

# APPLICATION FOR NEW COURSE

<b>1. General Information.</b>				
a.	Submitted by the College of: <u>Education</u>	Today's Date: <u>2/10/2010</u>		
b.	Department/Division: <u>EDSRC</u>			
c.	Contact person name: <u>Brian Bottge</u>	Email: <u>bbott2@uky.edu</u>	Phone: <u>257-7908</u>	
d.	Requested Effective Date: <input checked="" type="checkbox"/> Semester following approval OR <input type="checkbox"/> Specific Term/Year <sup>1</sup> : _____			
<b>2. Designation and Description of Proposed Course.</b>				
a.	Prefix and Number: <u>EDS713</u>			
b.	Full Title: <u>Designing Classroom-Based Intervention Research in Special Education</u>			
c.	Transcript Title (if full title is more than 40 characters): <u>Design Clsrn Based Res in Sped</u>			
d.	To be Cross-Listed <sup>2</sup> with (Prefix and Number): _____			
e.	Courses must be described by <u>at least one</u> of the meeting patterns below. Include number of actual contact hours <sup>3</sup> for each meeting pattern type.			
	_____ Lecture	_____ Laboratory <sup>1</sup>	_____ Recitation	_____ Discussion _____ Indep. Study
	_____ Clinical	_____ Colloquium	_____ Practicum	_____ Research _____ Residency
	<u>37.5</u> Seminar	_____ Studio	_____ Other – Please explain: _____	
f.	Identify a grading system: <input checked="" type="checkbox"/> Letter (A, B, C, etc.) <input type="checkbox"/> Pass/Fail			
g.	Number of credits: <u>3</u>			
h.	Is this course repeatable for additional credit?			YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
	If YES: Maximum number of credit hours: _____			
	If YES: Will this course allow multiple registrations during the same semester?			YES <input type="checkbox"/> NO <input type="checkbox"/>
i.	Course Description for Bulletin:	<u>The purpose of this course is to acquaint students with methods for designing and conducting experimental and quasi-experimental intervention studies in school-based settings. Students will have the opportunity to conceptualize a study based on their interests and propose procedures for implementing it. Although knowledge of basic statistics would increase understanding, the substance of the course focuses primarily on designing studies that test for the presence of a distinct cause-and-effect relationship between variables.</u>		
j.	Prerequisites, if any: _____			
k.	Will this course also be offered through Distance Learning?			YES <sup>4</sup> <input type="checkbox"/> NO <input checked="" type="checkbox"/>
l.	Supplementary teaching component, if any: <input type="checkbox"/> Community-Based Experience <input type="checkbox"/> Service Learning <input type="checkbox"/> Both			

<sup>1</sup> Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

<sup>2</sup> The chair of the cross-listing department must sign off on the Signature Routing Log.

<sup>3</sup> In general, undergraduate courses are developed on the principle that one semester hour of credit represents one hour of classroom meeting per week for a semester, exclusive of any laboratory meeting. Laboratory meeting, generally, represents at least two hours per week for a semester for one credit hour. (from SR 5.2.1)

<sup>4</sup> You must *also* submit the Distance Learning Form in order for the proposed course to be considered for DL delivery.

