
| **Old Prefix, Number, & Title New Course** | **Old Prefix, Number, & Title Instructor Assigned Cert Form** |

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| Diné Studies | |
| NAV 101 Intro to Nav Lang NAVA 1110 Navajo Language  NAV 110 Found of Nav Culure ANTH 1330 Foundations of Navajo Cult  NAV 201 Intro Nav Lang (Rdg) NAVA 2130 Intermediate Navajo Writ I  NAV 211 Navajo History HIST 2135 Navajo History | NAV 221 Navajo Government Lupita Chicag  NAV 225 Diné Philosophy of Education Lupita Chicag  NAV 195/295 Topics in Diné Studies \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| Communications | |
| COM 130 Public Speaking COMM 113o Public Speaking  COM 150 Interpersonal Comm COMM 2120 Interpersonal Comm  ENG 110 Freshman Comp ENGL 1110 Composition I  ENG 111 Comp & Research ENGL 1120 Composition II  ENG 105 Technical Comm ENGL 1210 Technical Communications  ENG 112 Tech Research & Writ ENGL 2120 Intermediate Composition |  |

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| Mathematics | |
| MTH 121 College Algebra MATH 1220 College Algebra  MTH 123 Trigonometry MATH 1230 Trigonometry  MTH 213 Elementary Stats MATH 1350 Intro to Statistics  MTH 162 Calculus I MATH 1510 Calculus I  MTH 163 Calculus II MATH 1520 Calculus II | MTH 113 Technical Mathematics II Carlos Paez-Paez  MTH 150 Pre-Calculus Mohamed Illafe  MTH 161 Calculus w/ Applications \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| Physical & Natural Sciences | |
| BIO 110 Elements of Biology BIOL 1110 General Biology  BIO 131 Hum Anat & Phys I BIOL 1320C Intro to Hum A & P L&L I  BIO 222 Gen Biology w/ Lab BIOL 2630C Gen Biology L&L  BIO 224 Microbiology BIOL 2310 Microbiology  CHM 110 Elements of Chem CHEM 1120 Intro to Chemistry  CHM 120 General Chem w/Lab CHEM 1215C Gen Chem I w/ Lab  PHY 101 Intro to Physics PHYS 1115C Survey of Physics w/ Lab  PHY 111 Alg-based Phys I PHYS 1230C Alg-based Phys I w/ L&L  PHY 112 Alg-based Phys II PHYS 1240C Alg-based Phys II w/ L&L  PHY 121 Cal-based Phys I PHYS 1310C Cal-based Phys I w/ L&L  PHY 122 Cal-based Phys II PHYS 1320C Cal-based Phys II w/ L&L | AST 110 The Solar System \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  AST 112 The Cosmic System \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  BIO 120 Principles of Biology I Irene Anayangwe  BIO 122 Principles of Biology II Irene Anayangwe  BIO 130 Human Anatomy & Physiology I Ramesh Devkota  CHM 122 General Chemistry II Thiago Soundappan  ENV 102 Environmental Science I Steve Chischilly  ENV 182 Enviroonmental Science II Steve Chischilly  GEO 101 Principles of Geology \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  SCI 101 Physical Science \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  SCI 195/295 Topics in Science |
| Social & Behavioral Sciences | |
| ECN 111 Intro to Economics ECON 1110 Survey of Economics  PSY 105 Intro to Psychology PSYC 1110 Intro to Psychology  PSY 210 Developmental Psych PSYC 2120 Developmental Psychology  SOC 101 Intro to Sociology SOCI 1110 Intro to Sociology  SOC 210 Soc of Social Problems SOCI 2310 Contemporary Social Prob | LAW 101 Introduction to Law Robert Yazzie  LAW 106 American Indian Law Robert Yazzie  LAW 195/295 Topics in Law Robert Yazzie  PSY 195/295 Topics in Psychology Dianna Mullet  SSC 100 College Success Skills Nancy Godwin  SSC 195/295 Topics in Sociology Nancy Godwin |

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| Humanities | |
| ENG 150 Intro to Literature ENGL 1410 Intro to Literature  ENG 160 Native Amer Lit ENGL 2567 Cont Navajo Lit  ENG 161 Comparative Ethnic Lit ENGL 2650 World Literature I  ENG 205 Cont Navajo Lit ENGL 2733 Native American Lit  HST 21o Amer History to 1877 HIST 1110 US History I  HST 220 Hist of Amer SW HIST 2150 Hist of Amer SW  HUM 160 Global Cinema FDMA 2175 Int'l Cinema  HUM 170 Hist Nat Amer in Med HUMN 1130 Media and Culture | COM 210 Journalism Chelsea Bunn  COM 195/295 Topics in Communication Chelsea Bunn  ENG 195/295 Topics in English Chelsea Bunn  HST 211 American History Since 1877 Dianna Mullet  PED 101 Physical Education \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  PED 120 Strength Training \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  PED 130 Jogging \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

