

SOUTH DAKOTA BOARD OF REGENTS

Academic and Student Affairs

AGENDA ITEM: 7 – B (1)

DATE: June 28-30, 2016

SUBJECT: Program Modifications – DSU

Dakota State University has submitted the following program modification proposals. These requests have been reviewed by the system Vice President for Academic Affairs and the Executive Director recommends approval.

Existing Program: Substantive Program Modification

- Cyber Operations (B.S.) – *request to change total credits required within the discipline and total credits of elective course work for the program*
- Digital Arts & Design (B.S.) – *request to change total credits required of supportive course work, total credits of elective course work, and existing specialization for the program*
- Exercise Science (B.S.) – *request to change total credits required within the discipline and total credits of elective course work for the program*
- Information Systems (B.S.) – *request to change total credits required within the discipline, total credits required of supportive course work, total credits of elective course work, program name, and existing specialization for the program*

DRAFT MOTION 20160628_7-B(1): I move to approve DSU’s program modifications for its B.S. in Cyber Operations; B.S. in Digital Arts & Design; B.S. in Exercise Science; and B.S. in Information Systems programs.

South Dakota Board of Regents

EXISTING PROGRAM: SUBSTANTIVE PROGRAM MODIFICATION

This form is used to request substantive changes in already existing programs (majors, minors, specializations).

1. INSTITUTION: **Dakota State University**

2. CURRENT PROGRAM NAME: **B.S. in Cyber Operations**

3. THIS PROPOSAL DEALS WITH A CHANGE IN:

Distribution of Credits

<u> X </u> total credits required within the discipline	_____ Program name
_____ total credits of supportive course work	_____ Existing specialization
<u> X </u> total credits of elective course work	_____ Addition of specialization
_____ total credits required for program	_____ Other: CIP Code change

4. LEVEL:

_____ Certificate
 _____ Associate Degree
 X Bachelor's Degree
 _____ Master's Degree
 _____ Doctoral Degree

5. CATEGORY:

_____ Minor
 X Major
 _____ Specialization

6. EFFECTIVE DATE OF CHANGE: Fall 2016

7. IF A NAME CHANGE IS PROPOSED, THIS WILL OCCUR:

_____ on the effective date for all students

 X on the effective date for students new to the program
 (enrolled students will graduate from existing program)

8. PRIMARY ASPECTS OF THE MODIFICATION

Existing Curriculum				Proposed Curriculum (Highlight Changes)			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
System General Education			30	General Education			30*
IGR			11*	IGR			11**
*Majors must take CSC150 as part of the institutional graduate requirements.				* Majors must take MATH 104 as part of the General Education graduation requirements. ** Majors must take CSC150 as part of the institutional graduate requirements.			
Required courses			69	Required courses			68
CSC	245	Info Sec Fund	3	CSC	245	Info Sec Fund	3
CIS	275	Web Programming I	3	CIS	275	Web Programming I	3
CSC	328	Operating Env	3	CSC	328	Operating Env	3
CIS	332	Systems Analysis	3	CIS	332	Systems Analysis	3
CSC	363	HW, Virt, Data Comm	3	CSC	363	HW, Virt, Data Comm	3
CSC	375	Web Programming II	3	CIS	375	Web Programming II	3
CIS	383	Networking I	3	CIS	383	Networking I	3
CIS	385	Networking II	3	CIS	385	Networking II	3
CIS	484	Database	3	CIS	484	Database	3
CIS	487	Database Programming	3				
CSC	250	Computer Science II	3	CSC	250	Computer Science II	3
CSC	300	Data Structures	3	CSC	300	Data Structures	3
CSC	314	Assembly	3	CSC	314	Assembly	3
CSC	420	Cellular and Mobile Communications	3	CSC	420	Cellular and Mobile Communications	3
CSC	432	Malware Analysis	3	CSC	432	Malware Analysis	3
CSC	434	Web Software Sec	3	CSC	434	Web Software Sec	3
CSC	436	Offensive Network Sec	3	CSC	436	Offensive Network Sec	3
CSC	438	Defensive Network Sec	3	CSC	438	Defensive Network Sec	3
CSC	444	Reverse Engineering	3	CSC	444	Reverse Engineering	3
CSC	456	Operating Systems	3	CSC	456	Operating Systems	3
CSC	470	Software Engineering	3	CSC	470	Software Engineering	3
				CIS	466	Survey of Virtualization	3
MATH	201	Intro to Discrete Math	3				
MATH	316	Discrete Mathematics	3				
				MATH	204	Math for Cyber Operations	5
Electives			10	Electives			11