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<b>3.</b>	Will this course be taught off campus?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
<b>4.</b>	<b>Frequency of Course Offering.</b>		
<b>a.</b>	Course will be offered (check all that apply):	<input checked="" type="checkbox"/> Fall	<input type="checkbox"/> Spring <input type="checkbox"/> Summer
<b>b.</b>	Will the course be offered every year?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If NO, explain: <u>It will be offered contingent on enrollment of graduate students in special education.</u>		
<b>5.</b>	Are facilities and personnel necessary for the proposed new course available?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
	If NO, explain: _____		
<b>6.</b>	What enrollment (per section per semester) may reasonably be expected?	<u>10</u>	
<b>7.</b>	<b>Anticipated Student Demand.</b>		
<b>a.</b>	Will this course serve students primarily within the degree program?	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
<b>b.</b>	Will it be of interest to a significant number of students outside the degree pgm?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES, explain: _____		
<b>8.</b>	<b>Check the category most applicable to this course:</b>		
	<input checked="" type="checkbox"/> Traditional – Offered in Corresponding Departments at Universities Elsewhere		
	<input type="checkbox"/> Relatively New – Now Being Widely Established		
	<input type="checkbox"/> Not Yet Found in Many (or Any) Other Universities		
<b>9.</b>	<b>Course Relationship to Program(s).</b>		
<b>a.</b>	Is this course part of a proposed new program?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES, name the proposed new program: _____		
<b>b.</b>	Will this course be a new requirement <sup>5</sup> for ANY program?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES <sup>5</sup> , list affected programs: _____		
<b>10.</b>	<b>Information to be Placed on Syllabus.</b>		
<b>a.</b>	Is the course 400G or 500?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES, the <i>differentiation for undergraduate and graduate students must be included</i> in the information required in <b>10.b.</b> You must include: (i) identification of additional assignments by the graduate students; and/or (ii) establishment of different grading criteria in the course for graduate students. (See SR 3.1.4.)		
<b>b.</b>	<input checked="" type="checkbox"/> The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from <b>10.a</b> above) are attached.		

<sup>5</sup> In order to change a program, a program change form must also be submitted.

# APPLICATION FOR NEW COURSE

## Signature Routing Log

**General Information:**

Course Prefix and Number: EDS713

Proposal Contact Person Name: Brian Bottge Phone: 7-7908 Email: bbott2@uky.edu

**INSTRUCTIONS:**

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

**Internal College Approvals and Course Cross-listing Approvals:**

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
EDSRC	11/3/09	Debra Harley / 7-7199 / dharl00.uky.edu	<i>Debra D. Harley</i>
Courses & Curricula	2/22/10	Jeff Reese 7-4909 jeff.reesc@uky.edu	<i>Jeff Reese</i>
College of Education	3/9/10	Robert Shapiro 7-9795 rshap01	<i>Robert Shapiro</i>
		/ /	
		/ /	

**External-to-College Approvals:**

Council	Date Approved	Signature	Approval of Revision <sup>6</sup>
Undergraduate Council			
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

<sup>6</sup> Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

**UNIVERSITY OF KENTUCKY**  
**Department of Special Education**  
**& Rehabilitation Counseling**

**Course Syllabus**

EDS 713 Designing Classroom-Based Intervention Research in Special Education

**Instructor**

Brian Bottge  
222 Taylor Education Building  
Office Phone: 257-7908  
Email: [bbott2@uky.edu](mailto:bbott2@uky.edu) (best option)

**Time and Location**

Time: TBA  
Location: TBA

**Office Hours**

TBA  
Other times by appointment

**Prerequisites**

Graduate status

**Rationale and Course Description**

The number of intervention research studies investigating the effectiveness of special education instructional approaches is at its lowest point in 30 years (Gersten, Baker, & Lloyd, 2000). In fact, only 16% of articles published in top special education journals over the past 10 years report findings from intervention research (Mastropieri et al., 2009). Several reasons for the shortage have been forwarded. Chief among them is the premise that school-based interventions are more difficult to design, carry out, and report, especially when group designs are being considered.

The purpose of this course is to acquaint students with methods for designing and conducting experimental and quasi-experimental intervention studies in school-based settings. Students will have the opportunity to conceptualize a study based on their interests and propose procedures for implementing it. Although knowledge of basic statistics would increase understanding, the substance of the course focuses primarily on designing studies that test for the presence of a distinct cause-and-effect relationship between variables.

**Competencies**

Upon completion of this course, students will:

- Understand and identify the major conceptual and methodological issues of intervention research (e.g., experimental and quasi-experimental designs).
- Develop skills to critically review and evaluate classroom-based intervention research.
- Develop and propose (but not implement) an intervention study that considers conceptual/methodological issues within the context of an experimental or quasi-experimental design.
- Prepare a manuscript that describes the background, methods, and outcomes of the study.
- Give a formal presentation of your study.

