STATE OF ALABAMA DEPARTMENT OF EDUCATION
TEACHER EDUCATION AND CERTIFICATION

Program: Alternative A - Physics
Total Hours: 46

ALTERNATIVE CLASS A EDUCATION PROGRAM CHECKLIST

Institution: The University of Alabama in Huntsville

Date Approved: 
Date Expires: 
Revisions: 

Study in each of the following areas:

Teaching Field: At least 1/3 of the program shall be in teaching field courses.

Curriculum:
- ED 604 - Contributions of Psychology to Education 3
- ED 609 - Classroom & Behavior Management 3

Management
Methods of Teaching:
- ED 523 - Teaching Science in Middle and High Schools 3

Diverse Populations: (including special needs)
- ED 530 - Applied Multiculturalism 3

Literacy: (including mathematics and technology)
- ED 608 - Content Area Reading 3
- ED 520 - Computer-based Instructional Technology 3

Professionalism:
- ED 501 - Introduction to Education 1

Using Assessment Data to Improve Student Learning:
- ED 607 - Educator as Evaluator 3

Survey of Special Education Coursework: (required if not previously completed)
- ED 593 - Teaching Exceptional Children 3

Internship:
- ED 698 - Middle and High School Internship 3

15 hours of graduate coursework in Physics is required

**See graduate course listing or graduate catalog for courses descriptions

English Language Arts, General Science, and General Social Studies programs shall require at least one course in two areas within the broader field.

Dean of Education:

Date: ________________________
Physics - Graduate Courses

- PH 531 - Introduction to Plasma Dynamics
- PH 541 - Geometrical Optics
- PH 542 - Physical Optics
- PH 544 - Optoelectronics
- PH 546 - Radiometry, Detectors, and Sources
- PH 553 - Introduction to Particle Physics
- PH 560 - Introduction to Solid State Physics I
- PH 561 - Introduction to Solid State Physics II
- PH 570 - Optical and Photonic Systems Design
- PH 571 - Stellar Astrophysics
- PH 572 - Galaxies & Cosmology
- PH 574 - Introduction to General Relativity
- PH 579 - Observational Astrophysics
- PH 601 - Classical Dynamics I
- PH 607 - Mathematical Methods I
- PH 609 - Mathematical Methods II
- PH 615 - Introduction to Radiological Physics
- PH 616 - Physics of Radiation Therapy
- PH 621 - Statistical Mechanics and Kinetic Theory I
- PH 622 - Statistical Mechanics and Kinetic Theory II
- PH 631 - Electromagnetic Theory I
- PH 632 - Fourier Optics
- PH 636 - Introduction to Space Plasma Physics
- PH 642 - Optical Physics
- PH 645 - Lasers I
- PH 651 - Quantum Mechanics I
- PH 652 - Quantum Mechanics II
- PH 654 - Optical Testing
- PH 655 - Applied Quantum Mechanics
- PH 661 - Data Analysis and Statistical Methods for Physics and Astrophysics
- PH 662 - Computational Physics
- PH 670 - Optomechanical Design and Manufacturing
- PH 671 - Optical Fabrication and Testing
- PH 673 - High Energy Astrophysics
- PH 674 - General Relativity and Gravitation I
- PH 679 - Education Capstone Course
- PH 680 - Selected Topics
- PH 681 - Selected Topics
- PH 682 - Selected Topics
- PH 683 - Selected Topics
- PH 684 - Selected Topics
- PH 685 - Selected Topics
- PH 686 - Selected Topics
- PH 687 - Selected Topics
- PH 688 - Selected Topics
- PH 689 - Selected Topics
- PH 699 - Master's Thesis Research