

UNIVERSITY CURRICULUM COMMITTEE

PROPOSAL FOR NEW ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

1. College CENS

2. Academic Unit Physics and Astronomy

3. Academic Plan Name BS Ed Physics: Secondary Education (extended major)

4. Subplan (if applicable)? _____

5. Effective Date FALL 2006

6. Is this proposal for a : New Plan

Plan Change

Plan Deletion

New Subplan

Subplan Change

Subplan Deletion

7.

For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the current on line academic catalog:

<http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm>

Be sure you include all catalog text that pertains to this plan change

For New Plans, leave this column blank.

This degree is intended for secondary education students whose primary emphasis area is physics. This academic plan also prepares you to obtain dual certification in chemistry. This plan meets or exceeds the No-Child-Left-Behind "highly qualified" national and state standards for both physics and chemistry.

...
* at least 52 units of major requirements

Major Requirements

Complete the following 52 units:

- * PHY 161, 161L, 262, 262L, 263, 264, and 361 (17 units)
- * AST 180 and 182 (4 units)
- * MAT 136 and 137 (8 units)
- * CHM 151, 151L, 152, 152L, 230, 230L, and 295 (14 units)
- * SCI 461 (3 units)
- * PHY 333W, which meets NAU's junior writing requirement (3 units)
- * SCI 460C, which meets NAU's senior capstone requirement (3 units)

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)

This degree is intended for secondary education students whose primary emphasis area is physics. This academic plan also prepares you to obtain dual certification in **mathematics or chemistry**. This plan meets or exceeds the No-Child-Left-Behind "highly qualified" national and state standards. ~~for both physics and chemistry.~~

...
* at least **38** units of major requirements
*** 6 or 14 units to meet the mathematics or chemistry emphasis, respectively**

...
Major Requirements

Complete the following **38** units:

- * PHY 161, 161L, 262, 262L, 263, 264, and 361 (17 units)
- * **AST 183/184L or AST180/181L (4 units)**
- * MAT 136 and 137 (8 units)
- * ~~CHM 151, 151L, 152, 152L, 230, 230L, and 295 (14 units)~~
- * SCI 461 (3 units)
- * PHY 333W, which meets NAU's junior writing requirement (3 units)
- * SCI 460C, which meets NAU's senior capstone requirement (3 units)

Emphasis requirements

Physics/Chemistry:

* **CHM 151, 151L, 152, 152L, 230, 230L, and 295 (14 units)**

Physics/Mathematics:

* **MAT 301 (3 units)**
* **MAT 401 or 402 (3 units)**

8. For undergraduate plans, will this requirement be a student individualized plan*? no yes

*A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAiLS focus, for which coursework requirements are established by the student in consultation with the advisor.

If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.

9. For undergraduate plans, will a milestone** be used to:

- a. verify satisfactory completion of a non course requirement.
- b. indicate admission to a major.
- c. will not be used.

**A *Milestone* is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status.

If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.

10. Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage - <http://www4.nau.edu/assessment/main/degree/degree.htm>).

The learning outcomes of this plan are unchanged by this curricular adjustment, and the department will use the current assessment plan to assess the student learning.

11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes. **The BS Ed Physics prepares students to teach physics and chemistry at the high school level. The plan is relatively new but has been quite successful so far in attracting students. Some students have requested, however, an option for certification in Physics and Mathematics instead of Physics and Chemistry. We propose adding two emphases, one in each area, to give the students an option that fits their career goals.**

12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?

13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU?

If so, attach supporting documentation from the affected departments/units and college dean.

14. Will present library holdings support this academic plan/subplan?

Certifications

Department Chair/ Unit Head (if appropriate) Date

Chair of college curriculum committee Date

Dean of college Date

For committee use only

For University Curriculum Committee Date

Action taken: _____ approved as submitted _____ approved as modified

Note: Submit original to associate provost's office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.