### What I Expect of You

- Full participation in each class session
- On-time completion of all assignments
- Sufficient outside time spent on the coursework to meet the course objectives
- Demonstrated effort toward excellence in class work
- Collaboration with classmates as appropriate
- Respect for and consideration of classmates
- Enthusiasm toward professional growth, exploration, and change

### What You Can Expect of Me

- Planned and organized class sessions
- Demonstration of good instructional practices
- Fair evaluation procedures (including constructive feedback)
- Creation of an environment in which ideas may be openly shared and discussed
- Availability for questions and support
- Maintaining sense of humor no matter what happens

### Academic Integrity

Students are expected to be familiar with their *Rights and Responsibilities*, particularly with regard to matters of academic integrity and the penalties for plagiarism/cheating. This information may be accessed at:

<http://www.uky.edu/StudentAffairs/Code/Part2.html>

(see section 6.3.0).

### Student Support

If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address [jkarnes@email.uky.edu](mailto:jkarnes@email.uky.edu)) for coordination of campus disability services available to students with disabilities (<http://www.uky.edu/StudentAffairs/DisabilityResourceCenter/>)

Assistance with writing is available through the *Writing Center*. “The Writing Center assists University of Kentucky students, faculty, and staff with the process of writing. Staffed by English graduate students, full-time instructors, part-time consultants, and undergraduate peer tutors, the Center offers free individual and group consultations on prewriting, writing, and rewriting.”

<http://www.uky.edu/AS/English/wc/>

Technological support is available through the *Instructional Technology Center* in room 151 Taylor Education Building.

<http://www.coe.uky.edu/ITC/>

### Assignments and Points Possible

1. **Design an Intervention Research Study (35 points).** You will write a mini-proposal for conducting an intervention research study in your area of interest. The proposal should be no longer than 15 pages (excluding references), double-spaced, and prepared in APA style as recommended in the Publication Manual of the American Psychological Association (5<sup>th</sup> Edition, 2001). Specific guidelines for this project will be distributed in class.
2. **(Oral Product) Present Your Intervention Research Study to the Class (15 points).** Present your intervention research study to the class. You may use PowerPoint if you wish. Please provide other members of the class a copy of your intervention study the week prior to your presentation. Your presentation should be approximately 30 minutes. Be prepared to answer questions.
3. **Summarize Published Articles and Lead a Discussion (20 points).** In pairs, write a two-page summary of a published article in special education that describes a group intervention study of interest to you. Your summary should highlight the strengths and weaknesses of the research design and the appropriateness of the conclusions the author(s) draws from it. You will also lead a class discussion (you will need to distribute the article one week before class).
4. **Review a Manuscript for a Journal (10 points).** Review a manuscript that has been submitted for publication (I will provide it) and write a two-page critique (single spaced) that would be helpful to the authors in their revision. Guidelines for the critique will be handed out in class.
5. **Response-To-Reading (RTR) (20 points).** Write one-page responses (single spaced) to questions from 10 selected reading assignments.

### Grading

90 – 100 points	= A
80 – 89 points	= B
70 – 79 points	= C
69 and less	= E

### Required Text

Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference*. Boston: Houghton Mifflin.

**Required Readings (not inclusive) \***

- Boote, D. N., & Beile, P. (2005). Scholars before researchers: On the centrality of the dissertation literature review in research preparation. *Educational Researcher*, 34(6), pp. 3-15.
- Bottge, B. A. (2001). Reconceptualizing math problem solving for low-achieving students. *Remedial and Special Education*, 22, 102-112.
- Bottge, B. A., Heinrichs, M., Mehta, Z. D., & Hung, Y. (2002). Weighing the benefits of anchored math instruction for students with disabilities in general education classes. *Journal of Special Education*, 35, 186-200.
- Bottge, B. A., Rueda, E., LaRoque, P. T., Serlin, R. C., & Kwon, J. (2007). Integrating reform-oriented math instruction in special education settings. *Learning Disabilities Research & Practice*, 22, 96-109.
- Boudah, D. J., & Lenz, B. K. (2000). And now the rest of the story: The research process as intervention in experimental and qualitative studies. *Learning Disabilities Research and Practice*, 15, 149-159.
- Cade, T., & Gunter, P. L. (2002). Teaching students with severe emotional or behavioral disorders to use a musical mnemonic technique to solve basic division calculations. *Behavioral Disorders*, 27, 208-214.
- CLD Research Committee: Rosenberg, M. S., et al. (1993). Minimum standards for description of participants in learning disabilities research. *Journal of Learning Disabilities*, 26, 210-213.
- Douglas, K. (2009). Sharpening our focus on measuring classroom instruction. *Educational Researcher*, 38, 518-521.
- Fuchs, L. S., Fuchs, D., Finelli, R., Courey, S. J., & Hamlett, C. L. (2004). Expanding schema-based transfer instruction to help third graders solve real-life mathematical problems. *American Educational Research Journal*, 41, 419-445.
- Gersten, R. (2005). Behind the scenes of an intervention research study. *Learning Disabilities Research & Practice*, 20, 200-212.
- Gersten, R., Baker, S., & Lloyd, J. W. (2000). Designing high-quality research in special education: Group experimental design. *Journal of Special Education*, 34, 2-18.
- Gersten, R., Fuchs, L. S., Compton, D., Coyne, M., Greenwood, C., & Innocenti, M. S. (2005). Quality indicators for group experimental and quasi-experimental research in special education. *Exceptional Children*, 71, 149 – 164.