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| Creative & Fine Arts | |
| ENG 155 Creative Writing ENGL 2310 Intro to Creative Writing  ENG 201 Beginning Fiction Writ ENGL 2320 Intro to Fiction Writing  ENG 202 Beginning Poetry Writ ENGL 2330 Intro to Poetry Writing | ART 110 Art Studio I \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  ART 195/295 Topics in Art \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  NAV 103 Introduction to Navajo Weaving \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  NAV 115 Intermediate Navajo Weaving \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  NAV 120 Advanced Navajo Weaving |

NAV 221 Navajo Government

No comparable course

There is POLS 2220 Native American Politics

NAV 225 Diné Philosophy of Education

No comparable course

NAV 195/295 Topics in Diné Studies

No comparable course

ENG 165 History of Native Americans in Media

HUMN 1180 The History of Native Americans in Media

This course is designed to allow students to examine the careers and lives of Native Americans with a focus on the history of Native Americans in Media. Media is a word which encompasses a broad range of topics. Students will explore issues through film, the spoken word, the written word and live performance which may be relevant to the historical significance of how Native Americans are viewed. This includes contemporary fiction/non-fiction writings, filmmaking and acting, theater performances, musical and spoken word recordings, and radio and television broadcasting with an emphasis on Native Language Revitalization. In addition, the course will attempt to broaden the student’s ability to analyze and evaluate oral and written communication in terms of situation, audience, purpose, aesthetics and diverse points of view, while exploring the voices of North American Indigenous Peoples.

**Student Learning Outcomes**

1. Students will understand the Writing Process.

2. Students will gain knowledge about how to interpret creative works by various well known Native American and non-native filmmakers and writers.

3. Students will be introduced to the nature of oral tradition and the challenges facing Native American readers from different Nations in preserving such materials.

4. Students will explore issues relevant to contemporary Native Americans as portrayed in documentaries, dramas, comedies, horror, western, action adventure, and romance films.

5. Using anthropological and oral materials as background, we will consider how several major Native American writers have combined old and new to develop innovative forms of expression.

MTH 113 Technical Mathematics II

MATH 1170 Technical Math

This course is designed for students in technical trade, Allied Health, and Tech Prep programs. There is an expectation for minimal background in mathematics (meet high school graduation requirements). For some of you, several topics may be “easy,” for others these same topics may present a challenge, especially if it has been some time since you have done mathematical calculations and solved problems algebraically. We will begin with basic arithmetic operations on real numbers (whole numbers, fractions, decimals). We will delve into measurement in both the American Standard and International (metric) systems. We will do some algebra and work with geometric formulas. There are also sections on trigonometry and statistics. All of this will give you an overview of the types of mathematics you will likely use in technical and health fields.

**Student Learning Outcomes**

Upon completion of this course, students will demonstrate competence (70% or better) in the

following areas:

Course Goal #1: Communication

1. Students will use correct mathematical notation and terminology.

2. Students will correctly interpret graphical representations of information.

3. Students will explain (orally and/or in writing) the steps needed to solve a problem.

4. Students will analyze solutions to equations and formulas, and give them contextual meaning.

Course Goal #2: Real Number Arithmetic

1. Students will correctly add, subtract, multiply, and divide common fractions.

2. Students will correctly add, subtract, multiply, and divide decimal fractions.

3. Students will correctly add, subtract, multiply, and divide integers.

4. Students will correctly evaluate exponents and radicals.

5. Students will correctly perform calculations and solve problems in which some values are percents.

6. Students will correctly convert between common fraction, decimal fraction, and percent notation.

7. Students will correctly use the Order of Operations.

8. Students will correctly solve proportional equations.

Course Goal #3: Measurement

1. Students will correctly use tools to find accurate measurements in both the American Customary and Metric measurement systems.

2. Students will correctly convert between units within and between both the American Customary and Metric measurement systems.

3. Students will correctly interpret significant digits from recorded measurements.

Course Goal #4: Basic Algebra

1. Students will correctly solve for a variable in linear and quadratic equations.

2. Students will correctly solve for the indicated variable in a formula.

3. Students will correctly add, subtract, multiply, and simplify algebraic expressions.

4. Students will correctly convert contextual statements (word problems) into algebraic expressions and equations.

5. Students will correctly complete calculations with scientific notation.

Course Goal #5: Plane Geometry and Solid Figures (2-D and 3-D)

1. Students will correctly compute perimeter, circumference, area, volume, and surface area of 2-D and 3-D geometric figures.

