SUBJECT
New Graduate Certificate: SDSU and USD – Public Health

CONTROLLING STATUTE, RULE, OR POLICY
BOR Policy 2:23 – Program and Curriculum Approval

BACKGROUND / DISCUSSION
South Dakota State University (SDSU) and the University of South Dakota (USD) seek permission to offer a collaborative graduate certificate in Public Health. The certificate will be comprised of existing graduate courses covering an introduction to public health, epidemiology, and application of public health concepts in program development. The certificate will be applicable for students in other health professions programs who wish to expand their knowledge of public health and the application of public health concepts.

Practicing health care professionals could pursue this certificate as a stand-alone education credential to enhance their knowledge in public and population health. Additionally, courses in the proposed certificate are stackable to the M.P.H program.

IMPACT AND RECOMMENDATION
The universities request an exception to the standard 12-credit limit for a graduate certificate. Other certificates across the country in this discipline typically consist of 15-18 credit hours. The proposed 15-credit program of study will allow the certificate to cover the five core areas of public health: biostatistics, environmental health, epidemiology, health policy, and social and behavioral sciences.

The universities do not request new state resources and no new courses are needed for the proposed certificate.

Board office staff recommends approval of the new certificate program.

ATTACHMENTS
Attachment I – New Graduate Certificate Request Form: SDSU & USD – Public Health

DRAFT MOTION 20201209_5-E(3):
I move to authorize SDSU and USD to offer the new graduate certificate in Public Health as presented.
UNIVERSITY: SDSU and USD

TITLE OF PROPOSED CERTIFICATE: Public Health

INTENDED DATE OF IMPLEMENTATION: 2021-2022 Academic Year

PROPOSED CIP CODE: 51.2201

UNIVERSITY DEPARTMENT: SDSU Grad Study – Allied and Population Health USD Public Health and Health Sciences (UHSC)

UNIVERSITY DIVISION: SDSU Graduate School (3G) USD School of Health Sciences (2H)

University Approval
To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

[Signature]
9/23/2020

Institutional Approval Signature
President or Chief Academic Officer of the University

[Signature]
8/14/2020

Institutional Approval Signature
President or Chief Academic Officer of the University

1. Is this a graduate-level certificate or undergraduate-level certificate?
   - Undergraduate Certificate □
   - Graduate Certificate ☒

2. What is the nature/purpose of the proposed certificate? Please include a brief (1-2 sentence) description of the academic field in this certificate.

   The graduate certificate in Public Health will enable students to explore fundamental concepts in public health. The certificate will be comprised of existing graduate courses covering an introduction to public health, epidemiology, and application of public health concepts in program development. The certificate will be particularly applicable for students in other health professions programs in order to expand their knowledge of public health and understand application of public health concepts in clinical practice.

   The universities do not request new state resources for the proposed certificate.
3. If you do not have a major in this field, explain how the proposed minor relates to your university mission and strategic plan, and to the current Board of Regents Strategic Plan 2014-2020.

The graduate certificate in Public Health supports the health professions education mission of SDSU and USD as provided in SDCL 13-58-1 and 13-57-1:

*Designated as South Dakota’s land grant university, South Dakota State University, formerly the state college of agriculture and mechanical arts, shall be under the control of the Board of Regents and shall provide undergraduate and graduate programs of instruction in the liberal arts and sciences and professional education in agriculture, education, engineering, home economics, nursing and pharmacy, and other courses or programs as the Board of Regents may determine.*

*Designated as South Dakota’s Liberal Arts University, the University of South Dakota, established and located at Vermillion, in Clay County, shall be under the control of the Board of Regents and shall provide undergraduate and graduate programs of instruction in the liberal arts and sciences and professional education in business, education, fine arts, law and medicine, and other courses or programs as the Board of Regents may determine.*

The proposed program also supports the goals stated in the South Dakota Board of Regents Strategic Plan 2014-2020:

*Goal 1 – Student Success*
- Increase the number of graduate degrees awarded.
*Goal 2 – Academic Quality and Performance*
- Continue to approve new graduate programs.

