# 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:

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

### Methods of Teaching:
- ED 522 - Teaching Mathematics in Middle and High Schools: 3 hours

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

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

### Professionalism:
- ED 501 - Introduction to Education: 1 hour

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

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

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

### Teaching Field: At least 1/3 of the program shall be in teaching field courses.
- 15 hours of graduate coursework in Mathematics is required

### Additional Courses:

### 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:**
Mathematics Graduate Courses

• MA 502 - Introduction to Real Analysis
• MA 503 - Introduction to Complex Analysis
• MA 506 - Methods of Partial Differential Equations
• MA 508 - Applied Linear Algebra
• MA 515 - Introduction to Numerical Analysis
• MA 520 - Intermediate Differential Equations
• MA 524 - Dynamical Systems I
• MA 526 - Partial Differential Equations I
• MA 538 - Metric Spaces with Applications
• MA 540 - Combinatorial Enumeration
• MA 542 - Algebra
• MA 544 - Linear Algebra
• MA 561 - Introduction to Fourier Analysis
• MA 562 - Intermediate Fourier Analysis
• MA 565 - Intermediate Mathematical Modeling
• MA 585 - Probability
• MA 590 - Selected Topics in Mathematics
• MA 607 - Mathematical Methods I
• MA 609 - Mathematical Methods II
• MA 614 - Numerical Methods for Linear Algebra
• MA 615 - Numerical Methods for Partial Differential Equations
• MA 624 - Dynamical Systems II
• MA 626 - Partial Differential Equations II
• MA 633 - Geometry
• MA 638 - General Topology
• MA 640 - Graph Theory
• MA 643 - Group Theory
• MA 644 - Matrix Theory
• MA 645 - Combinatorial Design
• MA 653 - Real Analysis I
• MA 654 - Real Analysis II
• MA 656 - Complex Analysis I
• MA 658 - Introduction to Functional Analysis
• MA 661 - Special Functions
• MA 662 - Asymptotics and Perturbation Methods
• MA 667 - The Calculus of Variations and Optimal Control
• MA 685 - Stochastic Processes with Applications I
• MA 686 - Stochastic Processes with Applications II
• MA 690 - Special Topics in Mathematics
• MA 695 - Graduate Seminar
• MA 699 - Master's Thesis