Total number of hours required for degree

120

Total number of hours required for degree

120

9. EXPLANATION OF THE CHANGE:

DSU's Cyber Operations B.S. program, as a Center of Academic Excellence in Cyber Operations designated by the National Security Agency (NSA), must meet 100% of the required curriculum standards set forth by the Agency. These course switches, replacing CIS 487 with CIS 466, replacing MATH 201 and MATH 316 keeps with MATH104 and MATH 204, and the addition of CSC461 and CSC466 allows the program to remain 100% compliant with the recently revised standards released by the NSA. Furthermore, the addition of CSC461 and CSC466 allow students to matriculate into the Masters of Applied Computer Science program without any additional coursework being needed.

South Dakota Board of Regents

EXISTING PROGRAM: SUBSTANTIVE PROGRAM MODIFICATION

This form is used to request substantive changes in already existing programs (majors, minors, specializations).

1. INSTITUTION: **Dakota State University**

2. CURRENT PROGRAM NAME: **B.S. in Digital Arts & Design**

3. THIS PROPOSAL DEALS WITH A CHANGE IN:

Distribution of Credits

<u> </u> total credits required within the discipline	<u> </u> Program name
<u> X </u> total credits of supportive course work	<u> X </u> Existing specialization
<u> X </u> total credits of elective course work	<u> </u> Addition of specialization
<u> </u> total credits required for program	<u> </u> Other (explain)

4. LEVEL:

 Certificate
 Associate Degree
 X Bachelor's Degree
 Master's Degree
 Doctoral Degree

5. CATEGORY:

 Minor
 Major
 X Specialization

6. EFFECTIVE DATE OF CHANGE: Fall 2016

7. IF A NAME CHANGE IS PROPOSED, THIS WILL OCCUR:

 on the effective date for all students
 X on the effective date for students new to the program
 (enrolled students will graduate from existing program)

8. PRIMARY ASPECTS OF THE MODIFICATION:

Existing Curriculum

Proposed Curriculum (Highlight Changes)

Existing Curriculum				Proposed Curriculum (Highlight Changes)			
Pre	Num	Title	Cr Hrs	Pre	Num	Title	Cr Hrs
System General Education			30	System General Education			30
IGR			11	IGR			11
Core Requirements			25	Core Requirements			25
Choose one specialization			54	Choose one specialization			54
Production Animation Specialization				Production Animation Specialization			
ART	111	Drawing	3	ART	111	Drawing	3
ART	123	Three Dimensional Design	3	ART	123	Three Dimensional Design	3
ART	213	Figure Drawing	3	ART	213	Figure Drawing	3
ART	231	Painting	3	ART	231	Painting	3
ARTD	250	2D Digital Animation	3	ARTD	250	2D Digital Animation	3
ARTD	260	Stop Motion Puppet Animation	3				
ARTD	285	2-D Design on Computers II	3	ARTD	285	2-D Design on Computers II	3
ARTD	286	Motion Graphics & Compositing	3	ARTD	286	Motion Graphics & Compositing	3
ARTD	356	Digital Painting	3	ARTD	356	Digital Painting	3
ARTD	382	3-D Design on Computers I	3	ARTD	382	3-D Design on Computers I	3
ARTD	385	3-D Design on Computers II	3	ARTD	385	3-D Design on Computers II	3
ARTD	460	Digital Editing	3	ARTD	460	Digital Editing	3
DAD	375	Storyboarding	3	DAD	375	Storyboarding	3
ARTD	388	Environmental Design	3				
ARTD	439	3-D Character Design & Modeling	3				
ARTD	440	Advanced 3 Dimensional Design	3				
ARTD	441	3-D Character Animation	3				
				Take 12 credits from the following list of four repeatable courses, minimum of two different courses. (students may opt to take all four, or choose a primarily 2-D or 3-D track)			12
				ARTD	439	3-D Design - Preproduction	3
				ARTD	441	3-D Design - Production	3
				ARTD	386	2-D Digital Animation II	3
				ARTD	442	2-D Digital Animation III	3
Elective			3	Elective			6
Web Design and Production Specialization			54	REMOVE			

