SOUTH DAKOTA BOARD OF REGENTS
Certificate Request

This form is to be used to request approval for a new certificate program that includes currently offered courses. A certificate program is not a major or minor. Refer to BOR policy 2:23 Certificate Programs.

<table>
<thead>
<tr>
<th>SDSU</th>
<th>HNS</th>
<th>Laurie Stenberg Nichols</th>
<th>4/5/11</th>
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</thead>
<tbody>
<tr>
<td>Institution</td>
<td>Division/Department</td>
<td>Institutional Approval Signature</td>
<td>Date</td>
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1. **Name of Program:** Transdisciplinary Childhood Obesity Prevention (T.O.P) graduate program

2. **Provide a justification for the program.**
   This certificate program combines transdisciplinary faculty expertise from South Dakota State University (SDSU) and the University of Nebraska-Lincoln (UNL) to implement a graduate program certificate program with experiential research training opportunities addressing childhood obesity. The primary **Goal** of the proposed Transdisciplinary Childhood Obesity Prevention (T.O.P) graduate program is to develop an innovative, research-based graduate education program that includes transdisciplinary experiential research training in the field of childhood obesity prevention. The T.O.P program will prepare students with the technical and functional competencies needed to conduct research on the behavioral, social, biological, and environmental causes of childhood obesity as well as skills to develop and implement evidence-based transdisciplinary approaches to prevention. Students will expand their understanding of the complex and interacting influences associated with excessive weight gain in children and will be prepared to develop and empirically evaluate intervention programs intended to prevent childhood obesity. The strength of this program is the transdisciplinary approach to childhood obesity prevention, which will allow students to think critically about the complexity of factors contributing to childhood obesity. In addition, the research portion of this program aims to specifically focus on minority, underserved, American Indian populations in rural South Dakota (SD) and Black and Hispanic populations in urban Nebraska (NE). These underserved populations also have a high percentage of students that qualify to receive free and/or reduced lunches and meet the criterion to qualify for the nutrition education services provided by Expanded Food and Nutrition Education Program (EFNEP) and Supplemental Nutrition Assistance Education Program (SNAP-Ed).

   The **Objectives** to meet this goal are to:

1) Combine faculty and resources from SDSU and UNL to develop a sustainable transdisciplinary graduate certificate program to address childhood obesity prevention.
2) Recruit and educate a transdisciplinary group of graduate students in fields of nutrition, family and consumer sciences, child development, exercise and sports science and other related fields of study.
3) Design and implement three core graduate courses and supporting courses to address childhood obesity and research methods.
4) Establish an ongoing research program on factors influencing excessive weight gain in children and develop and test effective interventions to prevent childhood obesity.
5) Establish an experiential learning experience for graduate students to interact with students in undergraduate tribal colleges to increase student awareness of the multifaceted and cultural issues associated with childhood obesity.
6) Prepare graduate students to effectively work as applied, basic researchers and experts to design, implement and evaluate childhood obesity prevention programs.
7) Integrate graduate coursework and research through faculty, peer mentoring and experiential research experiences with school systems, families, communities, research centers and extension.

Our **Long – Range Goal** is to develop an effective and sustainable transdisciplinary graduate certificate program in childhood obesity prevention that can be applied by universities on a national and international basis. Ultimately, this program will prepare professionals who will be able to address the complex issues of childhood obesity and its prevention.

**Transdisciplinary Graduate Education:** Our transdisciplinary research approach will expand student understanding of the behavioral, social, biological, and environmental causes of childhood obesity and equip them with the knowledge needed to implement and study evidence-based approaches to prevent childhood obesity. Graduate programs must be reflective transdisciplinary communities that bring issues, problems and people together to overcome existing institutional boundaries and invent alternative social organizations that will permit the flourishing of interdisciplinary work (Derry & Fischer, 2005). Lytle (2009) posits that a comprehensive transdisciplinary approach that addresses the individual-level influences and the complex systems that occur at the interpersonal, community, and governmental levels is needed to determine the etiology of childhood obesity. Transdisciplinary approaches have been used to understand other complex health concerns such as tobacco cessation (Stokols et al., 2003) and health disparities (Abrams, 2006). This transdisciplinary graduate program will focus on strategies geared toward addressing childhood obesity prevention in underserved minority youth and will train students to engage schools, families, and communities to work together to address this challenge.

3. **Who is the audience for the program?**
Nutrition, family and consumer sciences, child development, exercise and sports science, dietetics, nutrigenomics, extension, and biostatistics faculty are collaborating to implement the T.O.P graduate program. Students will graduate with a Master's or Doctoral degree from their respective college/department and will obtain a T.O.P program certificate upon completion of their degree, course, and research requirements.

4. **List the courses to be completed, the credit hours of each course, and the total number of credit hours required for the program.**

<table>
<thead>
<tr>
<th>Prefix &amp; #</th>
<th>Title</th>
<th>Credit Hrs</th>
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<tbody>
<tr>
<td>NFS750</td>
<td>Transdisciplinary Focus on Childhood Obesity Prevention</td>
<td>3</td>
</tr>
<tr>
<td>NFS751</td>
<td>Research Methods II in Childhood Obesity</td>
<td>3</td>
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<tr>
<td>NFS751L</td>
<td>Assessment Skills Laboratory</td>
<td>1</td>
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<tr>
<td>NFS 790</td>
<td>Nutrition Seminar (2 cr MS; 3 cr PhD)</td>
<td>2 (3)</td>
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**Total Credit Hours Required** 9 MS; 10 PhD

5. **Proposed CIP code** _190501_

6. **Effective Date of Certificate Program** _Fall 2011_