Doctor of Philosophy in Education

Doctor of Philosophy Mission Statement
The Doctor of Philosophy (Ph.D.) is designed to support the mission of the Fischler School of Education. The program prepares individuals to develop expertise in educational research methods in the areas of measurement, program evaluation, qualitative research methods, and statistics as they are applied in educational and other behavioral sciences. Graduates of the program are prepared for academic positions as research methodologists, corporate positions in research and testing agencies, or government positions as researchers, evaluators, or administrators of research programs in education or other areas of the behavioral sciences. The curriculum and program learning outcomes are grounded in continuous application of a theory-to-practice model that facilitates synergy in work-world settings in order to produce a new generation of local, national, and global research leaders who will effect positive changes in a diverse and multicultural society.

Certification/Licensure
The Doctor of Philosophy (Ph.D.) program is not designed for any certification or licensure at the local, state, regional, or national levels.

Program Learning Outcomes
All students will be able to:
1. Demonstrate ability to use assessment, evaluation, and research data to inform administrative decisions. (Knowledge)
2. Conduct a research study, assessment study, or program evaluation (Application)
3. Demonstrate the ability to effectively communicate the results of a unique study using a variety of media (e.g., written, oral, electronic). (Research)
4. Solve diverse problems using information and skills acquired in the program to create solutions. (Problem solving)
5. Make informed decisions based on ethical and legal principles. (Ethics)

Instructional Delivery Model
Courses in the Ph.D. program are offered online.

Admission Requirements
The following are specific admission requirements for entry into the Doctor of Philosophy program. Please refer to the General Student Information section of the catalog for admission information.

a. An official transcript from a regionally accredited institution indicating a conferred master's degree with a minimum CGPA of 3.3 and official final transcripts from all graduate coursework.

b. Three professional letters of recommendation by three different individuals who can attest to the applicant's ability to succeed in a Ph.D. program.

c. Resumes are required for Ph.D. applicants. In addition to your academic history and relevant work experience, the resume should include any experience you have in teaching and research as well as including a list of all licenses and certifications you may have attained.

d. A score on either the Miller Analogies Test (MAT) or Graduate Record Examination (GRE®). The test score submitted must have been taken within the past five (5) years (regardless of score).
   • Recommended score on MAT: Submit a test score report showing a raw score of 37 (scaled score between 391-396).
   • Recommended score on GRE: scores of 1000 (combined Verbal and Quantitative scales only) for tests taken prior to August 1, 2011 or GRE scores of 300 (combined Verbal and Quantitative scales only) for tests taken on or after August 1, 2011.

e. Personal statement of goals. The statement of purpose describes your academic and professional goals and any experience relevant to the Ph.D program. This is an opportunity for you to demonstrate your writing skills as you describe your future plans, expectations, and aspirations.

f. Personal interview (may be conducted by phone).

International Students
International students wishing to pursue this degree program in the United States may not qualify for a student visa due to its online instructional delivery format. Students should contact an enrollment counselor to discuss their options prior to beginning the application process.

Transfer of Credit
A maximum of nine semester hours of credit will be considered for transfer if (1) the credit was earned within five calendar years of request for transfer, (2) the credit was earned post-Master’s degree from a regionally accredited university, (3) the content of the courses requested for transfer is equivalent to the study area courses in the program, (4) the courses were not used towards a prior degree, and (5) a grade of A or B was earned in each of the courses requested for transfer. A grade of P (Pass) of CR (Credit) or other such grade will not be accepted. No credit for experiential learning or other
forms of advanced standing will be granted. Exceptions to the maximum number of transfer credits allowed are made only with the approval of the Office of Academic Affairs.

The student must provide the Office of Academic Affairs with a syllabus and catalog description of the courses for which transfer is sought. Students may be required to provide further documentation and supporting material such as class notes or other materials.

Acceptance of graduate coursework from other colleges and/or universities is not guaranteed. Applicants who wish to request evaluation of prior coursework for consideration as transfer credit should fill out the Transfer of Credit request contained in the application and submit associated course descriptions and official transcripts at the time of application to the doctoral program.

Students currently enrolled in the FSE Ph.D. program should request and receive prior written approval from the Office of Academic Affairs before enrolling in any other institution's courses that are intended to be submitted for transfer credit.

Credits earned at Nova Southeastern University are transferable only at the discretion of the receiving school. Students who wish to transfer credits from NSU should contact the admissions office of the receiving school for information.

