

SOUTH DAKOTA BOARD OF REGENTS

Academic and Student Affairs

AGENDA ITEM: 6 – H (2)

DATE: October 3-5, 2017

SUBJECT

Course & Program Duplication

PERTINENT HISTORY

During the [August 2017](#) Board of Regents meeting, a number of Board members indicated that one area of concern for stakeholders in the state is the perceived level of duplication at the program and course level that exists in the Regental system. The Academic Affairs Council (AAC) has been discussing this issue over the past year in an attempt to aid the program approval process, and determine whether policy or additional guidance is necessary to either foster collaboration or ensure enrollment/graduate numbers at a designated level.

CONTROLLING STATUTE, RULE, OR POLICY

[BOR Policy 2:23 – Program and Curriculum Approval](#)

[BOR Policy 5:17 – Instructional Funding](#)

[Academic Affairs Guidelines – Section 1 – Courses and Curriculum Guidelines](#)

[Academic Affairs Guidelines – Section 2 – Program and Curriculum Guidelines](#)

[Academic Affairs Guidelines 4.1 – Program Productivity Review Guidelines](#)

BACKGROUND / DISCUSSION

During the president’s roundtable at the [May 2017](#) Board workshop, the issue of duplication and the need for institutions to remain innovative and competitive within their region was raised. This discussion was further extended during the August 2017 Board retreat when presidents reflected on the need for institutions to be able to offer online programming that aligned with the current slate of face-to-face programs on campuses. Specifically, Criminal Justice was used as an example where considerable interest exists within the system to offer the Bachelor’s degree program online at multiple campuses (while also considering the current slate of minor or associate degree program offerings that already currently exist). While the current institutional missions serve as a framework for managing the expansion of particular degree programs, these missions statements at times are vague and lack the clarity needed to help guide system oversight of the program management process (as referenced in the [August 2017](#) AAC agenda item on this topic).

(Continued)

INFORMATIONAL ITEM

This item is for informational purposes only. Any action will be at the Board’s discretion.

IMPACT AND RECOMMENDATION

The special efficiencies analysis seeks to provide the Board with an overview of the extent that duplication exists in the Regental system in on-campus academic programs, online academic programs, and online courses offered across the Regental system. Although duplication does exist in each of these three areas, much of that duplication is minimal or justified considering the graduate production in these programs and the specific workforce needs of the state. Considering this information, the Board may want to discuss whether policies/guidelines (Section Size Policies, Program Productivity Review, University Mission Statements) are effective for managing the existing duplication or establishing thresholds for the system.

ATTACHMENTS

Attachment I – Special Efficiencies Analysis: Course & Program Duplication in the Regental System



*** Special Efficiencies Analysis ***

Course & Program Duplication in the Regental System

Program and course duplication within the Regental system continues to emerge as an issue of concern by many stakeholders in South Dakota. One of the features of the program approval process is to ensure a limited amount of unnecessary duplication in both on- and off-campus delivery. Additionally, the Board of Regents have developed policies to effectively manage section size for state-support courses in the system. Overall, this analysis indicates that limited duplication for both online programs and courses exist currently, and warrants further review of on-campus program duplication to ensure alignment with institutional mission and state workforce needs.

Throughout the 2016-17 academic year¹ the Academic Affairs Council (AAC) began evaluating the duplication across institution in the Regental system at both the course and program level. This activity resulted in a review of online degree programs, on-campus degree programs, and online course duplication. As a feature of this process the central office sought to ensure an accurate recording of the current slate of online programs/minors/certificates currently approved for delivery. During their [March 2017](#) meeting, the Board of Regents formalized the complete set of programs that have been approved for online delivery in the Regental system, along with the list of those programs with 50% or more capacity for online delivery. To date the list of duplicated distance degree programs remains limited to a small set of minors and majors (see Table 1).