Total number of hours required for major, minor, or specialization	54
Total number of hours required for degree	120

Total number of hours required for major, minor, or specialization	54
Total number of hours required for degree	120

9. EXPLANATION OF THE CHANGE:

Changes in the Production Animation specialization is an effort to accommodate student requests, and to more fully explore various means of animation production, this is a move to create twin tracks of 2-D and 3-D animation courses. It is accomplished by creating two new 2-D animation/design classes, while simultaneously compacting six semesters of 3-D animation/design classes into four expanded topic classes. In effect, creating four classes of each 2-D and 3-D animation/design studio classes. The expanded content of the new 2-D classes will bolster the compacted 3-D class content as principles will carry over from one media to another, only strengthening the program, and student success inside and outside of the classroom. The option for students to primarily focus on 2-D or 3-D animation does not exempt them from taking introductory classes in the other track. ARTD 250/286/382/385, of which two are 2-D and two are 3-D, are still required. The option for focusing will need to be discussed with the student's academic advisor. Removing the existing ARTD260 (Stop-Motion Puppet Animation) is necessary as it allows the prerequisite class ARTD250 to be offered annually. Consequently, this also offers our students the opportunity for another elective class, of which they have very few.

The Web Design and Production specialization has faced low and declining enrollment in its unique courses for several years, making it difficult to maintain a course schedule. The skills of web design and content production are also emphasized within the Computer Graphics specialization, particularly in ARTD 431 and ARTD 432.

South Dakota Board of Regents

EXISTING PROGRAM: SUBSTANTIVE PROGRAM MODIFICATION

This form is used to request substantive changes in already existing programs (majors, minors, specializations).

1. INSTITUTION: **Dakota State University**

2. CURRENT PROGRAM NAME: **B.S. in Exercise Science**

3. THIS PROPOSAL DEALS WITH A CHANGE IN:

Distribution of Credits

<u> X </u> total credits required within the discipline	_____ Program name
_____ total credits of supportive course work	_____ Existing specialization
<u> X </u> total credits of elective course work	_____ Addition of specialization
_____ total credits required for program	_____ Other: CIP Code change

4. LEVEL:

_____ Certificate
 _____ Associate Degree
 X Bachelor's Degree
 _____ Master's Degree
 _____ Doctoral Degree

5. CATEGORY:

_____ Minor
 X Major
 _____ Specialization

6. EFFECTIVE DATE OF CHANGE: Fall 2016

7. IF A NAME CHANGE IS PROPOSED, THIS WILL OCCUR:

_____ on the effective date for all students

 X on the effective date for students new to the program
 (enrolled students will graduate from existing program)

