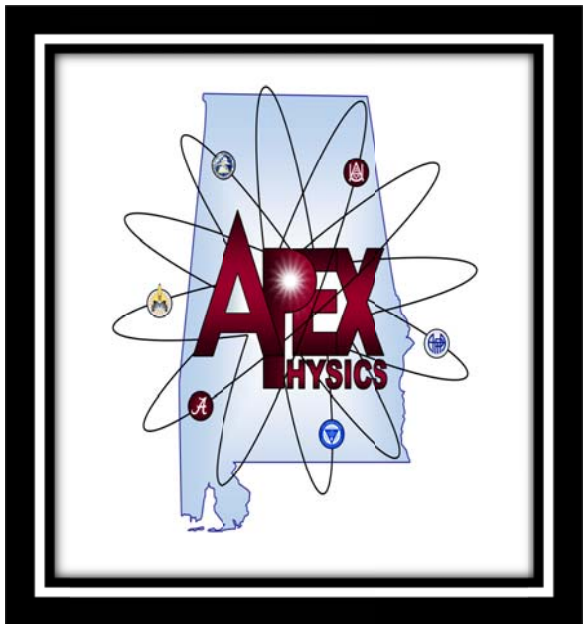


The University of Alabama Alliance for Physics Excellence (APEX) Scholarship Program for Pre-Service Secondary Physics Teachers



Program Description

Participant Application Information

APEX Program Description

The Alliance for Physics Excellence (APEX) vision is to transform secondary physics education in Alabama by enabling physics teachers to acquire a deeper knowledge of physics content and employ more effective pedagogical strategies based on physics education research, enabling students to achieve higher gains. APEX subscribes to our nation's philosophy that every student is entitled to the same quality educational experience, regardless of where they attend school, which assumes teachers are equally and highly qualified. Physics topics are becoming ubiquitous as educators realize that physics is the fundamental science upon which the other sciences and engineering are built.

The full APEX Program, funded by the National Science Foundation, is designed to raise the quality of physics teaching for all students by both inservice and preservice teachers. APEX is comprised of three interrelated components. The first component is the Alabama Physics Education Center (APEC). APEC is comprised of two professional efforts: Physics Teacher Institute (PTI) and the Physics Resource Enhancement Program (PREP). The second components of APEX is the Physics Teaching Research Program (PTR) and the third component is the Physics Leadership Development Program (PLD).

The University of Alabama Alliance for Physics Excellence (UA-APEX) Scholarship, as a part of APEC, provides support for students seeking certification at the undergraduate or Master's degree level to teach high school physics. For undergraduate physics majors seeking General Science certification, the award consists of a maximum of \$16,000 a year during the junior and senior years. For students with an undergraduate major in physics (or the equivalent) enrolled in the Master's degree Alternative Certification (MA Alt Cert) program, the award consists of a maximum of \$16,000 a year for up to two years of study.

Minimum Criteria Required for Submission of Application

- (1) United States citizens, nationals of the United States, or aliens lawfully admitted to the United States for permanent residence,
- (2) Attainment of (a) for scholarships - at least junior status with a minimum of 61 hours completed (sophomore status of physics major coursework is obtained) or (b) for stipends - acceptance into UA MA degree alternative certification education program in General Science with a major in Physics (or a Physics single field).
- (3) Academic Merit:
 - 3.1 Undergraduates: Minimum 2.75, Preferred 3.0+ overall GPA based on full academic transcripts with at least 61 hours for undergraduates. Note: For current UA students Degree Works will provide transcripts.
 - 3.2 Graduates: a completed appropriate Bachelor's degree in Physics with a minimum *overall* GPA based on full undergraduate academic transcripts of 3.0+ with a 2.75 GPA minimum in *Physics*) and acceptable GRE/MAT scores. Note: For current UA students Degree Works will provide transcripts.

Criteria Used After Minimum Eligibility is Established (rank ordered)

- (4) Minorities, persons with disabilities, and other underrepresented students in physics education
- (5) Financial need based on current Free Application for Federal Student Aid (FAFSA) report submitted to UA Office of Student Financial Aid
- (6) 3 letters of recommendation from teachers, professors, and/or supervisors in STEM professions. Letters should address your academic achievements, ability to work with others, and/or your potential as a teacher.
- (7) A personal creed statement (1000 words or less) addressing the following:
 - a) Why are you interested in teaching high school physics?
 - b) What have you done professionally and personally to prepare you to become a teacher (e.g. tutoring, serving as a Physics Learning Assistant, participation in

- administering/judging Science Olympiad or a secondary school science fair, Big Brother/Big Sister, other)
- c) How will this scholarship help you reach this goal?
 - d) What is your commitment to working in a 'high-needs' school?