Table 1
Distance Program Duplication Within the Regental System

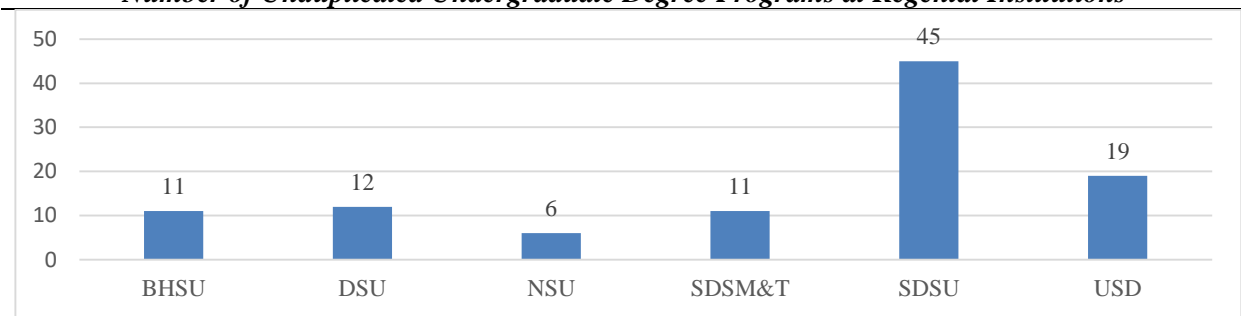
<i>Program</i>	<i>Degree Level</i>	<i>Institutions</i>
<i>Business Administration (BBA) - Management</i>	Bachelor's	DSU;BH
<i>Engineering (M.Eng)</i>	Master's	SDSMT; SDSU
<i>General Studies</i>	Bachelor's	BH;NSU;DSU;SDSU;USD
<i>General Studies</i>	Associate	DSU; NSU; SDSU; USD
<i>Management</i>	Bachelor's	NSU;USD
<i>Professional Accountancy</i>	Bachelor's	DSU;NSU
<i>Sociology</i>	Minor	DSU;SDSU

¹ Initial items were prepared for both the [November 2016](#) and May 2017 AAC meetings to review the current slate of both program and course offerings.

On Campus Program Duplication

A total of 263 distinct associate or bachelor’s degree programs exist within the Regental system, and a process was developed to align the approved CIP Codes with the Program names to determine where duplication exists. From this pool of programs, a total of 104 (39.5%) would be considered unique to the system based on their CIP Code and Program classification (see Appendix A for complete list of programs). Figure 1 below depicts the total number of unduplicated degree programs offered at each of the Regental institutions. SDSM&T has the lowest number of approved programs resulting in the highest percentage of unduplicated degree programs with 64.7%, followed by SDSU (59.2%), DSU (41.4%), USD (31.7%), BHSU (25.6%), and NSU (15.8%).

Figure 1
Number of Unduplicated Undergraduate Degree Programs at Regental Institutions



Each of the program offerings were further evaluated to determine the extent that duplication existed across two, three, four or five Regental institutions. Figure 2 provides an overview of the level of duplicated programs based on these three classifications. Table 2 was prepared to present a matrix for evaluating the duplication at each of these levels, and teacher education programs (highlighted in blue) and liberal arts majors connected with departments delivering General Education curriculum (highlighted in orange) reflect a significant portion of the duplicated program offerings.

Figure 2
Number of Duplicated Undergraduate Degree Programs at Regental Institutions

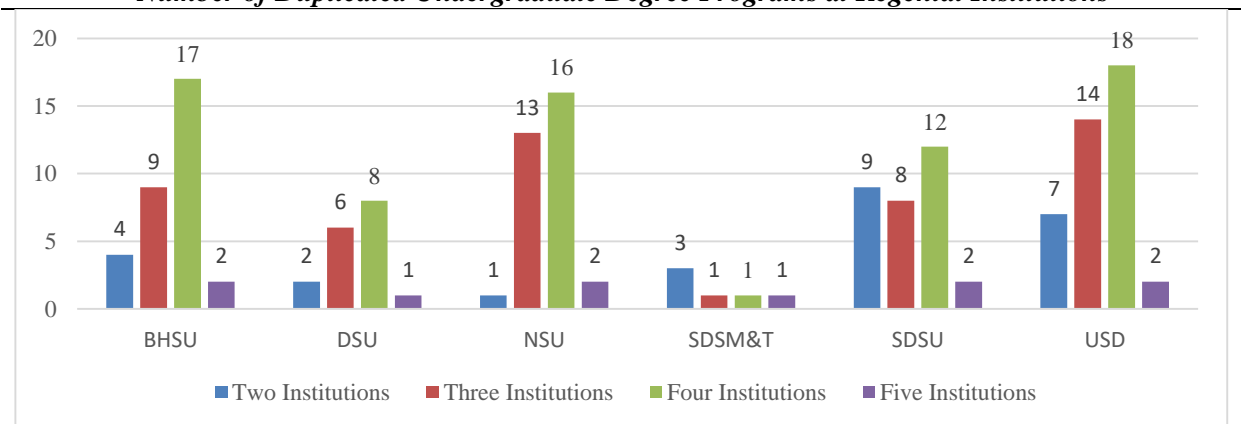


Table 2
Duplicated Programs at Two, Three, Four or Five Institutions Within the Regental System