In addition, the Public Health Certificate supports goals and strategies of the universities’ strategic plans:

**SDSU Strategic Goal¹ – Excellence Through Transformative Education**
Attain academic excellence: Develop and grow high-quality and distinct academic programs designed to meet the needs of diverse students and market demands.

**USD Strategic Goal² – Undergraduate, Graduate, and Professional Student Experience**
Goal 2: Enrich academic experiences for graduate and professional students.

4. Provide a justification for the certificate program, including the potential benefits to students and potential workforce demand for those who graduate with the credential.¹

The public health profession is in high demand, and job growth projections from the United States Bureau of Labor Statistics indicate average to well above average growth (10 year job growth of 5-11%, depending on area of specialization).² Importantly, public health knowledge is now recognized as an important component of the education of multiple health professions. Physicians, pharmacists, nurses, dieticians, and other health professionals are now utilizing public and population health knowledge in their clinical roles, and specialty positions for clinicians with a public health background are now available. For many of the clinical applications of public health, a bachelors or master’s degree in public health would not be

required, but additional coursework in public health beyond what is required in the main professional curriculum would give graduates an advantage in pursuing these positions. This certificate would provide foundational knowledge in public health and epidemiology as well as more advanced training in program planning and evaluation and applied public health for students interested in adding public health training to another degree program. All of the courses in the certificate would apply to the M.P.H. program so students would be able to proceed with further education if desired.

5. Who is the intended audience for the certificate program (including but not limited to the majors/degree programs from which students are expected)?

The main audience for the certificate would be students in other health professions majors such as medicine, pharmacy, nursing, and dietetics would be interested in advancing their knowledge of public health. Another audience for the certificate would be practicing clinicians who would like to further their education in public health.

6. Certificate Design
   A. Is the certificate designed as a stand-alone education credential option for students not seeking additional credentials (i.e., a bachelor’s or master’s degree)? If so, what areas of high workforce demand or specialized body of knowledge will be addressed through this certificate?

   Practicing health care professionals could pursue this certificate as a stand-alone education credential to enhance their knowledge in public and population health. Hospitals and health-systems are expanding their work in population health. Health care professionals with a certificate in public health would have knowledge and skill to work in this area.

   B. Is the certificate a value added credential that supplements a student’s major field of study? If so, list the majors/programs from which students would most benefit from adding the certificate.

   The proposed certificate could serve as a value-added credential that would supplement a variety of health-related programs. It will provide health professions majors with additional training in public health and an additional credential for job opportunities utilizing their professional training in public and population health applications.

   C. Is the certificate a stackable credential with credits that apply to a higher level credential (i.e., associate, bachelor’s, or master’s degree)? If so, indicate the program(s) to which the certificate stacks and the number of credits from the certificate that can be applied to the program.

   Yes. The Public Health Certificate may be a stackable credential as all of the courses in the certificate could be applied to the M.P.H program should the student decide to continue their education.
7. List the courses required for completion of the certificate in the table below (if any new courses are proposed for the certificate, please attach the new course requests to this form):^2

<table>
<thead>
<tr>
<th>Prefix</th>
<th>Number</th>
<th>Course Title</th>
<th>Prerequisites for Course</th>
<th>Credit Hours</th>
<th>New (yes, no)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBH</td>
<td>701</td>
<td>Biostatistics in Public Health</td>
<td></td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>PUBH</td>
<td>702</td>
<td>Public Health Theory and Practice</td>
<td></td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>PUBH</td>
<td>710</td>
<td>Epidemiology</td>
<td></td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Select 2 courses (6 credits) from the following supporting course list:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PUBH</td>
<td>733</td>
<td>Environmental Health</td>
<td></td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>PUBH</td>
<td>740</td>
<td>US Health Systems and Public Policy</td>
<td></td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>PUBH</td>
<td>750</td>
<td>Social and Behavioral Sciences in Public Health</td>
<td></td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>PUBH</td>
<td>755</td>
<td>Program Planning and Evaluation</td>
<td></td>
<td>3</td>
<td>No</td>
</tr>
<tr>
<td>PUBH</td>
<td>760</td>
<td>Public Health and Native American Communities</td>
<td></td>
<td>3</td>
<td>No</td>
</tr>
</tbody>
</table>

Subtotal 15^*

^*USD and SDSU ask for an exception on the number of credit hours for this graduate certificate. Other certificates across the country in this discipline typically consist of 15-18 credit hours. The increased credits will allow the certificate to cover the five core areas of public health: biostatistics, environmental health, epidemiology, health policy, and social and behavioral sciences.

