Eastern Illinois University
NEW/REVISED COURSE PROPOSAL FORMAT
(Approved by CAA on 9/29/11 and CGS on 10/18/11, Effective Fall 2011)

This format is to be used for all courses submitted to the Council on Academic Affairs and/or the Council on Graduate Studies.

Please check one: ___ New course **_x_** Revised course

PART I: CATALOG DESCRIPTION

1. **Course prefix and number,** *such as ART 1000*: EDL 5900

2. **Title** (*may not exceed 30 characters, including spaces*): Introduction to Research

3. **Long title, if any** (*may not exceed 100 characters, including spaces*): Introduction to Research in Education

4. **Class hours per week, lab hours per week, and credit [*e.g., (3-0-3)*]:** 3-0-3

5. **Term(s) to be offered:** _x_ Fall _x_ Spring _x_ Summer ___ On demand

6. **Initial term of offering:** _x_ Fall ___ Spring ___ Summer **Year:** _2012__

7. **Course description:**
   This course is an introduction to the use of research as a school leader in current PK-12 educational settings. As such, the course will focus on understanding basic principles of scientific inquiry to conduct, review and analyze research methods as a part of a systemic school improvement process. Topics covered will include the creation of research questions/hypotheses, operational definitions of research constructs, sampling methods, experimental and quasi-experimental designs, internal and external validity, basic psychometric and statistical methods, quantitative and qualitative inquiry, data analysis and Action Research methods. In addition, students will write an Action Research proposal in the students' area of PK-12 education interest.

8. **Registration restrictions:**
   a. **Equivalent Courses**
      - **Identify any equivalent courses** (e.g., cross-listed course, non-honors version of an honors course).
        None
      - Indicate whether coding should be added to Banner to restrict students from registering for the equivalent course(s) of this course. ___ Yes _x_ No

   b. **Prerequisite(s)**
      - **Identify the prerequisite(s),** including required test scores, courses, grades in courses, and technical skills. Indicate whether any prerequisite course(s) MAY be taken concurrently with the proposed/revised course.   NA

      - Indicate whether coding should be added to Banner to prevent students from registering for this course if they haven't successfully completed the prerequisite course(s). ___ Yes ___ No

        If yes, identify the minimum grade requirement and any equivalent courses for each prerequisite course:

   c. **Who can waive the prerequisite(s)?**
      ___ No one ___ Chair ___ Instructor ___ Advisor ___ Other (Please specify)

d. **Co-requisites** (course(s) which MUST be taken concurrently with this one):

e. **Repeat status:** __x__ Course may not be repeated.

___ Course may be repeated once with credit.

Please also specify the limit (if any) on hours which may be applied to a major or minor.

f. **Degree, college, major(s), level, or class** to which registration in the course is restricted, if any: **None**

g. **Degree, college, major(s), level, or class** to be excluded from the course, if any: **NA**

9. **Special course attributes** [cultural diversity, general education (indicate component), honors, remedial, writing centered or writing intensive] **NA**

10. **Grading methods** (check all that apply): __x__ Standard letter ___ CR/NC ___ Audit ___ ABC/NC ("Standard letter"—i.e., ABCDF--is assumed to be the default grading method unless the course description indicates otherwise.)

Please check any special grading provision that applies to this course:

___ The grade for this course will not count in a student's grade point average.

___ The credit for this course will not count in hours towards graduation.

If the student already has credit for or is registered in an equivalent or mutually exclusive course, check any that apply:

___ The grade for this course will be removed from the student's grade point average if he/she already has credit for or is registered in _____ (insert course prefix and number).

___ Credit hours for this course will be removed from a student's hours towards graduation if he/she already has credit for or is registered in _____ (insert course prefix and number).

11. **Instructional delivery method:** (Check all that apply.)