CIP CODE	Major	BHSU	DSU	NSU	SDSMT	SDSU	USD
Two Institutions							
9.0101	Speech Comm./Comm. Studies					X	X
13.1303	Business Education	X	X				
13.1331	Speech & Comm./Comm.Studies Education	X					X
14.0801	Civil Engineering				X	X	
14.1001	Electrical Engineering				X	X	
14.1901	Mechanical Engineering				X	X	
16.0901	French/Franchophone Studies					X	X
30.2001	Global/International Studies					X	X
31.0504	Sport Marketing and Administration			X			X
40.0101	Physical Science	X	X				
50.0409/0402	Graphic Design/Graphic Design Comm.	X				X	
50.0501	Theatre					X	X
51.3801	Nursing					X	X
Three Institutions							
5.0202	American Indian/Native Am. Studies	X				X	X
13.1099/1202	Elementary Education/Special Ed.		X	X			X
13.1001	Special Education	X		X			X
13.1210/1209	Early Childhood Ed./Early Ed. & Care	X	X			X	
13.1302	Art Education	X		X			X
13.1323	Chemistry Education	X		X		X	
13.1328	History Education	X		X			X
13.1330	Spanish Education	X		X			X
16.0501	German			X		X	X
31.0501/0505	Exercise Science	X	X			X	
40.0801	Physics				X	X	X
45.0601	Economics			X		X	X
51.1005	Medical Laboratory Science			X		X	X
52.0201	Business Administration	X		X			X
52.0201	Management		X	X			X
52.0801	Finance		X	X			X
52.1401	Marketing		X	X			X
9.0102/0401/	Mass Comm/Journalism/Media & Journ.	X				X	X

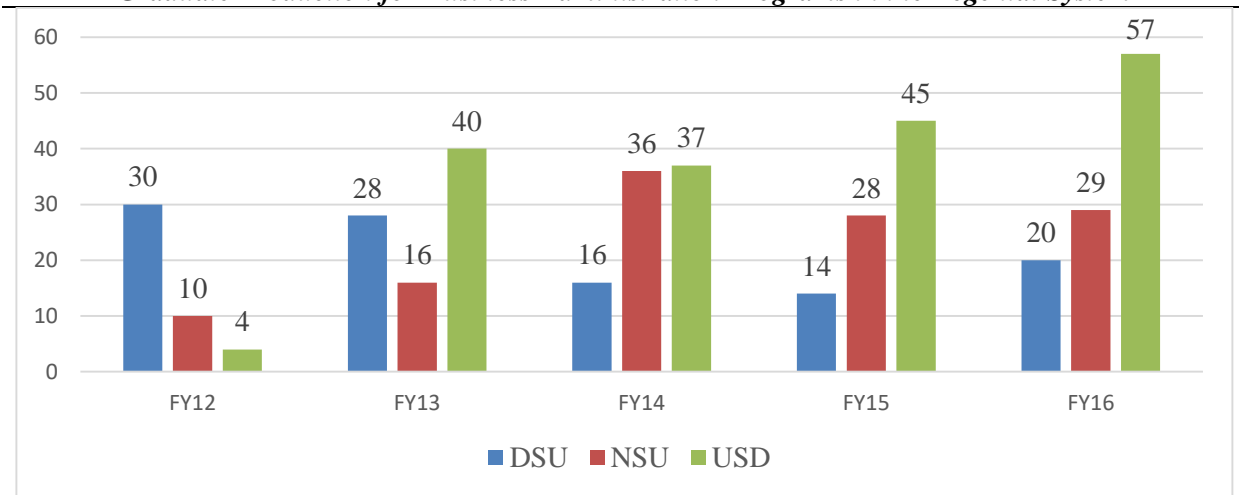
Table 2 (Continued)
Duplicated Programs at Two, Three, Four or Five Institutions Within the Regental System