8. Student Outcome and Demonstration of Individual Achievement.^3

A. What specific knowledge and competencies, including technology competencies, will all students demonstrate before graduation? The knowledge and competencies should be specific to the program and not routinely expected of all university graduates.

Students completing this certificate program will be able to:
1. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.
2. Interpret results of data analysis for public health research, policy, or practice.
3. Describe public health and its core functions.
4. Explain how various factors, including environmental factors, biological factors, psychological factors, and social determinants of health, contribute to population health and health disparities.
5. Apply epidemiological principles to collect and analyze public health data.

---

^2 Regental system certificate programs typically are a subset of the curriculum offered in degree programs, include existing courses, and involve 9-12 credits for completion. Deviations from these guidelines require justification and approval.

^3 Board Policy 2:23 requires certificate programs to “have specifically defined student learning outcomes.”
6. Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings.
7. Develop public health programs or interventions based on population-needs and select appropriate methods to evaluate such programs.

Students will gain knowledge in fundamental principles of public health, use of epidemiology methods in collection and analysis of data, and development and assessment public health programs. Achievement of the student learning outcomes will be assessed using examinations and quizzes, assignments, discussion posts, and a public health proposal.

B. Complete the table below to list specific learning outcomes – knowledge and competencies – for courses in the proposed program in each row.

<table>
<thead>
<tr>
<th>Individual Student Outcome</th>
<th>PUBH 701</th>
<th>PUBH 702</th>
<th>PUBH 710</th>
<th>Supporting Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students will be able to analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate.</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interpret results of data analysis for public health research, policy or practice</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students will be able to describe public health and its core functions.</td>
<td></td>
<td>*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students will be able to explain how various factors, including environmental factors, biological factors, psychological factors, and social determinants of health, contribute to population health and health disparities.</td>
<td></td>
<td>*</td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Students will be able to apply epidemiological principles to collect and analyze public health data.</td>
<td></td>
<td></td>
<td>*</td>
<td></td>
</tr>
<tr>
<td>Students will be able to compare the organization, structure and function of health care, public health and regulatory systems across national and international settings.</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
<tr>
<td>Students will be able to develop public health programs or interventions based on population-needs and select appropriate methods to evaluate such programs.</td>
<td></td>
<td></td>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

9. Delivery Location.4

A. Complete the following charts to indicate if the university seeks authorization to deliver the entire program on campus, at any off campus location (e.g., UC Sioux Falls, Capital University Center, Black Hills State University-Rapid City, etc.) or deliver the entire program through distance technology (e.g., as an on-line program)?

<table>
<thead>
<tr>
<th>On campus</th>
<th>Intended Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>2021-2022 Academic Year</td>
</tr>
</tbody>
</table>

4 The accreditation requirements of the Higher Learning Commission (HLC) require Board approval for a university to offer programs off-campus and through distance delivery.
B. Complete the following chart to indicate if the university seeks authorization to deliver more than 50% but less than 100% of the certificate through distance learning (e.g., as an on-line program)?

<table>
<thead>
<tr>
<th>Distance Delivery (online/other distance delivery methods)</th>
<th>Yes/No</th>
<th>If Yes, identify delivery methods</th>
<th>Intended Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>015 - Internet Asynchronous</td>
<td>2021-2022 Academic Year</td>
</tr>
<tr>
<td>Does another BOR institution already have authorization to offer the program online?</td>
<td>No</td>
<td>If yes, identify institutions:</td>
<td></td>
</tr>
</tbody>
</table>

5 Delivery methods are defined in AAC Guideline 5.5.
6 This question responds to HLC definitions for distance delivery.