



DEPARTMENT OF
HIGHER EDUCATION &
WORKFORCE DEVELOPMENT

New Program Report

Date Submitted:
03/19/2021

Institution
Northwest Missouri State University

Site Information

Implementation Date:
8/2/2021 12:00:00 AM

Added Site(s):

Selected Site(s):

Northwest Missouri State University, 800 University Drive, Maryville, MO, 64468-6001

CIP Information

CIP Code:
131329

CIP Description:
A program that prepares individuals to teach physics programs at various educational levels.

CIP Program Title:
Physics Teacher Education

Institution Program Title:
Physics Science Education

Degree Level/Type

Degree Level:
Bachelor's Degree

Degree Type:
Bachelor of Science in Education (BSED)

Options Added:

Collaborative Program:
N

Mode of Delivery

Current Mode of Delivery
Classroom

Student Preparation

Special Admissions Procedure or Student Qualifications required:
All education majors must successfully complete all Phase I coursework with a grade of C or better. All students must pass the MoGEA, have a 20 ACT or higher, or meet the GPA requirement to be admitted. All students must successfully complete a criminal background check.

Specific Population Characteristics to be served:
n/a



**DEPARTMENT OF
HIGHER EDUCATION &
WORKFORCE DEVELOPMENT**

New Program Report

Faculty Characteristics

Special Requirements for Assignment of Teaching for this Degree/Certificate:

The School of Education courses are taught by faculty from the School of Education; the Department of Natural Sciences teaches any related science discipline content courses; the Department of Natural Sciences also houses the Science Education faculty member.

Faulty member have been verified against HLT 18 hours within the degree area as assigned.

Estimate Percentage of Credit Hours that will be assigned to full time faculty:

100% of credit hours are assigned to full time faculty.

Expectations for professional activities, special student contact, teaching/learning innovation:

Expectations are the same for this program as for all other BSED programs at the University.

Student Enrollment Projections Year One-Five

Year 1	Full Time: 1	Part Time: 0	
Year 2	Full Time: 2	Part Time: 0	
Year 3	Full Time: 2	Part Time: 0	Number of Graduates: 2
Year 4	Full Time: 3	Part Time: 0	
Year 5	Full Time: 4	Part Time: 0	Number of Graduates: 3

Percentage Statement:

n/a

Program Accreditation

Institutional Plans for Accreditation:

Northwest is a member in good standing of the Association for Advancing Quality in Education Preparation (AAQEP).

Program Structure

Total Credits:

141

Residency Requirements:

n/a

General Education Total Credits:

44

Major Requirements Total Credits:

54

Course(s) Added

COURSE NUMBER	CREDITS	COURSE TITLE
see	0	attached

Free Elective Credits:

0



DEPARTMENT OF
HIGHER EDUCATION &
WORKFORCE DEVELOPMENT

New Program Report

Internship or other Capstone Experience:

All BSED students will complete a student teaching experience.

Assurances

I certify that the program is clearly within the institution's CBHE-approved mission. The proposed new program must be consistent with the institutional mission, as well as the principal planning priorities of the public institution, as set forth in the public institution's approved plan or plan update.

I certify that the program will be offered within the proposing institution's main campus, CBHE-approved service region or CBHE-approved off-site location.

I certify that the program will not unnecessarily duplicate an existing program within the geographically applicable area.

I certify that the program will build upon existing programs and faculty expertise.

I certify that the program can be launched with minimal expense and falls within the institution's current operating budget.

I certify that the institution has conducted research on the feasibility of the proposal and it is likely the program will be successful. Institutions' decision to implement a program shall be based upon demand and/or need for the program in terms of meeting present and future needs of the locale, state, and nation based upon societal needs, and/or student needs.

Contact Information

First and Last Name: JAY
JOHNSON

Email: jay@nwmissouri.edu

Phone: 660-562-1277

Physics Science Education Major

Requirements

1. The Northwest Core (44-47 hours)
2. Institutional Requirements (4 hours)
3. Collateral Courses (25 hours)
 - a. BIOL - 04106 - Principles of Biology - 3 credits
 - b. BIOL - 04107 - Principles of Biology Laboratory - 1 credits
 - c. MATH - 17120 - Calculus I - 4 credits
 - d. CHEM - 24114 - General Chemistry I - 3 credits
 - e. CHEM - 24115 - General Chemistry I Laboratory - 1 credits
 - f. CHEM - 24116 - General Chemistry II - 4 credits
 - g. CHEM - 24117 - General Chemistry II Laboratory - 1 credits
 - h. GEOL - 27110 - General Geology - 3 credits
 - i. GEOL - 27111 - General Geology Laboratory - 1 credits
 - j. GEOL - 27114 - General Earth Science - 3 credits
 - k. GEOL - 27115 - General Earth Science Laboratory - 1 credits
 - l. BIOL - 04420 - Environmental Issues - 4 credits
 - m. BIOL - 04376 - Basic Ecology - 4 credits
 - n. GEOL - 27360 - Environmental Geology - 4 credits
4. Required Courses (29 hours)
 - a. PHYS - 25120 - Fundamentals of Classical Physics I - 4 credits
 - b. PHYS - 25121 - Fundamentals of Classical Physics I Laboratory - 1 credits
 - c. PHYS - 25230 - Fundamentals of Classical Physics II - 4 credits
 - d. PHYS - 25231 - Fundamentals of Classical Physics II Laboratory - 1 credits
 - e. PHYS - 25430 - Optics - 3 credits
 - f. PHYS - 25352 - Modern Physics - 3 credits
 - g. PHYS - 25489 - Physics Practicum - 1 to 2 credits
 - h. SCED - 28550 - History of Science and Technology - 3 credits
 - i. Electives and Other Departmental Requirements - 4 credits
 - i. PHYS - 25325 - Classical Mechanics I - 3 credits
 - ii. PHYS - 25326 - Classical Mechanics I Laboratory - 1 credits
 - iii. PHYS - 25330 - Electricity and Magnetism I - 3 credits
 - iv. PHYS - 25332 - Electronics - 3 credits
 - v. PHYS - 25333 - Electronics Laboratory - 1 credits
 - vi. PHYS - 25450 - Computational Physics - 3 credits
 - vii. PHYS - 25350 - Introduction to Quantum Mechanics - 3 credits
 - viii. PHYS - 25499 - Special Investigations in Physics - 1 to 3 credits
 - ix. PHYS - 25420 - Advanced Physics Laboratory - 1 credits
 - x. MATH - 17121 - Calculus II - 5 credits
5. Professional Education Requirements (39 hours)
 - a. Northwest Professional Education Curriculum – 36 credits
 - b. SCED – 28580 – Methods in Secondary School Science – 3 credits