CIP CODE	Major	BHSU	DSU	NSU	SDSMT	SDSU	USD
Four Institutions							
13.1202	Elementary Education	X	X	X			X
11.0101	Computer Science		X		X	X	X
13.1305	English Education	X	X	X			X
13.1311	Mathematics Education	X	X	X			X
13.1312	Music/Instrumental Music/Vocal Music Music Education	X		X		X	X
13.1314	Physical Education	X	X	X			X
13.1322	Biology Education	X	X	X			X
16.0905	Spanish	X		X		X	X
23.0101	English	X		X		X	X
26.0101	Biology	X		X		X	X
27.0101	Mathematics	X	X			X	X
42.0101	Psychology	X		X		X	X
45.1101	Sociology	X		X		X	X
45.1001	Political Science	X		X		X	X
50.0701	Art	X		X		X	X
50.0901	Music/Composite Music/Musical Arts	X		X		X	X
52.0301	Accounting/Professional Accountancy	X	X	X			X
54.0101	History	X		X		X	X
Five Institutions							
24.0101	General Studies	X	X	X		X	X
40.0501	Chemistry/ACS Certified Chemistry	X		X	X	X	X

Important to this analysis for those degree programs not highlighted in the above table is the overall graduate production of these majors at each campus. Program duplication results in potential inefficiencies when a collection of relatively small programs are replicated across multiple institutions in the system. When approving programs, the Board of Regents has set 15 graduates as a standard for ensuring whether the resource allocation is warranted at the institutional level. Using Management as an example, there are three similar programs currently offered in the Regental system at DSU, NSU and USD. The SDBOR Graduate Production Dashboard tracks the number of graduates at each institution for all approved degree programs over the past five years, and from FY12 through FY6 a total of 227 graduates completed this program at these three institutions. Figure 3 depicts the specific graduate production levels during this time period for each institution, except in FY12 when USD transitioned into using the Management title for their program, all institutions have more than doubled the graduates required for meeting program productivity requirements.²

² Every two years the Board of Regents review data on all degree programs to ensure that they maintain an average of five or more graduates during a five-year period. This review process is managed by the AAC [Program Productivity Review Guidelines](#).

Figure 3
Graduate Production for Business Administration Programs in the Regental System



Common Online Courses

To evaluate the level of online-course duplication, a complete list of Internet (INT) delivered courses with multiple sections offered at a home institution or across institutions in that term were evaluated. From the complete list of 1,388 sections offered during the Fall 2016 term, there are a limited number of courses that had seven or more sections offered (see Table 3). For example, during the Fall 2017 term there were a total of 31 sections of Fundamentals of Speech offered across five of our Regental institutions. Also included on this list are a number of General Education courses like ENGL 10: Composition I (19 sections) and Math 102: College Algebra (16 sections). It is important to emphasize that SPCM 101 Fundamentals of Speech had an average section size of 23.4 students during this time period which is just under the section limits imposed in the Regental system course catalog. Composition I was at 23.8 students and College Algebra was at 36.8 students. Overall, there were only twelve duplicated course with seven or more sections delivered online during the Fall 2017 term, with average enrollments ranging between 20.7 and 36.9 students (see Table 3).

Table 3
Average Enrollments for Duplicative Online Courses with More than Seven Sections in Fall 2016

Course	Number of Sections	Average Enrollment
<i>Fundamentals of Speech</i>	31	23.4
<i>Composition I</i>	19	23.8
<i>College Algebra</i>	16	36.8
<i>General Psychology</i>	13	35.5
<i>Introduction to Sociology</i>	11	33.5
<i>Composition II</i>	10	23.8
<i>Human Relations</i>	8	28.9
<i>United States History I</i>	8	36.9
<i>American Government</i>	7	41.7
<i>Biology Survey I Lab</i>	7	24.1
<i>Introduction to Literature</i>	7	20.7
<i>Technical Communication</i>	7	21.0

Course Duplication for Low Enrolled Sections

Again, drawing from the complete list of 1,388 sections offered during the Fall 2016 term, the data were further analyzed to determine the extent that duplication of courses resulted in a high number of low enrolled sections. From the complete list there were a total of 154 (11%) courses that had at least two sections offered in the Regental system. The enrollments for these 154 duplicated sections were further evaluated to determine whether the average enrollment was above the 18.1 average that currently exists for selected course sections routinely reported in the annual Section Size Report. Once those with enrollments exceeding 18.1 were removed, a total of 28 unique courses remained. Table 4 depicts the duplicated courses in this pool resulting in 62 sections delivered across the Regental system (4% of all online course sections offered). The vast majority of these courses resulted in two sections (18 out of the 28, or 64%) housed primarily at the same institution.