Admission to Candidacy
Admission to candidacy for the Ph.D. program requires that a student has completed all coursework and earned a minimum of 54 semester credit hours.

Deposit Policy
Applications are reviewed by the Ph.D. program Admissions Committee based on the date an applicant’s file is complete. Select candidates to the Ph.D. program are notified of full admission by mail. Following notification of full admission, a tuition deposit of $500 will be required as confirmation of admission.

The deposit schedule is August 1 for students admitted for fall and December 1 for students admitted for winter.

Doctoral Program Completion Timeline
Doctoral students are allotted seven (7) years from the initial term of enrollment in which to complete all program/degree requirements (excludes PPO 8000). Students unable to complete all program/degree requirements within this seven (7) year timeframe are subject to dismissal. For exceptions and further information, please refer to the Doctoral Program Completion Timeline Policy (FSE Policy 1.02) in the Student Handbook section of the catalog.

Graduation Requirements
Please refer to Graduation in the General Student Information section of the catalog to find general degree completion requirements. For questions about any specific program completion requirements contact your Doctoral Enrollment Counselor (DEC).

To complete the Doctorate in Philosophy program a student must:
- complete PPO 8000 new student orientation,
- complete all coursework consisting of a minimum of 75 semester credit hours,
- maintain a minimum overall 3.0 GPA,
- attend a minimum of one Summer Conference,
- successfully complete the dissertation,
- successfully complete the applied research-practicum,
- meet all financial obligations to the university, and
- apply for degree conferral.

Ph.D. Program Orientation (PPO)
The purpose of the Ph.D. program orientation (PPO 8000) is to provide new students with an overview of critical areas in the program to help ensure doctoral student success. New students must complete the orientation meeting held on campus. This noncredit course is a mandatory requirement for all first-year Ph.D. students at NSU's Fischler School of Education. Students may enroll in the orientation simultaneously with the first doctoral course.

Summer Conference
During their second year in the program students are required to attend a one-week, FSE Conference on Global Leadership, Learning, and Research as part of required coursework.

Students who have attended the mandatory summer conference are encouraged to attend an additional conference to enhance their educational experience.
Applied Research Practicum

Every Ph.D. student must complete a research practicum. The practicum should occur after completing a minimum of 15 research credits and preferably prior to completion of the dissertation proposal. The practicum is designed to provide students with an opportunity to propose and engage in independent research, closely collaborating with faculty and other research leaders before moving on to the dissertation. The practicum generally results in a journal length research paper.

The practicum is designed as a pre-dissertation research experience that would involve identifying a question or issue of interest, designing and conducting the study, and analyzing and reporting the findings. It is assumed that participation in a practicum will provide students with a range of opportunities relevant to conducting educational research.

The research practicum will support students in learning to:

1. Propose a significant question or questions grounded in existing theory and building on or responding to other research in a field of interest;
2. Select, justify, and implement methods appropriate to the question(s) and research context;
3. Gather appropriate evidence/data;
4. Subject the evidence/data to careful analysis;
5. Reassess prior assumptions and conceptualizations in relation to evidence/data gathered and ongoing analysis;
6. Organize and present oral and written reports that are cogent, focused, and logical for a community of scholars;
7. Respond to input and critiques, and provide advice and comments for others’ research; and
8. Revise the written report in response to feedback.

A written proposal must be approved by the student’s Practicum Advisor. The written proposal should include: (1) a rationale for the study, including a brief literature review; (2) research question(s) or purpose(s); (3) methodology and method, including plans for data analysis; and (4) a brief discussion of educational significance. The student should obtain approval of the practicum proposal and, if applicable, the Institutional Review Board (IRB) prior to beginning the practicum study.

Satisfactory completion of the Practicum requires a written report and an oral presentation approved by the Practicum Committee. The written report should include the following: (1) the rationale for the study, including a review of the relevant literature; (2) research question(s) or purpose(s); (3) methodology and method, including data analysis procedures; (4) findings/presentation of analyses; and (5) a discussion, including implications and limitations.

Dissertation

The dissertation is a detailed, accurate, and cohesive account of a formal, scholarly investigation designed to answer one or more research questions directed toward a significant educational issue. This research is distinguished by a strong theoretical foundation and methodology encompassing a diversity of disciplines and research skills. Each student is assigned a dissertation chair and two committee members to facilitate and supervise the process.

Ph.D. students are required to complete a dissertation as their culminating project and publicly defend that dissertation at a place and time mutually determined by the committee and student. There are two benchmarks in the completion of the dissertation: (1) the prospectus, and (2) the final report.