8. PRIMARY ASPECTS OF THE MODIFICATION

Existing Curriculum				Proposed Curriculum (Highlight Changes)			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
System General Education*			30	System General Education*			30
IGR			11	IGR			11
*Majors must take BIOL 151, CHEM 112, PSYC 101 and MATH 102 or a course requiring MATH 102 as a prerequisite as part of the System-wide General Education.				*Majors must take BIOL 151, CHEM 112, PSYC 101 and MATH 102 or a course requiring MATH 102 as a prerequisite as part of the System-wide General Education.			
Required courses			59	Required courses			59-60
BIOL	221	Human Anatomy	4	BIOL	221	Human Anatomy	4
BIOL	325	Physiology	4	BIOL	325	Physiology	4
EXS	145	Intro to Exercise Science	1	EXS	145	Intro to Exercise Science	1
EXS	180	Foundations of HPER	2	EXS	180	Foundations of HPER	2
EXS	252	Foundation of Motor Learning & Development	3				
				EXS	452	Motor Learning & Development	3
EXS	300	Introduction to Research	3	EXS	300	Introduction to Research	3
EXS	335	Administration of Exercise Science	3	EXS	335	Administration of Exercise Science	3
EXS	350	Exercise Physiology	3	EXS	350	Exercise Physiology	3
EXS	350L	Exercise Physiology lab	1	EXS	350L	Exercise Physiology lab	1
EXS	353	Kinesiology	3	EXS	353	Kinesiology	3
EXS	376	Technology Integration	3	EXS	376	Technology Integration	3
EXS	395	Practicum	2	EXS	395	Practicum	2
EXS	400	Exercise Testing & Prescription	3	EXS	400	Exercise Testing & Prescription	3
EXS	401	Fitness for Special Populations	3	EXS	401	Clinical Exercise Physiology	3
EXS	405	Physiological Methods of Training	3	EXS	482	Theory of Strength Training & Conditioning	3
EXS	454	Biomechanics	3	EXS	454	Biomechanics	3
EXS	490	Seminar	2	EXS	490	Seminar	1-2
EXS	492	Topics	3				
EXS	494	Internship	2	EXS	494	Internship	2
HLTH	251	First Aid & CPR	4				
HLTH	422	Nutrition	3	HLTH	422	Nutrition	3
PE	207	Professional Preparation: Strength Training	1	PE	207	Professional Preparation: Strength Training	1
PE	354	Prevention & Care Athletic Injuries	3	PE	354	Prevention & Care Athletic Injuries	3
				HIM	130	Introduction to Medical Terminology	2

Existing Curriculum				Proposed Curriculum (Highlight Changes)			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
				MATH	281	Introduction to Statistics	3
Electives			20	Electives			20-21
Total number of hours required for degree			59	Total number of hours required for degree			59-60

8. EXPLANATION OF THE CHANGE:

- The elimination of EXS 492: Topics as a required class will bring consistency within the major; every student will have the same core classes, and content. The course will still be offered as an elective.
- The elimination of HLTH 251: First Aid & CPR as a required class is recommended because most students majoring in Exercise Science receive 1st Aid/CPR certification off-campus, usually for a job (i.e. Community Center fitness mentor).
- The addition of HIM 130: Introduction to Medical Terminology as a required class will help students prepare for EXS 401: Clinical Exercise Physiology and to work with clients who have special needs (i.e. heart disease, diabetes, etc.).
- The addition of MATH 281: Introduction to Statistics as a required class will help prepare students for EXS 300: Introduction to Research as well as any upper Exercise Science course (most include reading/evaluating research articles).

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EXISTING PROGRAM: SUBSTANTIVE PROGRAM MODIFICATION

This form is used to request substantive changes in already existing programs (majors, minors, specializations).

1. INSTITUTION: **Dakota State University**

2. CURRENT PROGRAM NAME: **B.S. in Information Systems**

3. THIS PROPOSAL DEALS WITH A CHANGE IN:

Distribution of Credits

 X total credits required within the discipline

 X Program name

 X total credits of supportive course work

 X Existing specialization

 X total credits of elective course work

 Addition of specialization

 total credits required for program

 Other (explain)

4. LEVEL:

 Certificate

 Associate Degree

 X Bachelor's Degree

 Master's Degree

 Doctoral Degree

5. CATEGORY:

 Minor

 X Major

 X Specialization

6. EFFECTIVE DATE OF CHANGE: Aug. 15, 2016

7. IF A NAME CHANGE IS PROPOSED, THIS WILL OCCUR:

 on the effective date for all students

 X on the effective date for students new to the program
(enrolled students will graduate from existing program)