- Hedges, L. V., & Hedberg, E. C. (2007). Intraclass correlations for planning group randomized experiments in rural education. *Journal of Research in Rural Education, 22*(10), 1-15.
- Horner, R. H., Carr, E. G., Halle, J., McGee, G., Odom, S., & Wolery, M. (2005). The use of single-subject research to identify evidence-based practice in special education. *Exceptional Children, 71*, 165 - 179.
- Krathwohl, D. R. (1998). *Methods of educational & social science research: An integrated approach* (2<sup>nd</sup> edition). New York: Longman.
- Lienemann, T. O., & Reid, R. (2008). Using self-regulated strategy development to improve expository writing with students with attention deficit hyperactivity disorder. *Exceptional Children, 74*, 471-486.
- Mastropieri, M. A., et al. (2009). What is published in the field of special education? An analysis of 11 prominent journals. *Exceptional Children, 76*, 95-109.
- Mooney, P., Epstein, M. H., Reid, R., & Nelson, J. R. (2003). Status and trends in academic intervention research for students with emotional disabilities. *Remedial and Special Education, 24*, 273-287.
- Odom, S. L., Brantlinger, E., Gersten, R., Horner, R. H., Thompson, B., & Harris, K. R. (2005). Research in special education: Scientific methods and evidence-based practices. *Exceptional Children, 71*, 137-148.
- O'Donnell, C. L. (2008). Defining, conceptualizing, and measuring fidelity of implementation and its relationship to outcomes in K-12 curriculum intervention research. *Review of Educational Research, 78*, 33-84.
- Seethaler, P. M., & Fuchs, L. S. (2005). A drop in the bucket: Randomized controlled trials testing reading and math interventions. *Learning Disabilities Research & Practice, 20*, 98-102.
- Slavin, R. E. (2008). What works? Issues in synthesizing educational program evaluations. *Educational Researcher, 37*, 5-14.
- Thompson Jacobson, L., & Reid, R. (2010). Improving the persuasive essay writing of High school students with ADHD. *Exceptional Children, 76*, 157-174.
- U.S. Department of Education. (2005). *Reporting the Results of Your Study: A User-Friendly Guide for Evaluators of Educational Programs and Practices*. Institute of Education Sciences, Washington, DC.

- Wagner, M., Newman, L., Cameto, R., & Levine, P. (2006). *The Academic and Functional Performance of Youth With Disabilities. A Report From the National Longitudinal Transition Study-2 (NLTS2)*. (NCSE 2006-3000). Menlo Park, CA: SRI International.
- Wehby, J. H., Lane, K. L., & Falk, K. B. (2005). An inclusive approach to improving early literacy skills of students with emotional and behavioral disorders. *Behavioral Disorders, 30*, 155-169.
- Woodward, J., & Baxter, J. (1997). The effects of an innovative approach to mathematics on academically low-achieving students in inclusive settings. *Exceptional Children, 63*, 373-388.
- Zientek, L. R., Capraro, M. M., & Capraro, R. M. (2008). Reporting practices in quantitative teacher education research: One look at the evidence cited in the AERA Panel Report. *Educational Researcher, 37*, 208-216.