2. Students will correctly measure various attributes of 2-D and 3-D geometric figures.

3. Students will correctly solve contextual problems involving 2-D and 3-D geometric figures.

Course Goal #6: Triangle Trigonometry

3. Students will correctly use the Pythagorean Theorem to solve problems as applied to right triangles.

4. Students will correctly use basic trigonometric ratios to solve problems as applied to right triangles.

5. Students will correctly use the Law of Sines and/or the Law of Cosines to solve problems as applied to oblique triangles.

Course Goal #7: Statistics

2. Students will correctly read and construct graphs from data.

3. Students will correctly calculate measures of central tendency.

MTH 150 Pre-Calculus

MATH 1240 Pre-Calculus

This course extends students’ knowledge of polynomial, rational, exponential and logarithmic functions to new contexts, including rates of change, limits, systems of equations, conic sections, and sequences and series.

**Student Learning Outcomes**

1. Functions

a. Reinforce recognizing a function from its graph and from its algebraic expression.

b. Reinforce identification of a one-to-one function graphically and from its algebraic expression.

c. Reinforce identification of inverse functions graphically and algebraically.

d. Reinforce combining functions arithmetically and compositionally.

e. Be able to calculate the average rate of change of a function using the difference quotient and depict it graphically.

f. Be able to find a limiting value of a function and be able to identify and use the notation that describes this.

2. Graphing

a. Reinforce using key characteristics of functions to graph them.

b. Be able to graph conic sections from their key characteristics such as foci, eccentricity and asymptotes.

c. Be able to identify all functions mentioned from their graphs, describing their key aspects.

3. Solving

a. Exponential/Logarithmic equations using the rules of exponents and logarithms

b. Systems of linear equations by elimination.

c. Non-linear systems algebraically and graphically.

4. Applications

a. Modeling with functions with an emphasis on exponential and logarithmic functions, growth and decay.

5. Sequences and series

a. Understand the concept and notation of a sequence.

b. Understand the concept and notation of a series.

c. Be able to find limits of basic sequences.

d. Be able to find sums of basic series.

MTH 161 Calculus with Applications

MATH 1430 Applications of Calculus I

An algebraic and graphical study of derivatives and integrals, with an emphasis on applications to business, social science, economics and the sciences.

**Student Learning Outcomes**

Students will:

1. Find limits algebraically and graphically, and use limits to analyze continuity.

2. Find the derivative of a function by applying appropriate techniques (limit of the difference quotient, general derivative rules, product rule, quotient rule, chain rule, and higher order derivatives).

3. Perform implicit differentiation. Use implicit differentiation to solve related rate application problems.

4. Use the derivative to describe the rate of change and slope of a curve in general and at particular points. Compare and contrast average rates of change to instantaneous rates of change.

5. Find the maxima, minima, points of inflections, and determine concavity of a function by applying the first and second derivatives. Use these results to sketch graphs of functions and to solve optimization problems in context.

6. Find the antiderivative and indefinite integral functions to include integration by substitution. Apply the Fundamental Theorem of Calculus in computing definite integrals of functions.

7. Approximate the area under the curve using Riemann sums.

8. Use the integral to determine the area under a curve and to find the accumulated value of a function in context.

9. Solve contextual problems by identifying the appropriate type of function given the context, creating a formula based on the information given, applying knowledge of algebra and calculus, and interpreting the results in context.

10. Communicate mathematical information using proper notation and verbal explanations.

BIO 120 Principles of Biology I

Need SME to determine equivalent course.

BIO 122 Principles of Biology II

Need SME to determine equivalent course.

BIO 130 Human Anatomy & Physiology I

Need SME to determine equivalent course.

CHM 122 General Chemistry II

Need SME to determine equivalent course.

ENV 102 Environmental Science I

ENVS 1110 Environmental Science I

Introduction to environmental science as related to the protection, remediation, and sustainability of land, air, water, and food resources. Emphasis on the use of the scientific method and critical thinking skills in understanding environmental issues.

**Student Learning Outcome**

1. Students will learn to critically analyze cause-and-effect relationships in the environment

2. Students will integrate and synthesize knowledge and draw appropriate conclusions based on the scientific method

ENVS 1110L. Environmental Science I Laboratory

Covers general principles and theory relating to environmental science and management. Focal areas for the course include: water management, climate, pollution and waste management. Students taking this course will come away with a basic understanding of the main issues faced by technicians and managers of environmental science departments.

**Student Learning Outcomes**

1. Students will exercise and develop communication skills in public speaking, technical writing, and research documentation.

2. Students will be relate current environmental issues to their personal, economic, and cultural circumstances.

3. Students will garner assessment and problem solving

ENV 182 Environmental Science II

ENVS 1120 Environmental Science II

Provides a continuation of general principles and theory relating to environmental science and management. Focal areas for the course include: mining, energy production, mitigation of environmental problems, and topical matters relating to tribal communities. Students taking this course will build upon prior learning to develop an intermediate understanding of the main issues faced by technicians and managers of environmental science departments.