Table 4
Duplicated Course Sections with Enrollments Below 18.1 Students Delivered Online Within the Regental System in Fall 2016

<i>Course Title</i>	<i>BHSU</i>	<i>DSU</i>	<i>SDSMT</i>	<i>NSU</i>	<i>SDSU</i>	<i>USD</i>	<i>System</i>
Basic Medical Terminology		2					2
Behavior Mgmt of Except Child	1	1					2
Calculus I				1	1	1	3
Calculus II	1				1		2
Community Health					2		2
Comp App Spec Educ		2					2
Complement/Integrat Hlth Care					2		2
Contemporary Health Problems					4		4
Criminology						2	2
Early Amer Ind Hist & Culture	2						2
Educational Assessment		1		1			2
Epidemiology					4		4
Foundations & Theory of Read	2						2
History of World Art I		1				1	2
Ident & Assess in Special Educ	1	1					2
Introduction to Theatre				1	1	1	3
Literacy: Data Based Teaching		2					2
Methods Ed.Technology		2					2
Middle Level Methods	2						2
Offensive Network Security		2					2
Operational Strategies			2				2
Professional Behavior At Work					2		2
Public Health Science					2		2
Quantitative Literacy	1					1	2
Serve Studt W/Severe Disability	1	1					2
Swine Nutrition					2		2
The Evolution/Creation Debate						2	2
Women's Health Issues					2		2
<i>Grand Total</i>	<i>11</i>	<i>15</i>	<i>2</i>	<i>3</i>	<i>23</i>	<i>8</i>	<i>62</i>

In an attempt to provide additional detail to information depicted in Table 4, a supplemental table (see Table 5 below) depicts the average section size data for these 28 courses. Overall, the report demonstrates that there is a limited amount of online course duplication where merging course section across multiple institutions would be warranted to manage at a central level. Fourteen of these courses (50%) had average enrollments at 16 or more students, and those below this number depict low numbers because they represent a set of cross listed sections where only one course is being offered, but multiple sections are used for tracking purposes. Using the DSU courses as an example, the four courses listed below were created specifically during the transition to the year-long residency. These courses are then cross-listed for the purposes of workload and align with other courses at DSU with higher enrollment counts not captured in this analysis. Specifically the Methods of Technology course has both an EDFN and SEED prefix that are cross listed resulting in 15 enrollments.

SPED 465 – Computer Application in Special Education
 ELED 454 – Literacy: Data Based Teaching
 EDFN 401 – Methods in Educational Technology
 EDER 415/515 – Educational Assessment

Table 5
Average Enrollments in Duplicated Course Sections with Enrollments Below 18.1 Student Delivered Online Within the Regental System in Fall 2016

	<i>BHSU</i>	<i>DSU</i>	<i>SDSMT</i>	<i>NSU</i>	<i>SDSU</i>	<i>USD</i>	<i>Average</i>
Basic Medical Terminology		15.0					15.0
Behavior Mgmt of Except Child	19.0	9.0					14.0
Calculus I				22.0	13.0	8.0	14.3
Calculus II	25.0				10.0		17.5
Community Health					17.5		17.5
Comp App Spec Educ		5.5					5.5
Complement/Integrat Hlth Care					17.0		17.0
Contemporary Health Problems					16.0		16.0
Criminology						17.0	17.0
Early Amer Ind Hist & Culture	7.0						7.0
Educational Assessment		6.0		10.0			8.0
Epidemiology					19.5		19.5
Foundations & Theory of Read	14.0						14.0
History of World Art I		17.0				17.0	17.0
Ident & Assess in Special Educ	9.0	12.0					10.5
Introduction to Theatre				18.0	22.0	13.0	17.7
Literacy: Data Based Teaching		6.5					6.5
Methods Educational Technology		7.5					7.5
Middle Level Methods	18.0						18.0
Offensive Network Security		18.0					18.0
Operational Strategies			18.0				18.0
Professional Behavior At Work					17.5		17.5
Public Health Science					17.5		17.5
Quantitative Literacy	13.0					16.0	14.5
Serve Studt W/Severe Disability	18.0	10.0					14.0
Swine Nutrition					14.5		14.5
The Evolution/Creation Debate						5.0	5.0
Women's Health Issues					16.5		16.5