**\* Assigned readings will be modified according to the interests of class members**

## Course Calendar

Date	Topics	Readings	Assignment(s) Due
<i>Week 1</i>	Introductions Purpose of the course Requirements of the course What is research? Who needs it? Why? Overview – Research Methodologies,		
<i>Week 2</i>	Overview –Elements of Group Experimental, Quasi-experimental Research	<ul style="list-style-type: none"> <li>• <i>Text</i>, Preface &amp; Chapter 1</li> <li>• Mastropieri et al., 2009</li> <li>• Odom, et al., 2005</li> <li>• Gersten, Baker, &amp; Lloyd, 2000</li> </ul>	RTR 1
<i>Week 3</i>	Overview (cont'd) – Elements of Group Experimental, Quasi-Experimental Research	<ul style="list-style-type: none"> <li>• Gersten et al., 2005</li> <li>• Woodward &amp; Baxter, 1997</li> <li>• Boote &amp; Beile, 2005</li> <li>• Boudah et al., 2000</li> </ul>	RTR 2 Article Summary (Pair #1)
<i>Week 4</i>	Validity – Statistical Conclusion & Internal Construct & External	<ul style="list-style-type: none"> <li>• <i>Text</i>, Chapters 2 &amp; 3</li> <li>• Krathwol, 1998</li> </ul>	RTR 3 Article Summary (Pair #2)
<i>Week 5</i>	Quasi-Experiments, Group Designs	<ul style="list-style-type: none"> <li>• <i>Text</i>, Chapters 4 &amp; 5</li> <li>• Gersten, 2005</li> <li>• CLD Research Committee, 1993</li> </ul>	RTR 4 Article Summary (Pair #3)
<i>Week 6</i>	Quasi-Experiments, Interrupted Time-Series Designs	<ul style="list-style-type: none"> <li>• <i>Text</i>, Chapter 6</li> <li>• Lienemann &amp; Reid, 2008</li> <li>• Bottge et al., 2007</li> </ul>	RTR 5 Article Summary (Pair #4)
<i>Week 7</i>	Regression Discontinuity Designs	<ul style="list-style-type: none"> <li>• <i>Text</i>, Chapter 7</li> </ul>	RTR 6 Article Summary (Pair #1)
<i>Week 8</i>	Randomized Experiments	<ul style="list-style-type: none"> <li>• <i>Text</i>, Chapter 8</li> <li>• Seethaler &amp; Fuchs, 2005</li> <li>• Mooney et al, 2003</li> <li>• Hedges &amp; Hedberg, 2007</li> </ul>	RTR 7 Article Summary (Pair #2)

<i>Week 9</i>	Reporting Practices - Fidelity of Implementation Interrater Reliability	<ul style="list-style-type: none"> <li>• O'Donnell, 2008</li> <li>• Zientek et al., 2008</li> <li>• U.S. Dept of Education, 2005</li> </ul>	Article Summary (Pair #3)
<i>Week 10</i>	Evaluating Research- Based Interventions  Ethics and Practical Problems	<ul style="list-style-type: none"> <li>• <i>Text</i>, Chapters 9 &amp; 10</li> <li>• Slavin, 2008</li> <li>• Douglas, 2009</li> </ul>	RTR 8 Article Summary (Pair #4)
<i>Week 11</i>	Examples of Intervention Studies (Group Research)	<ul style="list-style-type: none"> <li>• Fuchs et al., 2004</li> <li>• Bottge, 2001</li> <li>• Bottge et al., 2002</li> </ul>	RTR 9
<i>Week 12</i>	Examples of Intervention Studies (Single-Case Research)	<ul style="list-style-type: none"> <li>• Horner et al, 2005</li> <li>• Wehby, Lane, &amp; Falk, 2005</li> <li>• Cade &amp; Gunter, 2002</li> <li>• Thompson Jacobson &amp; Reid, 2010</li> </ul>	RTR 10
<i>Week 13</i>	Manuscript Review	Manuscript for Review	Manuscript Review
<i>Week 14</i>	Research Presentations, Discussion		Final Project
<i>Week 15</i>	Research Presentations Discussion		Final Project

NOTE: Content of class sessions will follow as close to the calendar as possible.