Ph.D. Concentration and Minor

<table>
<thead>
<tr>
<th>Ph.D. Concentration</th>
<th>Ph.D. Minor</th>
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<tbody>
<tr>
<td>Educational Research and Evaluation</td>
<td>Systems Analysis</td>
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</table>
**Doctor of Philosophy Program of Study**

**General Program Requirements**
All Ph.D. program students must complete the following recommended program of study. Prerequisites are required for some courses. Total minimum credits required for degree completion is 75 (credits).

**Program of Study**

<table>
<thead>
<tr>
<th>YEAR 1</th>
<th>YEAR 2</th>
<th>YEAR 3</th>
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<tbody>
<tr>
<td><strong>Term 1 – 9 Credits</strong></td>
<td><strong>Term 4 – 6 Credits</strong></td>
<td><strong>Term 6 – 6 Credits</strong></td>
</tr>
<tr>
<td>PPO 8000: Ph.D. Program Orientation (0 credit)</td>
<td>EDRE 8913: Program Evaluation (3 credits)</td>
<td>ARC 9350: <strong>Teaching Research Evaluation and Development (3 credits)</strong></td>
</tr>
<tr>
<td>PHDE 8000: Historical Development of American Education (3 credits)</td>
<td>EDRE 9100: Applied Nonparametric Statistics (3 credits)</td>
<td>EDRE 9150: Data-Driven Decision Making in Education (3 credits)</td>
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<tr>
<td>EDRE 8100: Methods of Educational Research (3 credits)</td>
<td>EDRE 9000: Regression Analysis (3 credits)</td>
<td><strong>YEAR 3</strong></td>
</tr>
<tr>
<td>EDRE 8200: Introduction to Statistical Methods (3 credits)</td>
<td><strong>Term 5 – 6 Credits</strong></td>
<td><strong>Term 7 – 6 Credits</strong></td>
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<tr>
<td><strong>Term 2 – 6 Credits</strong></td>
<td>EDRE 9200: Mixed Methods Research (3 credits)</td>
<td>EDRE 8950: <strong>Policy Analysis in Education (3 credits)</strong></td>
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<tr>
<td>EDRE 8300: Experimental Design and Analysis Using ANOVA Models (3 credits)</td>
<td>EDRE 9000: Regression Analysis (3 credits)</td>
<td><strong>Term 8 – 7 Credits</strong></td>
</tr>
<tr>
<td>EDRE 8916: Qualitative Research (3 credits)</td>
<td><strong>Term 3 – 6 Credits</strong></td>
<td>EDRE 9600: Applied Research Practicum (4 credits)</td>
</tr>
<tr>
<td><strong>Term 3 – 6 Credits</strong></td>
<td>EDRE 8920: Mixed Methods Research (3 credits)</td>
<td>EDRE 9500: Large-Scale Assessment: Procedures and Practice (3 credits)</td>
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<td>EDRE 8900: Regression Analysis (3 credits)</td>
<td><strong>Term 6 – 6 Credits</strong></td>
<td>EDRE 8950: <strong>Policy Analysis in Education (3 credits)</strong></td>
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<tr>
<td><strong>Term 4 – 6 Credits</strong></td>
<td><strong>Term 7 – 6 Credits</strong></td>
<td><strong>YEAR 4</strong></td>
</tr>
<tr>
<td>EDRE 8913: Program Evaluation (3 credits)</td>
<td><strong>Term 8 – 7 Credits</strong></td>
<td><strong>Term 10 – 8 Credits</strong></td>
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<tr>
<td><strong>Term 5 – 6 Credits</strong></td>
<td>EDRE 9600: Applied Research Practicum (4 credits)</td>
<td>EDRE XXXX: Research Elective (3 credits)</td>
</tr>
<tr>
<td>EDRE 9300: Multivariate Statistics (3 credits)</td>
<td><strong>Term 9 – 7 Credits</strong></td>
<td><strong>YEAR 4</strong></td>
</tr>
<tr>
<td>EDRE 9400: Measurement Theory and Test Construction (3 credits)</td>
<td>ARC 8970: <strong>Research Dissertation Prospectus (4 credits)</strong></td>
<td><strong>Term 10 – 8 Credits</strong></td>
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<tr>
<td><strong>Term 6 – 6 Credits</strong></td>
<td>EDRE 9500: Large-Scale Assessment: Procedures and Practice (3 credits)</td>
<td>ARC 8980: <strong>Research Dissertation I (8 credits)</strong></td>
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<tr>
<td>ARC 8970: <strong>Research Dissertation Prospectus (4 credits)</strong></td>
<td>EDRE 8950: <strong>Policy Analysis in Education (3 credits)</strong></td>
<td><strong>Term 11 – 8 Credits</strong></td>
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<tr>
<td>EDRE XXXX: Research Elective (3 credits)</td>
<td><strong>YEAR 4</strong></td>
<td>ARC 8981: <strong>Research Dissertation II (8 credits)</strong></td>
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<tr>
<td>**<strong>Courses in Development</strong></td>
<td><strong>YEAR 4</strong></td>
<td>**<strong>Courses in Development</strong></td>
</tr>
<tr>
<td><strong>Total Credits for Degree Completion 75</strong></td>
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PhD. Course Descriptions