Scholarship/Stipend Graduation Progress Review

The recipient will sign a contract. The contract will be considered satisfied if all teaching and follow-up requirements are completed. The continuing eligibility of scholarship/stipend recipients will be monitored each semester using three criteria: (1) maintaining minimum undergraduate overall GPA of 2.75 and 3.0 for graduate students (with a minimum of 2.50 GPA in science content courses), (2) making adequate continuous progress towards degree completion, and (3) demonstrating appropriate professional dispositions. UA APEX recipients will provide a written report to the UA APEX scholarship/stipend committee or a designated representative each semester on a regular schedule, indicating how well they are continuing to meet the 3 monitoring criteria identified. UA APEX recipients who do not meet these requirements will be notified and counseled. Recipients will lose their funding for the subsequent semester if the requirements are not met.

Additional Criteria for Maintaining the Scholarship/Stipend are:

- (1) Participation in three weekend APEX workshops held in fall and spring semesters during each year of scholarship/stipend.
- (2) Participation in UA APEX evaluation (i.e. surveys, interviews, focus groups, teaching observations) as part of the APEX continuing assessment program.

Scholarship/Stipend Follow-up Teaching and Educational Requirements

UA APEX recipients are required to report yearly on professional activities following graduation to the UA APEX scholarship/stipend committee or a designated representative. Annual review of compliance checks will be conducted by the committee regarding the specific criteria below to determine whether induction course tuition (2 courses) will be provided.

Criteria are:

- (1) Recipients must commit to teaching one year as a physics and/or physical science teacher in a high school or middle school in a high-need school district in Alabama for each year of scholarship/stipend received, within the period of the project ending on September 30, 2018. High-need school districts are defined as having: (a) a high percentage of individuals from families with incomes below the poverty line, (b) a high percentage of secondary science and/or mathematics school teachers not teaching in the content area in

- which the teachers were trained to teach, or (c) a high teacher turnover rate.
- (2) Participation in three weekend APEX workshops held in fall and spring semesters during each year of scholarship/stipend.
 - (3) Participation in UA APEX evaluation (i.e. surveys, interviews, focus groups, teaching observations) as part of the APEX continuing assessment program.
 - (4) Participation in the University of Alabama induction program including completion of two induction Masters Degree level graduate courses Note: Tuition will be paid by UA APEX for graduate courses.
 - (5) Provision to UA APEX designated representative, by recipients, of annual certification of employment and current contact information.

Application Information

- (1) The Application Form below will be available at the following website <http://www.education.ua.edu/secondary/science> and must be submitted electronically by the announced due date of November 1 and April 1 each year to Dennis Sunal at dwsunal@bama.ua.edu
- (2) Current UA students' records will be obtained by APEX from Degree Works. Transfer students must provide official sealed current transcripts, sent to Dennis Sunal, P.O. Box 870232, The University of Alabama, Tuscaloosa, AL 35487-0323.

For additional information contact:

Dennis Sunal, Department of Curriculum and Instruction, Box 870232, University of Alabama or email responses to this application to dwsunal@bama.ua.edu or

J.W. Harrell, Physics Department, Box 870234, University of Alabama or email responses to this application to jwharrelljr@gmail.com



UA APEX Application Form

This form is available on <http://www.education.ua.edu/secondary/science>
Deadlines for registration for the next semester: November 1 and April 6 each year.
Application should be made the semester before you wish to enter the program

- (1) Name:
- (2) Student UA ID Number:
- (3) Permanent Address: (Number and street, city, state, zip code)
- (4) Local Address if different from permanent address ((Number and street, city, state, zip code)
- (5) Email address:
- (6) Phone:
- (7) Date of Birth:
- (8) Gender: Male _____ Female _____
- (9) Attainment of at least junior status with at least 61 hours completed and with sophomore status of physics major course work completed. Overall hours of _____ and physics major course work _____ completed.
- (10) A. Overall GPA based on full transcript with at least 61 hours for undergraduates ____ or
B. Overall GPA based on full undergraduate academic transcripts in completed appropriate Bachelor's degree in Physics _____ and GRE/MAT score _____ (indicate which one).
Submit the following
 - (1) *send your unofficial college transcript of the courses completed to date,*
 - (2) *a list of current college courses, and*
 - (3) *A list of high school mathematics and science courses you successfully completed*
- (11) Anticipated year/semester that you will graduate with certification:
- (12) Schools attended from high school to present (*School, City, State, Dates Attended*):
 - A.
 - B.
 - C.
- (13) I am a: ____ US Citizen __ Permanent Resident __ US National
- (14) Semester/year you wish to begin the scholarship?
- (15) Race/Ethnicity/Identified Disability status (optional):
- (16) Three individuals submitting recommendations. Note: References should send their letters to Dennis Sunal at dwsunal@bama.ua.edu

Name	Affiliation	Relationship

(17) FAFSA: Indicate whether or not you have a financial need statement (FAFSA) on file at the University of Alabama.

YES _____ NO _____

(18) Below, complete a personal creed statement (1000 words or less) addressing the following:

- A) Why are you interested in teaching high school physics?
- B) What have you done professionally and personally to prepare you to become a teacher (e.g. tutoring, serving as a Learning Assistant, Big Brother/Big Sister, other)
- C) How will this scholarship help you reach this goal?
- D) What is your commitment to working in a 'high-needs' school?

Submit completed form to **Dennis Sunal** at dwsunal@bama.ua.edu

Teaching
STEM

