ATTACHMENT 1U-1
LETTER OF NOTIFICATION – 3

NEW OPTION, CONCENTRATION, EMPHASIS

(Maximum 18 semester credit hours of new theory courses and 6 credit hours of new practicum courses)

1. Institution submitting request: University of Arkansas, Fayetteville

2. Contact person/title: Dr. Sharon Gaber, Provost and Vice-Chancellor for Academic Affairs, ADMN 422, University of Arkansas, Fayetteville, AR 72701

3. Phone number/e-mail address: (479) 575-2151 / sgaber@uark.edu

4. Proposed effective date: Fall 2014

5. Title of degree program: This is a new concentration in the physics program. A simultaneous proposal is being submitted by Geology.

6. CIP Code: 40.0801

7. Degree Code: 3030

8. Proposed option/concentration/emphasis name: Geophysics concentration

9. Reason for proposed action:
   A variety of sub-disciplines of the geological sciences rely increasingly on quantitative, physics-based understanding of earth materials and geological and hydrological processes. Preparation for work within these fields requires a combination of geology, physics, and mathematics skills that is not typically obtained from a traditional degree program within geology or physics.

10. New option/concentration/emphasis objective:
    The proposed degree program will use existing faculty, courses, and resources to prepare students that are competitive for the top geophysics graduate programs in the country and will also act as a recruiting tool to bring physics majors into a double major in geology. The final aim can be energy or environmental industry (MS terminal degree) or research careers within geophysics broadly-defined (PhD terminal).

11. Provide the following:
    a. List of required courses
       Students will complete the same required courses as for the computational physics degree. The upper division electives from physics, math and computer science will be replaced by GEOL 1113 &1111L, GEOL 2313, GEOL 3413, 3514, 4223 and 4924
    b. New course descriptions: No new courses
    c. Program goals and objectives: To provide an excellent career preparation for our students that is not currently offered, but is completely within our current resources.
    d. Expected student learning outcomes: Students will be prepared for a variety of career paths. Students doing the minimum requirements for the concentration will have completed the requirements for a minor in geology. The addition of GEOL 4666 will allow them to enter a masters program in geology with no deficits, or enter the workforce directly. With a strong physics

background, this opens some very good career options. Additional electives as indicated possible in the 8-semester plan open more career and PhD research options.

12. Will the new option be offered via distance delivery?

    No, since neither of the existing degrees from which it draws resources are offered distance. It will make use of any distance courses offered in any of the existing courses.

13. Mode of delivery to be used: See above.

14. Explain in detail the distance delivery procedures to be used: See above.

15. Is the degree approved for distance delivery? See above.

16. List courses in option/concentration/emphasis. Include course descriptions for new courses.

    Physics core with PHYS 3113, GEOL 1113 &1111L, GEOL 2313, GEOL 3413, 3514, 4223 and 4924 as the required concentration courses.

17. Specify the amount of the additional costs required, the source of funds, and how funds will be used.

None.

Board of Trustees Approval Date:

Chief Academic Officer Date: