

ATTACHMENT 4A

Academic Policy Series

1622.20A

ADD, CHANGE OR DELETE PROGRAM OR UNIT

Complete this form consistent with the instructions in Academic Policy 1622.20. Use the form to add, change, or delete a program or unit. Proposed additions and changes must be consistent with Academic Policies 1100.40 and 1621.10 and any other policies which apply.

SECTION I: Approvals

Department / Program Chair Date Submitted Faculty Senate Chair Date
College Dean Date Provost Date
University Course and Programs Committee Date Board of Trustees Approval/Notification Date
Graduate Council Chair Date Arkansas Higher Education Coordinating Board Approval/Notification Date

SECTION II: Profile Data - Required Information and Name Change Information

Academic Unit: Major/Field of Study Minor Other Unit
Level: Undergraduate Graduate Law Effective Catalog Year 2008

Current Name Educational Foundations (EDFD)

College, School, Division EDUC Department Code CIED

Current Code (6 digit Alpha) EDFDPH Proposed Code (6 digit Alpha) ESRMPH
Prior approval from the Office of the Registrar is required.

Interdisciplinary Program CIP Code 13.0603
Prior assignment from Office of Institutional Research is required.

Proposed Name Educational Statistics and Research Methods
When a program name is changed, enrollment of current students reflects the new name.

SECTION III: Add a New Program/Unit

For new program proposals, complete Sections II and VII and use as a cover sheet for a full program proposal as described in 'Criteria and Procedures for Preparing Proposals for New Programs in Arkansas.' ADHE <http://www.adhe.arknet.edu.aadept.html>.

Program proposal uses courses offered by another academic college. The signature of the dean of that academic college is required here:

SECTION IV: Eliminate an Existing Program/Unit

Code/Name Effective Catalog Year
No new students admitted to program after Term: Year:
Allow students in program to complete under this program until Term: Year:

SECTION V: Proposed Changes to an Existing Program

Insert here a statement of the exact changes to be made: The name of the program would be changed from Educational Foundations (EDFD) to Educational Statistics and Research Methods (ESRM). All research methods and applied statistics courses would change from EDFD designations to ESRM designations. All educational foundations, issues, policy, and psychological theory courses would remain under the EDFD designation. This would impact the name of the current EDFD Ph.D. and EDFD graduate certificates; they would convert to ESRM Ph.D. and ESRM graduate certificates to more closely represent the majority of the coursework completed for these degrees.

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Check if either of these boxes apply and provide the necessary signature:

- Program change proposal adds courses offered by another academic college. The signature of the dean of that academic college is required here: \_\_\_\_\_
- Program change proposal deletes courses offered by another academic college. The signature of the dean of that academic college is required here: \_\_\_\_\_

Check all the boxes that apply and complete the required sections of the form:

- Change of Name and Code (Complete only sections I, II, V and VII.)
- Change Course Requirements: (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Delivery Site/Method (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)
- Change Total Hours (Complete all sections of the form except "Proposed Name" in II, section III, and section IV.)

### SECTION VI: Justification

*Justify this change and state its likely effect on any other degree program (including those outside the school or college). Identify any program or program components (other than courses) to be eliminated if this program is implemented. (Program and course change forms must also be submitted for such related changes.)*

### SECTION VII: Catalog Text and Format

*Insert the current catalog text, with proposed changes identified in Section V inserted and tracked in Microsoft Word. Be sure that all proposed changes are inserted and tracked. Only changes explicitly stated in Section V will be considered for approval by the University Course and Programs Committee, the Graduate Council and the Faculty Senate.*

**Include the following elements, in order, in the catalog text for proposed undergraduate program(s) or program changes:**

- State complete major/program name
- Briefly define or describe the major/program or discipline.
- Identify typical career goals or paths for graduates. (Optional)
- State admission requirements (if any) for entry or entry into upper/advanced level of major/program.
- Identify location in catalog of university, college/school, and department/program requirements which the student must meet in addition to hours in the major, but do not restate these requirements.
- State course requirements in the major and any allied areas, giving number of hours and specific courses; specify electives or elective areas and give numbers of hours and courses in elective pools or categories; identify any other course requirements.
- State any other requirements (required GPA, internship, exit exam, project, thesis, etc.).
- Identify name and requirements for each concentration (if any).
- Specify whether a minor or other program component is allowed or required and provide details.

**For minors, state requirements in terms of hours, required courses, electives, etc.**

**For graduate program/units, include elements (as needed) parallel to those listed for undergraduate programs above.**

**For Law School program/units, prepare text consistent with current catalog style.**

**For centers, prepare text consistent with current catalog style.**

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### **EDUCATIONAL STATISTICS AND RESEARCH METHODS (ESRM) EDUCATIONAL FOUNDATIONS (EDFD)**

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Ronna C. Turner  
Program Coordinator

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25048 Graduate Education Building

479-575-4143/5109

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Web: <http://edfd.uark.edu/index.htm>

- Professors Denny, Lucas, Mulvenon, Stegman
- Associate Professor Turner

### Degree Conferred:

M.S., Ph.D. (~~EDFD~~ESRM)

### Graduate Certificates Offered:

Educational Program Evaluation  
Educational Measurement  
Education Policy Studies  
Educational Statistics and Research Methods

**Areas of Concentration:** Research Methods and Policy Studies. The degree program develops professionals in the areas of educational research methods and policy studies, both through courses and independent research. Graduates can obtain employment with school districts, educational agencies, and industries with internal data analysis needs.

**Prerequisites for Acceptance to the Master of Science Program:** In addition to meeting University requirements for admission to the Graduate School, applicants must have earned a bachelor's degree with at least a 2.75 cumulative GPA and a combined score of at least 1000 on the verbal and quantitative sections and a 3 on the writing section of the Graduate Record Examinations.

**Requirements for the Master of Science Degree:** Graduates are required to satisfy the requirements of the Graduate School for a Master of Science degree. The degree requires 30 hours, consisting of these required courses (18 hours):

~~EDFD~~ESRM 5013 Research Methods in Education  
EDFD 5353 Philosophy of Education  
EDFD 5373 Psychological Foundations of Teaching & Learning  
~~EDFD~~ESRM 5393 Statistics in Education and Health Professions  
~~EDFD~~ESRM 5653 Educational Assessment  
EDFD 5683 Issues in Educational Policy  
One course from the following (3 hours):  
EDFD 5303 Historical Foundations of Modern Education  
EDFD 5473 Adolescent Psychology in Education  
EDFD 5573 Life-Span Human Development

In addition to the courses listed, students are also required to complete these independent research requirements (9 hours):

~~EDFD~~ESRM 599V Research Practicum (3 hours)  
~~EDFD~~ESRM 600V Master's Thesis (6 hours)  
and pass a comprehensive examination.

**Prerequisites for Acceptance to the Graduate Certificate Programs:** In addition to meeting University requirements for admission to the Graduate School, applicants must have earned a master's degree with a 3.25 cumulative GPA and scores of at least 500 on both the quantitative and verbal sections of the Graduate Record Examinations OR be currently enrolled in a doctoral program at the University of Arkansas.

**Certificate Requirements:** 18 semester hours from the list of courses for a certificate with a grade-point average of 3.50.

**Graduate Certificate in Educational Program Evaluation:** The graduate certificate in Educational Program Evaluation recognizes students who take a concentrated core of courses focused on systematic and rigorous evaluation of educational programs and policies. Students who earn this certificate have a working knowledge of qualitative and quantitative evaluation procedures and can use these to plan, conduct, and report on evaluations.

Program of Study:

~~EDFD~~ESRM 6403 Educational Statistics and Data Processing  
ESRM~~EDFD~~ 6413 Experimental Design in Education  
ESRM~~EDFD~~ 6613 Evaluation of Policies, Programs, and Projects  
ESRM~~EDFD~~ 6533 Qualitative Research  
ESRM~~EDFD~~ 699V Seminar: Survey Research Methods  
One course from the following (3 hours):  
ESRM~~EDFD~~ 6423 Multiple Regression Techniques for Education  
ESRM~~EDFD~~ 6453 Applied Multivariate Statistics  
ESRM~~EDFD~~ 6543 Advanced Qualitative Research  
ESRM~~EDFD~~ 6653 Measurement and Evaluation  
ESRM~~EDFD~~ 699V Seminar (approved by ~~EDFD~~ESRM faculty)

**Graduate Certificate in Educational Measurement:** The graduate certificate develops professionals in the areas of measurement, testing, and assessment, through courses in the area of instrument development and research design. Graduates can obtain employment with educational agencies and industries with assessment and research analysis needs.

Program of Study:

ESRM~~EDFD~~ 5653 Educational Assessment

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[ESRMEDFD](#) 6403 Educational Statistics and Data Processing  
[ESRMEDFD](#) 6653 Measurement and Evaluation  
[ESRMEDFD](#) 699V Seminar: Advanced Measurement and Evaluation

One course from the following (3 hours):

[ESRMEDFD](#) 6613 Evaluation of Policies, Programs, and Projects  
[ESRMEDFD](#) 699V Seminar: Survey Research Methods

And one course from the following (3 hours):

[ESRMEDFD](#) 6413 Experimental Design  
[ESRMEDFD](#) 6423 Multiple Regression Techniques for Education

**Graduate Certificate in Education Policy Studies:** The graduate certificate in Education Policy Studies recognizes students who take a concentrated core of courses focused on education policy and public policy. Students who earn this certificate develop a framework for studying issues in public policy and education policy, examine how education policy is developed and implemented, and learn methods for evaluating programs and policies.

Program of Study:

[ESRMEDFD](#) 6403 Educational Statistics and Data Processing  
EDFD 5683 Issues in Educational Policy  
[ESRMEDFD](#) 6613 Evaluation of Policies, Programs, and Projects  
EDFD 6993 Seminar: Economics of Education  
EDAD 5053 School Law  
PLSC 5163 Public Policy

**Graduate Certificate in Educational Statistics and Research Methods:** The graduate certificate in Educational Statistics and Research Methods recognizes students who complete a core of courses focused on developing theoretical, application, and interpretative aspects of statistical techniques and research methods. Graduate students completing this certificate will also develop comprehensive programming and data management skills necessary for today's academic researcher.

Program of Study:

[ESRMEDFD](#) 6403 Educational Statistics and Data Processing  
[ESRMEDFD](#) 6413 Experimental Design  
[ESRMEDFD](#) 6423 Multiple Regression  
[ESRMEDFD](#) 6453 Multivariate Statistics  
One course from the following (3 hours):  
[ESRMEDFD](#) 5653 Educational Assessment  
[ESRMEDFD](#) 6653 Measurement and Evaluation  
And one course from the following (3 hours):  
[ESRMEDFD](#) 699V Advanced Statistics Seminar: Structural Equation Modeling  
[ESRMEDFD](#) 699V Advanced Statistics Seminar: Exploratory Data Analysis  
[ESRMEDFD](#) 699V Advanced Statistics Seminar: Categorical Data Analysis  
[ESRMEDFD](#) 699V Advanced Statistics Seminar: Approved by [EDFD-ESRM](#) Faculty

**Doctor of Philosophy in Educational ~~Statistics and Research Methods~~ Foundations: Educational Statistics and Research Methods:** The increased emphasis on educational accountability and data-driven decision making to improve public school institutions, as well as greater reliance on empirical research and analysis in public policy and educational studies, have led to a greater need for experts in educational statistics and research methods. The Educational ~~Foundations: Statistics and Research Methods~~ doctoral program develops professionals who can lead in these areas through coursework and independent research in educational statistics, research design, assessment, and program evaluation.

**Admission Requirements for the Ph.D. Degree:** In addition to meeting University requirements for admission to the Graduate School, applicants should have an earned master's degree with a minimum 3.25 GPA, GRE-Verbal of 550, GRE-Quantitative of 550, and GRE-Writing of 3.5. Higher scores in one area can compensate for lower scores in another area.

**Requirements for the Ph.D. Degree:** Students must complete all requirements of the Graduate School for the Doctor of Philosophy degree, and complete an approved program of study including a minimum of 36 credit hours of core courses, 9 hours of elective courses, and 18 credit hours of doctoral dissertation. Coursework must be completed with a cumulative grade average of at least 3.25, with no credit for courses with a grade of "C" or lower.

### Required Courses:

36 Hours of Core Courses

EDFD 5373 Psychological Foundations of Teaching & Learning  
EDFD 5683 Issues in Educational Policy  
[ESRMEDFD](#) 6403 Educational Statistics and Data Processing  
[ESRMEDFD](#) 6413 Experimental Design in Education  
[ESRMEDFD](#) 6423 Multiple Regression Techniques for Education  
[ESRMEDFD](#) 6453 Applied Multivariate Statistics  
[ESRMEDFD](#) 6513 Advanced Experimental Design  
[ESRMEDFD](#) 6523 Advanced Multiple Regression  
[ESRMEDFD](#) 6533 Qualitative Research  
[ESRMEDFD](#) 6553 Advanced Multivariate Statistics  
[ESRMEDFD](#) 6613 Evaluation of Policies, Programs and Projects  
[ESRMEDFD](#) 6653 Measurement and Evaluation

9 Hours of Elective Courses from the following:

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~~ESRMEDFD~~ 5653 Educational Assessment

~~ESRMEDFD~~ 6993 Seminar: Advanced Topics in Measurement

~~ESRMEDFD~~ 6993 Seminar: Categorical Data Analysis

~~ESRMEDFD~~ 6993 Seminar: Exploratory Data Analysis

~~ESRMEDFD~~ 6993 Seminar: Structural Equation Modeling

~~ESRMEDFD~~ 6993 Seminar: Survey Research Methods

Other Math Department and Quantitative Courses approved by ~~ESRM EDFD~~ Faculty  
18 hours of ~~ESRMEDFD~~ 700V Doctoral Dissertation

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### Educational Statistics and Research Methods (ESRM)

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[ESRM5013 Research Methods in Education \(FA, SP, SU\)](#) General orientation course which considers the nature of research problems in education and the techniques used by investigators in solving those problems. Prerequisite: graduate standing.

[ESRM 5393 Statistics in Education and Health Professions \(FA, SP, SU\)](#) Applied statistics course for Master's degree candidates. Includes concepts and operations for frequency distributions, graphing techniques, measures of central tendency and variation, sampling, hypothesis testing, and interpretation of statistical results.

[ESRMEDFD5653 Educational Assessment \(FA, SP\)](#) Introduction to measurement issues and basic test theory. Focus on types and usage of assessment tools, data management, and analysis and interpretation of educational data. Practical training in the utilization and interpretation of academic achievement data in Arkansas.

[ESRM599V Seminar \(1-6\) \(IR\)](#)

[ESRM600V Master's Thesis \(1-6\) \(FA, SP, SU\)](#)

[ESRM605V Independent Study \(1-6\) \(FA, SP, SU\)](#)

[ESRM6403 Educational Statistics and Data Processing \(FA, SP, SU\)](#) Theory and application of frequency distributions, graphical methods, central tendency, variability, simple regression and correlation indexes, chi-square, sampling, and parameter estimation, and hypothesis testing. Use of the computer for the organization, reduction, and analysis of data (required of doctoral candidates). Prerequisite: ESRM 5013 or equivalent.

[ESRM6413 Experimental Design in Education \(FA, SP\)](#) Principles of experimental design as applied to educational situations. Special emphasis on analysis of variance techniques used in educational research. Prerequisite: ESRM 6403 or equivalent.

[ESRM6423 Multiple Regression Techniques for Education \(FA\)](#) Introduction to multiple regression procedures for analyzing data as applied in educational settings, including multicollinearity, dummy variables, analysis of covariance, curvilinear regression, path analysis. Prerequisite: ESRM 6403.

[ESRM6453 Applied Multivariate Statistics \(SP\)](#) Multivariate statistical procedures as applied to educational research settings including discriminant analysis, principal components analysis, factor analysis, canonical correlation, and cluster analysis. Emphasis on use of existing computer statistical packages. Prerequisite: ESRM 6413.

[ESRM6513 Advanced Experimental Design \(IR\)](#)

Advanced topics of the general linear model, including hierarchical linear modeling and longitudinal analysis with a focus on developing the mathematical and theoretical basis for these methods. Prerequisite: ESRM 6413

[ESRM6523 Advanced Multiple Regression \(IR\)](#)

Advanced topics of correlational research methods, including logistic regression and path analysis with a focus on developing the mathematical and theoretical basis for these methods. Prerequisite: ESRM 6423

[ESRM6533 Qualitative Research \(FA, SP\)](#) Introduction of non-quantitative methods, including data collection through interviews, field observation, records research, internal and external validity problems in qualitative research. Prerequisite: ESRM 6403.

[ESRM6543 Advanced Qualitative Research \(SP\)](#) Preparation for the conduct of qualitative research, structuring, literature reviews, data collection and analysis, and reporting results. May be repeated for 6 hours. Prerequisite: ESRM 6533.

[ESRM6553: Advanced Multivariate Statistics \(IR\)](#) Builds on the foundation provided in Multivariate and introduces techniques that extend methodological elements of canonical, discriminant, factor analytic, and longitudinal analyses, providing the mathematical and theoretical foundations necessary for these designs. Prerequisite: ESRM 6453

[ESRM6613 Evaluation of Policies, Programs, and Projects \(FA\)](#) Introduction to evaluation in social science research, including why and how evaluations of programs, projects, and policies are conducted; includes analysis of actual evaluations in a variety of disciplines. ESRM 6403.

[ESRM6623 Techniques of Research in Education \(FA, SP, SU\)](#) Use of scientific method in attacking educational problems. Emphasis placed on the planning and design of research studies, collection of reliable and valid data, sampling methods, and analysis and interpretation of data. (Required Prerequisite: ESRM 6403.)

[ESRM6653 Measurement and Evaluation \(IR\)](#) Fundamentals of measurement: scales, scores, norms, reliability, validity. Test and scale construction and item analysis. Standardized measures and program evaluation models in decision making. Prerequisite: ESRM 6403.

[ESRM668V Practicum in Research \(1-6\) \(FA, SP, SU\)](#) Practical experience in educational research on campus, in school systems, or in other agencies in educational program development.

[ESRM699V Seminar \(1-6\) \(IR\)](#) Prerequisite: advanced graduate standing.

[ESRM700V Doctoral Dissertation \(1-18\) \(FA, SP, SU\)](#) Prerequisite: candidacy.

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### Educational Foundations (EDFD)

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[EDFD5303 Historical Foundations of Modern Education \(FA, SP, SU\)](#) Critical analysis and interpretation of the historical antecedents of contemporary education, focusing upon the American experience from the colonial period to the present.

[EDFD5323 Global Education \(IR\)](#) Comparative and global analysis of international education with emphasis on cultural education and implications for the future.

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**EDFD5353 Philosophy of Education (IR)** Introduction to the method and attitude essential to effective analysis and interpretation of issues and values within a society reflecting cultural, ethnic, gender, and global diversity. Prerequisite: graduate standing.

**EDFD5373 Psychological Foundations of Teaching and Learning (IR)** Psychological principles and research applied to classroom learning and instruction. Social, emotional, and intellectual factors relevant to topics such as readiness, motivation, discipline, and evaluation in the classroom.

**EDFD5473 Adolescent Psychology in Education (IR)** Study of the adolescent experience with emphasis on the unique psychological problems and tasks of this developmental stage; role of educators in the facilitation of crises resolutions in social, personal and institutional conflicts. Prerequisite: graduate standing.

**EDFD5573 Life-Span Human Development (FA, SP, SU)** Basic principles of development throughout the human life-cycle. Physical, cognitive, social, emotional, and personality development.

**EDFD5683 Issues in Educational Policy (FA, SP, SU)** This course examines how K-12 education policy is designed and implemented in the United States. Students will develop a working knowledge of policymaking frameworks to examine major education policies of current interest and debate. Key policy issues that arise at each level of government.

**EDFD599V Seminar (1-6) (IR)**

**EDFD605V Independent Study (1-6) (FA, SP, SU)**

**EDFD6223 Educational Futurism (IR)** An integrative, holistic analysis and assessment of potential alternative futures to guide current educational practice. Prerequisite: graduate standing and history or philosophy of education.

**EDFD699V Seminar (1-6) (IR)** Prerequisite: advanced graduate standing.

### SECTION VIII: Action Recorded by Registrar's Office

#### PROGRAM INVENTORY/DARS

PGRM \_\_\_\_\_ SUBJ \_\_\_\_\_ CIP \_\_\_\_\_ CRTS \_\_\_\_\_

DGRE \_\_\_\_\_ PGCT \_\_\_\_\_ OFFC&CRTY VALID \_\_\_\_\_

#### REPORTING CODES

PROG. DEF. \_\_\_\_\_ REQ. DEF. \_\_\_\_\_  
Initials \_\_\_\_\_ Date \_\_\_\_\_

#### Distribution

Notification to:

(1) College  
(7) Treasurer

(2) Department  
(8) Undergraduate Program Committee

(3) Admissions

(4) Institutional Research

(5) Continuing Education  
Initials \_\_\_\_\_ Date \_\_\_\_\_

(6) Graduate School