

UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE

NEW COURSE, GRADUATE

RSCH 8150 *Structural Equation Modeling* from the Department of Educational Leadership

New Research Course for College of Education Doctoral Students

PROPOSAL SUMMARY

The Department of Educational Leadership purposes to add a new course in applying a general statistical modeling technique to the College of Education's doctoral programs. This course may be used as an elective in Educational Leadership, Special Education, Curriculum and Instruction, and Counseling doctoral programs.

PROPOSED CATALOG COPY

RSCH 8150 *Structural Equation Modeling* is designed to apply general statistical modeling techniques to establish relationships among variables. Topics include regression models, path analysis models, exploratory and confirmatory factor analyses, latent variables, basic steps in structural equation modeling, multiple indicators and multiple causes (MIMIC) model, multi-group model, multilevel model, mixture model, structured mean model, second order factor model, latent variable growth model, and dynamic factor model. The course will be offered once a year (3). Prerequisite: RSCH 8110, 8120 or equivalent.

JUSTIFICATION

Structural equation modeling provides an effective tool for testing theoretical models and has become part of essential training in advanced research techniques in the field of education. Empirical research articles that use structural equation modeling as a major analytic tool appear regularly in leading academic journals in education. American Educational Research Association, a major international professional organization in educational research, routinely offer professional development courses in structural equation modeling during its annual conference. Universities and research institutes specify knowledge in structural equation modeling as either required or strongly desirable in a candidate qualification. This clearly reflects the need for the College of Education to prepare its students with these favored proficiencies.

The course number is 8150 (8000=doctoral level coursework, 8150=courses in the research sequence). RSCH=Educational Research.

IMPACT

What group(s) of students will be served by this proposal?

Doctoral level students in the College of Education will be served by this proposal. All students have an option of selecting a research elective.

What effect will this proposal have on existing courses and curricula?

There is no foreseeable effect that this proposal will have on any existing courses or curricula. A short introduction to structural equation modeling is taught in RSCH 8140 (Multivariate Statistics) but much more information is needed for students to use the statistical techniques.

When and how often will added course(s) be taught?

This course will be offered once a year.

How will the content and/or frequency of offering of other courses be affected?

The creation of this course should have no foreseeable negative impact on existing course offerings and will complement the research options that are available to the doctoral students. This course will provide students with additional electives from which to select and fill the gap that currently exist in educational research curriculum.

What is the anticipated enrollment in course(s) added (for credit and auditors)?

Course enrollment is anticipated to be from 10 to 15 students per semester.

How will enrollment in other courses be affected? How did you determine this?

This course may reduce the number of independent studies that most students take in order to understand structural equation modeling. It is possible that there may be a slight reduction in the other research course electives taken by the doctoral students.

If course(s) has been offered previously under special topics numbers, give details of experience including number of times taught and enrollment figures.

This course has not been offered previously.

Identify other areas of catalog copy that would be affected, e.g., curriculum outlines, requirements for the degree, etc.

Curriculum outlines would not be affected by the addition a course option for doctoral students.

RESOURCES REQUIRED TO SUPPORT PROPOSAL.

Personnel—None. There is sufficient faculty in the Department of Educational Leadership to teach this course. Faculty in the educational research and evaluation program are qualified to teach this course. Those faculty members include Drs. Do-Hong Kim, Richard Lambert, Chuang Wang, Robert Algozzine, Claudia Flowers, and Dawson Hancock. All these faculty members are tenured or are in tenure track positions.

Physical Facility--none

Equipment and Supplies--none

Computer—current computer labs provided by the University are sufficient.

Audio-Visual—none

Other Resources--none

Indicate source(s) of funding for new/additional resources required to support this proposal—non required.

CONSULTATION WITH THE LIBRARY AND OTHER DEPARTMENTS OR UNITS

Library Consultation—Judy Walker states that the library holdings are adequate (see attached e-mail)

Consultation with other departments or units – Consulted with doctoral program coordinators (communication attached) (Once completed, the course description will be discussed with department chairs during the next College Leadership Council meeting, with the department's program coordinators during the next Department Leadership Council meeting, and with all department faculty during the next department meeting.)

INITIATION AND CONSIDERATION OF THE PROPOSAL

Originating Unit: Department of Educational Leadership

Briefly summarize action on the proposal in the originating unit including information on voting and dissenting options.

On August 26, 2008, 100% of the Department of Educational Leadership faculty approved this proposal via closed ballots. No dissenting views were expressed.