

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 Physical Science 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

<p>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 <i>Be sure you include all catalog text that pertains to this plan change</i></p> <p><i>For New Plans, leave this column blank.</i></p> <p>...</p> <p>* at least 41 units of major requirements</p> <p>...</p> <p>Major Requirements</p> <p>Complete the following 40 units:</p> <ul style="list-style-type: none"> * AST 180 (3 units) * PHY 111, 111L, 112, and 112L (8 units) * PHS 313 (3 units) * CHM 130, 151L, 230, and 230L (9 units) * GLG 101 and 103 (4 units) * GGR 461 (4 units) * MAT 125 (4 units) * Any course that meets NAU's junior writing requirement (3 units) * PHS 498C, which meets NAU's senior capstone requirement (3 units) 	<p>Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing. <i>(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.)</i></p> <p>...</p> <p>* at least 44 units of major requirements</p> <p>...</p> <p>Major Requirements</p> <p>Complete the following 44 units:</p> <ul style="list-style-type: none"> * AST 180 or 183 (3 units) * PHY 111, 111L, 112, and 112L (8 units) * PHS 313 (3 units) * PHY 161, 161L, 262, 262L, 263, and 361 (14 units) * CHM 130, 151L, 230, and 230L (9 units) * CHM 151, 151L, 152, 152L, 230, 230L (13 hours) * GLG 101 and 103 (4 units) * GGR 461 (4 units) * MAT 125 (4 units) * Any course that meets NAU's junior writing requirement (3 units) * PHY 333W, which meets NAU's junior writing requirement (3 units) * PHS 498C, which meets NAU's senior capstone requirement (3 units)
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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 continue to use the current assessment plan.

11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes. **Three of the original core courses for this plan are no longer offered due to low enrollment (PHS 300W, PHS 313, and PHS 498C). This is particularly problematic because (1) all three were upper-division courses that counted toward the 30 hour minimum, (2) one course was the advanced writing course, and (3) one was the capstone course. It is difficult for students to find replacements for these courses. Because the algebra-based physics sequence and its math prerequisites don't prepare them to take the PHY/AST capstone course, advanced writing course or any other PHY/AST courses, they were forced to find replacements in other departments, which was just as difficult. Essentially the major couldn't be completed because there were no courses that could be used to fulfill the requirements. Recently, however, several students who took the calculus-based sequence (instead of the algebra-based sequence specified in the catalog) successfully completed the major since they could take the regular PHY capstone and junior writing course.**

The primary change here is to replace the algebra-based introductory physics sequence with a calculus based sequence and require PHY (rather than PHS) courses for the capstone and junior writing course. The requirement of AST 180 Intro Astronomy was replaced by an option to take either AST 180 or AST 183 Life in the Universe. The chemistry part of the requirements were also beefed up (130 replaced by 151, etc.)

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.