**Student Learning Outcomes**

1. Students exercise and develop communication skills in public speaking, technical writing, and research documentation.

2. Students expand their abilities to relate current environmental issues to general economic, social, and legal circumstances.

3. Students identify the political and legal contexts of environmental policies, and to be able to articulate the relative importance of each.

4. Students understand linkages between environmental issues at Tribal, State, National, and International contexts.

ENVS 1120L. Environmental Science II Laboratory

Complementary laboratory section to ENVS 1120. Continues coverage of general principles and theory relating to environmental science with a focus on environmental testing. Focal areas for the course include: weather and climate, food production, ethics, and risk assessment. Students taking this course will come away with a basic understanding of the skills required of technicians and environmental science practitioners.

**Student Learning Outcomes**

1. Students gain experience and understanding of Environmental Science as a discipline, including: scientific reasoning, key concepts, terminology, and social context.

2. Students acquire vocabulary and technical understanding of climate, weather, biogeography and ecological principles.

3. Students appropriately interpret risk assessment results, discussing the implications and limitations of methods for governing contemporary environmental challenges.

4. Students independently design and execute a laboratory experiment utilizing discipline standard procedures.

GEO 101 Principles of Geology

Need SME to determine equivalent course.

SCI 101 Physical Science

Need SME to determine equivalent course

SCI 195/295 Topics in Science

Need SME to determine equivalent course.

LAW 101 Introduction to Law

Need SME to determine equivalent course.

LAW 106 American Indian Law

There is POLS 2220 Native American Politics

Need SME to determine equivalent course.

LAW 195/295 Topics in Law

Need SME to determine equivalent course.

PSY 195/295 Topics in Psychology

PSYC 2996

Need SME to prepare certification form.

SSC 100 College Success Skills

FYEX 1120 College Success

This is an introduction to college life and surveys topics from policies and procedures to career exploration. This course outlines strategies the student can use to achieve a successful college experience. The emphasis is on the attainment of superior personal and academic skills.

**Student Learning Outcomes**

By the end of this College Success course, students should be able to:

3. Recognize the importance of success skills in their life.

4. Gain insight into how their own learning is best achieved through a learning skills inventory.

5. Develop a time management system that will allow them to balance all aspects of life and reach the goals which they have set.

6. Improve memory techniques and apply them to all aspects of one’s life.

7. Improve reading skills by becoming an active reader.

8. Discuss note taking skills and develop a system that works for them.

9. Discover the art of test taking and improve one’s performance on tests.

10. Improve their critical thinking skills in order to enhance learning.

11. Recognize the importance of effective communication and other personal skills like money management and good health.

12. Recognize the value of diversity that comes in many forms throughout academics and life.

13. Increase awareness of available student services at NMJC.

2. Determine their own personal academic/career goals and set a course to achieve them.

SSC 195/295 Topics in Sociology

No comparable course

COM 210 Journalism

ENGL 1310 Introduction to Journalism

This course is intended as an introduction to print and online journalism. The student is introduced to the journalistic style of writing, terms used in journalistic work, editing copy, as well as layout and design. Emphasis is also placed on examining complexities surrounding the media, particularly media ethics.

**Student Learning Outcomes**

1. Recognize newsworthy events or people.

2. Assess the necessary background research for a story and how to interview sources.

3. Develop basic “hard news” stories and basic feature stories.

4. Recognize the ethical conflicts that can arise in the course of researching and writing stories.

5. Apply principles for layout and design of articles.

6. Use appropriate diction, syntax, grammar, and mechanics.

COM 195/295 Topics in Communication

COMM 2996

Need SME to prepare certification form.

ENG 195/295 Topics in English

ENGL 2996

Emphasis on a literary and/or writing subject chosen for the semester. Repeatable for a unlimited credit under different subtitles.

Need SME to prepare certification form.

HST 221 American History Since 1877

HIST 1120 United States History II

The primary objective of this course is to serve as an introduction to the history of the United States from reconstruction to the present. The elements of this course are designed to inform students on the major events and trends that are essential in the understanding of the development of the United States within the context of world societies.

**Student Learning Outcomes**

1. Students will be able to EXPLAIN in their work how humans in the past shaped their own unique historical moments and were shaped by those moments, and how those cultures changed over the course of the centuries for the history of the United States from the reconstruction to the present.

2. Students will DISTINGUISH between primary and secondary sources, IDENTIFY and EVALUATE evidence and EMPATHIZE with people in their historical context.

3. Students will SUMMARIZE and APPRAISE different historical interpretations and evidence in order to CONSTRUCT past events.

4. Students will IDENTIFY historical arguments in a variety of sources and EXPLAIN how they were constructed, EVALUATING credibility, perspective, and relevance.

5. Students will CREATE well-supported historical arguments and narratives that demonstrate an awareness of audience.

6. Students will APPLY historical knowledge and historical thinking