EDRE 8100 Methods of Educational Research (3 Cr)
Provides the basic concepts, principles, and skills to integrate hypothesis testing with the appropriate statistical procedures when designing an experiment. Students will be prepared to conceptualize experiments, select appropriate research designs and methods as they relate to the hypothesis and research questions, and present the application of the research results. Research designs include but are not limited to factorial experiments with two factors, higher order factorial experiments, within subject designs and analyses of covariance. Although classic and generic design methods are covered, course emphasis is on the applicability of the skills learned with focus on the most popular research designs and methods in education. Prerequisite/s: None

EDRE 8200 Introduction to Statistical Methods (3 Cr)
An introduction to descriptive and inferential statistics. In particular, students learn descriptive statistics, graphical and numerical representation of information; measures of location, dispersion, position, dependence, and exploratory data analysis. Also, students are introduced to inferential statistics, point and interval estimation, tests of statistical hypotheses, inferences involving one or more populations, as well as ordinary least squares regression and chi-square analyses. Students will also learn to conduct and interpret tests of means, partial and part correlations, multiple regression, analysis of variance with planned and post hoc comparisons, analysis of covariance, repeated measures analysis, elements of experimental design, and power analysis. Prerequisite/s: None

EDRE 8300 Experimental Design and Analysis Using ANOVA Models (3 Cr)
This course introduces the underlying logic of experimental and quasi-experimental designs commonly used to conduct educational research and evaluation. Emphasis placed on the correct analyses of data arising from designed experiments. Students will be able to compare and contrast a variety of experimental designs, describe treatment effects, and determine the statistical significance of results. Prerequisite/s: EDRE 8100 and EDRE 8200

EDRE 8913 Program Evaluation (3 Cr)
This course is intended to provide students with an in-depth and comprehensive foundation in advanced program evaluation methods. Topics will include the development and use of logic models, as well as the use of experimental and quasi-experimental designs in evaluation research. A wide range of data-collection procedures, including conventional (e.g., systematic surveys) and unconventional (e.g., trained observer ratings) will be reviewed. Multiple qualitative and quantitative data analysis strategies are carefully examined. In addition, this course will provide guidance for the application of cost-effectiveness and cost-benefit techniques in program evaluation. Prerequisite/s: None

EDRE 8916 Qualitative Research (3 Cr)
This course outlines the theoretical underpinnings and current trends in qualitative research practices for various fields related to educational inquiry. Students learn to identify the qualitative research practices appropriate for addressing research questions that are based on non-linear, verbal and graphic datasets, and professionally accepted methods for analyzing, discussing, and theorizing utilizing such data. Prerequisite/s: None

EDRE 8920 Mixed Methods Research (3 Cr)
This course provides students with an understanding of mixed methods approaches to research studies. Appropriate strategies for incorporating both quantitative and qualitative paradigms are explored. Specific issues, challenges, and considerations encountered in using mixed methodologies are detailed. The conflict between positivism and constructivism are investigated along with examples of mixed model designs. Prerequisite/s: EDRE 8200

EDRE 9000 Regression Analysis (3 Cr)
This course addresses topics related to various types of common regression analyses, such as simple linear regression, multiple regression, and logistic regression. Students will develop an understanding of when to apply each technique, how to apply it, and how to interpret the results. Additionally, the course includes related topics such as preliminary data analysis steps, how to check the underlying assumptions, testing of interaction effects, autoregressive models, and path analysis. Students will also learn how to use dedicated software to analyze data using regression techniques. Prerequisite/s: EDRE 8300