__x__ lecture ___ lab ___ lecture/lab combined ___ independent study/research

___ internship ___ performance ___ practicum or clinical ___ study abroad

___ Internet __x__ hybrid ___ other (Please specify)

PART II: ASSURANCE OF STUDENT LEARNING

1. **List the student learning objectives of this graduate level course:**
   a. **Depth of content knowledge**
   b. **Effective critical thinking and problem solving**
   c. **Effective oral and written communication**

d. Advanced scholarship through research or creative activity

**The Educational Leadership Constituent Council is the policy board that establishes national accreditation standards for educational leadership professionals.

1. Learning Objectives	Graduate Level Goals	Assignment
Students will demonstrate understanding of how to collect and use data to identify goals, assess organizational effectiveness, and promote organizational learning. (ELCC 1).	A, B, C, D	Education Research Analysis, Research Problem, Statistical Dataset Analysis, IRB Ethics Module, Action Research Outline, Action Research Proposal, Final Exam
Students will demonstrate an understanding of how to utilize research methods to create and implement effective school planning. (ELCC 1, 2, 3, 4).	A,B, C, D	Research Problem, Statistical Dataset Analysis, Action Research Outline, Action Research Proposal, Final Exam
Students will demonstrate an understanding of how to monitor and evaluate progress and revise plans. (ELCC 1, 2, 3).	A, B, C, D	Statistical Dataset Analysis, Action Research Outline, Action Research Proposal, Final Exam
Students will demonstrate an understanding of how to collect and analyze data and information pertinent to the educational environment. (ELCC 1, 2, 3, 4, 5, 6).	A, B, C, D	Education Research Analysis, Research Problem, Statistical Dataset Analysis, IRB Ethics Module, Action Research Outline, Action Research Proposal , Final Exam
Students will demonstrate an understanding of how to develop, define and/or adapt best practices based on current research. (ELCC 1, 2, 3).	A, B, C, D	Education Research Analysis, Research Problem, Action Research Outline, Action Research Proposal , Final Exam
Students will demonstrate an understanding of scientifically based research, fundamental quantitative and qualitative research terminology, best practice and processes. (ELCC 6).	A, B. C, D	Education Research Analysis, Research Problem, Action Research Outline, Action Research Proposal , Final Exam
Students will demonstrate an understanding of ethical and legal considerations related to Educational Research.	A, B	IRB Ethics Module, Final Exam
Students will demonstrate through presentations their ability to synthesize and present information in an effective manner.	C	Education Research Analysis, Research Problem, Statistical Dataset Analysis, Action Research Outline, Action Research Proposal, Final Exam
Students will develop knowledge and understanding of the fundamental principles of applied research, including the formulation of research questions, the development of methodological procedures and the collection, analysis and interpretation of data.	A, B, C, D	Education Research Analysis, Research Problem, Statistical Dataset Analysis, IRB Ethics Module, Action Research Outline, Action Research Proposal, Final Exam

2. **Identify the assignments/activities the instructor will use to determine how well students attained the learning objectives:**
   DESCRIPTION OF ASSIGNMENTS

   Assignment 1. Research Problem. 8% Students will be required to select a research problem in their area of interest related to PK-12 education, provide some background for the problem, including its significance or importance and why it is of interest. Students will define the constructs and technical jargon that are in the problem statement. Students will formulate two or three research questions related to the problem, and

in no more than a few paragraphs, suggest a general research approach for a study design to answer the research questions. Be prepared to discuss your study in class.

Assignments 2, 3, 4. 25%. Education Research Analysis. Students will write a descriptive and critical analysis of selected educational research articles. They will describe the research problem, hypotheses, and the type of research design employed and comment on the appropriateness of the methodology for addressing the research problem, and the quality of the methods procedures. They will also assess the extent to which the results support the conclusions as stated by the researcher. Be prepared to discuss these in class.

Assignment 4. IRB Ethics Module. 8%. Students will take the prescribed research ethics course. Be prepared to discuss in class.