8. PRIMARY ASPECTS OF THE MODIFICATION:

Existing Curriculum				Proposed Curriculum (Highlight Changes)			
Current Program Name: Information Systems				Proposed Program Name: Computer Information Systems			
Pre	Num	Title	Cr Hrs	Pre	Num	Title	Cr Hrs
Required Courses			30	Required Courses			45
				ACCT	210	Principles of Accounting I	3
BADM	220	Business Statistics	3	BADM	220	Business Statistics	3
				BADM	344	Managerial Communications	3
				BADM	350	Legal Environment of Business	3
BADM	360	Organization and Management	3	BADM	360	Organization and Management	3
BADM	370	Marketing	3	BADM	370	Marketing	3
CIS	251	Business Applications Programming	3	CIS	251	Business Applications Programming	3
				CIS	332	Structured Systems Analysis and Design	3
				CIS	338	Project Management	3
CIS	350	Computer Hardware, Data Communications and Networking		CSC	363	Hardware, Virtualization and Data Communications	3
or							
CSC	363	Hardware, Virtualization, and Data Communications	3				
CIS	427	Information Systems Planning and Management	3	CIS	427	Information Systems Planning and Management	3
CIS	484	Database Management Systems	3	CIS	484	Database Management Systems	3
CIS	494	Internship	3	CIS	494	Internship (1-8)	
or				or			
CIS	498	Undergraduate Research/Scholarship		CIS	498	Undergraduate Research/Scholarship (1-6)	3
				CSC	245	Information Security Fundamentals	3
				CIS	325	Management Information Systems	3
Software Development Specialization			27	Software and Web Development Specialization			18
BADM	344	Managerial Communications	3				
CIS	275	Web Application Programming	3	CIS	275	Web Application Programming	3
CIS	277	OS Interfaces and Utilities	3				
CIS	375	Web Application Programming II	3	CIS	375	Web Application Programming II	3

CIS	424	Software Development with Agile Methodologies	3	CIS	424	Software Development with Agile Methodologies	3
Math	201	Introduction to Discrete Mathematics	3	Math	201	Introduction to Discrete Mathematics	3
Choose three courses from the following:			9				
CSC	328	Operating Environments	3	CIS	361	Advanced Programming for Business Applications	3
CIS	330	COBOL I	3	CIS	487	Database Programming	3
CIS	361	Advanced Programming for Business Applications	3				
CIS	476	Web Development Environments	3				
CIS	487	Database Programming	3				
CIS	488	Advanced Database Issues	3				
Project Management Specialization			27	Project Management Specialization			18
BADM	344	Managerial Communications	3				
BADM	435	Management of Technology and Innovation	3				
BADM	460	Human Resource Management	3	BADM	460	Human Resource Management	3
CSC	245	Information Security Fundamentals	3				
CIS	325	Management Information Systems	3				
CIS	384	Decision Support Systems	3	CIS	384	Decision Support Systems	3
				CIS	424	Software Development with Agile Methodologies	3
CIS	438	Advanced Project Management	3	CIS	438	Advanced Project Management	3
ECON	202	Principles of Macroeconomics	3	ECON	202	Principles of Macroeconomics	3
SOC	285	Society and Technology	3	SOC	285	Society and Technology	3
				Or			
				BADM	435	Management of Technology and Innovation	
				Data Science Specialization			18
				CIS	474	Business Intelligence and Big Data	3
				CIS	372	Programming for Analytics	3
				CIS	368	Predictive Analytics	3
				BADM	321	Business Statistics II	3

				CIS	487	Database Programming	3
				BADM	425	Production and Operations Management	3
Business Analysis			27	REMOVE SPECIALIZATION			
ACCT	210	Principles of Accounting I	3				
ACCT	211	Principles of Accounting II	3				
BADM	310	Business Finance	3				
BADM	321	Business Statistics II	3				
BADM	344	Managerial Communications	3				
BADM	350	Legal Environment of Business	3				
BADM	435	Management of Technology and Innovation	3				
CIS	424	Software Development with Agile Methodologies	3				
ECON	202	Principles of Macroeconomics	3				
Electives			22	Electives			16

Total number of hours required for major, minor, or specialization

57

Total number of hours required for degree

120

Total number of hours required for major, minor, or specialization

63

Total number of hours required for degree

120

9. EXPLANATION OF THE CHANGE:

The changes include updates in the courses required to reflect the evolution of the field. The number of required courses has increased and the number of courses in each specialization has decreased. These changes in the program align it more closely with national standards and accreditation agencies.