EDRE 9100 Applied Nonparametric Statistics (3 Cr)
An introduction and survey of distribution-free approaches to statistical inference. Topics include Fisher's method of randomization; distribution-free test procedures for means, variances, correlations, and trends; rank tests; relative efficiency, asymptotic relative efficiency, and normal-score procedures; binomial, hypergeometric distributions, and combinatorial run theory. Also, tests of goodness-of-fit, including the Kolmogorov-Smirnov and chi-square tests, contingency-table analysis, tolerance sets, and Tchebycheffe-type inequalities are introduced. Emphasis is on applications. Prerequisite/s: EDRE 8100

EDRE 9150 Data-Driven Decision Making in Education (3 Cr)
Provides an overview of appropriate data gathering and analytic techniques for educational leaders. Students learn how data are gathered and used to make critical organizational decisions. The course also provides an in-depth examination of the way in which information technologies both inform and challenge education organizations’ capabilities to define, control, and manage the abundance of data available to organizational leaders. Case studies along with the use of current work-world challenges are used to acquire the course outcomes. Prerequisite/s: None

EDRE 9300 Multivariate Statistics (3 Cr)
An advanced statistical level course, which deals with multivariate data analysis for quantitative responses. This course assumes the successful completion of a basic statistics course. Specific multivariate models covered include dependence techniques such as multiple regression, multiple discriminant analysis, logistic regression, MANOVA, and joint analysis. Interdependent techniques such as cluster and correspondence analysis and multidimensional scaling are covered. Other techniques covered include structural equation modeling (SEM) and confirmatory factor analysis (CFA). The course provides a general understanding of a variety of multivariate analysis techniques and includes an overview of preparing, examining, and summarizing multivariate data. The emphasis is on conveying a general understanding and the applied aspects of multivariate data analysis. Prerequisite/s: EDRE 8200

EDRE 9400 Measurement Theory and Test Construction (3 Cr)
Covers the design of surveys and assessments, including sampling theory, instrument development, and administering surveys, including training survey administrators, quality control, data coding, data reduction, statistical analysis and inference, report writing,
and presentation of results. Also covered are practical issues, such as using available sampling frames and minimizing non-response. **Prerequisite/s:** EDRE 8200

**EDRE 9500 Large-Scale Assessment: Procedures and Practice (3 Cr)**
Examines measurement concepts and data collection procedures in the context of large-scale (e.g., district, state, national, and international) assessment. Technical, operational, and political issues from the perspective of measurement concepts are considered. Using examples from TIMSS, PIRLS, and NCLB, the course covers framework development, test development, questionnaire development, sampling, data collection, analysis, and reporting. **Prerequisite/s:** EDRE 8900

**EDRE 9600 Applied Research Practicum (6 Cr)**
A capstone experience designed to provide application of research and concentration development experiences and opportunities. It is a unique professional growth benchmark and focuses on skill significance and scholarly research. The focus is on analysis, evaluation, and solution strategies for one or more research questions framed by the sponsoring organization. **Prerequisite/s:** EDRE 9300

**PPO 8000 PHD Program Orientation (0 Cr)**
The purpose of the Ph.D. program orientation (PPO 8000) is to provide new students with an overview of critical areas in the program to help ensure doctoral student success. New students must attend the orientation meeting held on campus. This noncredit course is a mandatory requirement for all first-year Ph.D. students at NSU's Fischler School of Education. Students may enroll in the orientation simultaneously with the first doctoral course. **Prerequisite/s:** None

**PHDE 8000 Historical Development of American Education (3 Cr)**
Examines the historical and philosophical development of education and educational systems in the United States. Students study a variety of themes such as access issues, teacher education, religious influences, educational philosophies, education and social movements, and the impact of technology and media. The course also examines the history of educational research and assessment within the context of American education. Students analyze primary documents to understand social context and historical change in American education. **Prerequisite/s:** None

**PHDE 8950 Policy Analysis in Education (3 Cr)**
Offers a systematic consideration of the structure and function of educational policies and problems of research in a political context. Also, the course examines methods for evaluating educational policies across the educational continuum. Students design and conduct a policy evaluation drawing on policy evaluation literature. Examination of the uses of policy evaluation information in shaping organization-decision making is also included. **Prerequisite/s:** None

**PHDE 9999 Advanced Topics (3 Cr)**
This is an organized class specifically designed to accommodate student needs and program development demands not met by existing course offerings. See the course topic syllabus for list of outcomes, assignments and assessments. **Prerequisite/s:** None