Assignment 5. Statistical Dataset Analysis. 8%. Students will write an analysis of a statistical dataset that will be provided by the instructor. The results section should include tables and/or graphs and associated narrative.

Assignment 6. Action Research Outline. 8%. Students will prepare an outline of the Action Research project.

Assignment 7.   Action Research Proposal.   35%.
Students will prepare and submit an Action Research Proposal. This assignment is the basis for the capstone experience of the Master's program.

Assignment 8.   Final Exam. 8%.

As a condition of graduation, students will be expected to complete the Action Research project and present it to peers and faculty.

3. **Explain how the instructor will determine students' grades for the course:**

> **Grading Scale**:
> 90% A
> 80% B
> 70% C
> 60% D
> below 60% F

4. **For technology-delivered and other nontraditional-delivered courses/sections, address the following:**
    a. **Describe how the format/technology will be used to support and assess students' achievement of the specified learning objectives:** For the online component of the course, some lectures are delivered via Apreso utilizing audio, video and PowerPoint. Each online module includes additional reading/video material and internet links for personal usage. Reflection papers and discussions cover reading assignments, lectures, assignments and are submitted via LMS Threaded Discussion. A Rubric is designed within LMS for grading and feedback on all assignment including reflections. Final Exam covers the assigned reading (open book) and lectures. Major papers are submitted via email attachment with LMS.

b. **Describe how the integrity of student work will be assured:** All assignments in this course are of a personal nature and cannot be replicated across students.

c. **Describe provisions for and requirements of instructor-student and student-student interaction, including the kinds of technologies that will be used to support the interaction (e.g., e-mail, web-based discussions, computer conferences, etc.):** The online component of the course utilizes LMS threaded discussion which provides a platform for feedback and interaction between faculty and students. Extensive feedback on all papers and weekly email communication with LMS provides continuous interaction with students.

5. **For courses numbered 4750-4999, specify additional or more stringent requirements for students enrolling for graduate credit. These include:**
   a. **course objectives;**
   b. **projects that require application and analysis of the course content; and**
   c. **separate methods of evaluation for undergraduate and graduate students.**

6. **If applicable, indicate whether this course is writing-active, writing-intensive, or writing-centered, and describe how the course satisfies the criteria for the type of writing course identified. (See Appendix *.)   NA**

PART III: OUTLINE OF THE COURSE

Provide a week-by-week outline of the course's content. Specify units of time (e.g., for a 3-0-3 course, 45 fifty-minute class periods over 15 weeks) for each major topic in the outline. Provide clear and sufficient details about content and procedures so that possible questions of overlap with other courses can be addressed. For technology-delivered or other nontraditional-delivered courses/sections, explain how the course content "units" are sufficiently equivalent to the traditional on-campus semester hour units of time described above.

Session 1. Introduction and overview
- Introduction to course goals and objectives
- Review of the course outline
- Discussion of students' and instructor's research interests
- Scientifically Based Research
- Basic Terms and Concepts

Session 2. Action Research
- Definition
- Components
- Importance in PK-12
- How to promote it to staff

Session 3. Educational Research and School Improvement/Planning Processes
- Data Sources and repositories of data IIRC
- Sources of scientifically based research
- Relationship to School Improvement Processes

Session 4. Ethics in Educational Research
- Institutional Review Board

- Required Training
- Human Subjects
- Implications for PK-12

Session 5. Formulating research questions and hypotheses
- Identifying the issues and defining the problem
- Developing research questions
- Links between research questions/hypotheses and research methodology
- Theoretical and operational definitions of independent (predictor), dependent (outcome)

Session 6. Communicating research
- Components of research proposals
- Components of research reports
- Critiquing research reports

Session 7. Experimental quantitative research designs
- Types of variance
- Controlling variance
- Experimental designs
- Quasi-experimental designs

Session 8. Nonexperimental Quantitative research designs
- Ex post facto
- Surveys
- Questionnaires & interviews