Appendix A
Unduplicated Programs by Institution

BHSU	
<ul style="list-style-type: none"> • Corporate Communication – 9.0999 • Communication Studies & Theatre – 23.1304 • Outdoor Education – 31.0601 • Photography – 50.0605 • Composite Science Education – 13.1316 	<ul style="list-style-type: none"> • Composite Social Science Education – 13.1317 • Environmental Physical Science – 40.9999 • Human Services – 44.0201 • Social Science – 45.0101
DSU	
<ul style="list-style-type: none"> • Business Technology – 11.0401 • Computer Information Systems – 11.0401 • Digital Arts and Design – 11.0803 • Network & Security Administration – 11.002 • Cyber Operations – 11.1003 • Computer Education – 13.1321 • English for New Media – 23.9999 	<ul style="list-style-type: none"> • Biology for Information Systems – 26.9999 • Mathematics for Information Systems – 27.0503 • Computer Game Design – 50.0411 • Health Information Administration – 51.0706 • Health Information Technology (HIT) – 51.0707 • DSU Respiratory Care (BS) – 51.0908
NSU	
<ul style="list-style-type: none"> • Human Performance & Fitness – 31.0501 • Banking & Financial Services – 52.0803 	<ul style="list-style-type: none"> • International Business – 52.1101 • Management Information Systems – 52.1201
SDSMT	
<ul style="list-style-type: none"> • Chemical Engineering – 14.0701 • Computer Engineering – 14.0901 • Metallurgical Engineering – 14.2001 • Mining Engineering – 14.2101 • Industrial Engineering/Industrial Engineering & Management – 14.3501 	<ul style="list-style-type: none"> • Geological Engineering – 13.3901 • Applied Biological Science – 26.1201 • Applied & Computational Math – 27.0304 • Interdisciplinary Sciences – 30.9999 • Geology – 40.0601 • Paleontology – 40.0604
SDSU	
<ul style="list-style-type: none"> • Agricultural Science – 1.000 • Agricultural Business – 1.0102 • Agricultural & Resource Economics – 1.0103 • Agricultural Systems Technology – 1.0201 • Precision Agriculture – 1.0601 • Ag Ed, Communication, Leadership – 1.0802/1.0899 • Animal Science – 1.0901 • Dairy Manufacturing – 1.0905 • Dairy Production – 1.0905 • Food Science – 1.1001 • Agronomy – 1.1102 • Rangeland Ecology & Management – 1.1106 • Ecology & Environmental Science – 3.0104 • Wildlife & Fisheries Sciences – 3.0601 • Architecture – 4.0201 • Community & Regional Planning – 4.0301 • Landscape Architecture – 4.0601 • Public Relations – 9.0902 • Advertising – 09.0903 • Ag Ed/Comm/Leadership Education – 13.1301 • Health Education – 13.1307 	<ul style="list-style-type: none"> • Family & Consumer Science Education – 13.1308 • Agricultural & Biosystems Engineering – 14.0301 • Electronics Engineering Technology – 15.0303 • Construction Management – 15.1001 • Consumer Affairs – 19.0402 • Human Development & Family Studies – 19.0701 • Apparel Merchandising – 19.0905 • Natural Resource Law Enforcement – 22.0207 • Biochemistry – 26.0202 • Microbiology – 26.0502 • Biotechnology – 26.1201 • Physical Education/ Teacher Education – 31.0501 • Sport, Recreation, & Park Management – 31.0301 • Geography – 45.0701 • Geographic Information Sciences – 45.0702 • Interior Design – 50.0408 • Aviation – 49.0101/49.0108/49.0104 • Pharmaceutical Sciences – 51.2001 • Nutrition & Dietetics – 51.3101 • Hospitality Management – 52.0901 • Operations Management – 52.0205 • Entrepreneurial Studies – 52.0701
USD	
<ul style="list-style-type: none"> • Sport Marketing & Media – 9.0102 • Medical Biology – 26.0102 • Sustainability – 30.3301 • Philosophy – 38.0101 • Anthropology – 45.0201 • Kinesiology & Sport Science – 31.0101 • Criminal Justice Studies – 43.0104 • Earth Sciences – 40.0601 • Music Performance – 50.0903 	<ul style="list-style-type: none"> • Health Sciences – 51.0000 • Comm Sciences & Disorders – 51.0201 • Dental Hygiene – 51.0602 • Health Services Administration – 51.0702 • Social Work – 51.1503 • Addiction Studies – 51.1501 • Human Resources Management – 52.0201 • Innovation & Entrepreneurship – 52.0701 • Operational Analytics – 52.1399