Session 9. Sampling
- Purpose of sampling
- Universe or target population
- Types of sampling
- Determining the size of a sample

Session 10. Measurement and data collection
- Levels of measurement
- Reliability
- Validity

Session 11. Introduction to descriptive statistical analysis
- Continuous versus categorical variables
- Frequency distributions
- Central tendency
- Dispersion
- Correlation

Session 12. Introduction to inferential statistical analysis
- Hypothesis testing
- Type I and Type II errors

- Statistical power analysis
- Parametric versus nonparametric
- Tests of significance

Session 13. Qualitative research designs
- Conceptual foundations
- Types of designs
- Data analytic methods

Session 14. Mixed and other methods
- Multiple measures and multiple methods
- Hybrid methods
- Meta-analysis
- Research paper presentations

Session 15. Paper Presentations
- Research paper presentations

Session 16. General issues
- Final Exam

PART IV: PURPOSE AND NEED

1. **Explain the department's rationale for developing and proposing the course.**

   a. This proposal is a revision of the current EDA 5900. It includes components that will provide Master's level students with a more structured opportunity to produce and present research relevant to PK-12 settings.
   b. Technology delivered components: Some lectures are delivered via Apreso utilizing audio, video and PowerPoint. Each online module includes additional reading/video material and internet links for personal usage. Reflection papers and discussions cover reading assignments, lectures, assignments and are submitted via LMS Threaded Discussion. A rubric is designed within LMS for grading and feedback on all assignment including reflections. The Final Exam covers the assigned reading and lectures. Major papers are submitted via email attachment with LMS.

2. **Justify the level of the course and any course prerequisites, co-requisites, or registration restrictions.**

   NA

3. **If the course is similar to an existing course or courses, justify its development and offering.**

   a. This proposal is a revision of the current EDA 5900. It includes components that will provide Master's level students with a more structured opportunity to produce and present research relevant to PK-12 settings.

4. **Impact on Program(s):**

   a. **For graduate programs, specify whether this course will be a core requirement for all candidates in a degree or certificate program or an approved elective.**

This course is a required course for the M.S. in Education in Educational Leadership.

PART V: IMPLEMENTATION

1. **Faculty member(s) to whom the course may be assigned:** All qualified department approved graduate faculty

2. **Additional costs to students:** None

3. **Text and supplementary materials to be used (Include publication dates):**
   Ary, D., Jacobs, L.C., Razanvieh, A. & Sorensen, C. (2006). *Introduction to research in education* (7th ed.). New York: Holt, Rinehart, and Winston, Inc.

PART VI: COMMUNITY COLLEGE TRANSFER: NA

PART VII: APPROVALS

Date approved by the department or school: 2/14/12

Date approved by the college curriculum committee: 3/26/2012

Date approved by the Honors Council *(if this is an honors course):*

Date approved by CAA: CGS:

*In **writing-active courses**, frequent, brief writing activities and assignments are required. Such activities -- some of which are to be graded – might include five-minute in-class writing assignments, journal keeping, lab reports, essay examinations, short papers, longer papers, or a variety of other writing-to-learn activities of the instructor's invention. Writing assignments and activities in writing-active courses are designed primarily to assist students in mastering course content, secondarily to strengthen students' writing skills. In **writing-intensive courses**, several writing assignments and writing activities are required. These assignments and activities, which are to be spread over the course of the semester, serve the dual purpose of strengthening writing skills and deepening understanding of course content. At least one writing assignment is to be revised by the student after it has been read and commented on by the instructor. In writing-intensive courses, students' writing should constitute no less than 35% of the final course grade. In **writing-centered courses** (English 1001G, English 1002G, and their honors equivalents), students learn the principles and the process of writing in all of its stages, from inception to completion. The quality of students' writing is the principal determinant of the course grade. The minimum writing requirement is 20 pages (5,000 words).

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