SFU

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MEMORANDUM

ATTENTION	Senate	**DATE**	August 5, 2011
FROM	Bill Krane, Chair Senate Committee on Undergraduate Studies	**PAGES**	1/1
RE:	Faculty of Science (SCUS 11-40)		

For information:

Acting under delegated authority at its meeting of August 4, 2011, SCUS approved the following curriculum revisions effective Summer 2012:

1. Department of Chemistry (SCUS 11-40b)

(a) Prerequisite changes for CHEM 282, 286, 380, 442 and 444.

2. Department of Biomedical Physiology and Kinesiology (SCUS 11-40d)

(a) Title and description change for KIN 402
(b) Changes to the Kinesiology Major and Honors Program requirement options

Senators wishing to consult a more detailed report of curriculum revisions may do so on the Web at http://www.sfu.ca/senate/Senate_agenda.html following the posting of the agenda. If you are unable to access the information, please call 778-782-3168 or email shelley_gair@sfu.ca.

SFU

TO: Bill Krane, Chair, SCUS

FROM: Rolf Mathewes, Associate Dean
Faculty of Science

RE: Faculty of Science
Undergraduate Curriculum
Items

DATE: July 22, 2011

The Faculty of Science has approved the following, which must now be considered by SCUS.

Please place these items on the agenda of the next SCUS meeting.

1. **Chemistry & Earth Sciences**
   NOI for a Joint Major in Earth Sciences and Chemistry

2. **Chemistry**
   CHEM 282, CHEM 286, CHEM 380, CHEM 442, CHEM 444 - Prerequisite changes

3. **Mathematics**
   a) Changes to the Industrial Mathematics program
   - Title Change - From Industrial Mathematics to Operations Research, Major & Honours
   - Reorganization of Requirements
   - Deletion of Area Requirements
   - Deletion of Options B and C from the Industrial Mathematics program, Major & Honours

   b) Math 402W - Title, description and prerequisite change
   c) Math 408 – Prerequisite change

4. **Biomedical Physiology and Kinesiology**
   a) KIN 402 – Change to title and description
   b) Changes to the Kinesiology Program
   c) ~~Change to the Biomedical Physiology (BIF) Major~~

R. Mathewes

Enclosure
c. J. Hinchliffe, C. Cupples

SFU

SENATE COMMITTEE ON
UNDERGRADUATE STUDIES

SCUS 11-40b

EXISTING COURSE, CHANGES RECOMMENDED

Please check appropriate revision(s)

☐ Course number ☐ Credit ☐ Title Description X Pre-requisite ☐ Deletion

Indicate number of hours for: Lecture_____ Seminar _____ Tutorial _____ Lab _____

FROM : **TO:**

Course Number CHEM 282 Course Number CHEM 283 Credit

Hour 2 Credit Hour 2

TITLE

(1) Long title for calendar and schedule, no more than 100 characters including spaces and punctuation.

(2) Short title for enrollment and transcript, no more than 30 characters including spaces and punctuation.

DESCRIPTION

PREREQUISITE

CHEM 281	CHEM 281. Students with credit for CHEM 283 may not take CHEM 282 for further credit. NOT EQUIVALENTS

RATIONALE

This restriction is a housekeeping move that reflects the recently approved creation of CHEM 283 as an add-on to CHEM 282 for Chemistry majors.

Does this course replicate the content of a previously approved course to such an extent that students should not receive credit for both courses? If so, this should be **noted in the prerequisite**.

Effective term and year Spring 2012

SFU

SENATE COMMITTEE ON
UNDERGRADUATE STUDIES

COURSE CHANGE/DELETION

OCTOBER 2007

EXISTING COURSE, CHANGES RECOMMENDED

Please check appropriate revision(s)

☐ Course number ☐ Credit ☐ Title Description X Co-requisite ☐ Deletion

Indicate number of hours for: Lecture_____ Seminar _____ Tutorial _____ Lab _____

FROM :	TO:
Course Number CHEM 286	Course Number CHEM 286 Credit
Hour 2	Credit Hour 2

TITLE

(1) Long title for calendar and schedule, no more than 100 characters including spaces and punctuation.

(2) Short title for enrollment and transcript, no more than 30 characters including spaces and punctuation.

DESCRIPTION

Co-REQUISITE

CHEM 282	CHEM 282 or 283

RATIONALE

The addition of CHEM 283 as an allowed co-requisite in place of CHEM 282 is a housekeeping move that reflects the recently approved creation of CHEM 283 as an add-on to CHEM 282 for Chemistry majors.

Does this course replicate the content of a previously approved course to such an extent that students should not receive credit for both courses? If so, this should be **noted in the prerequisite**.

Effective term and year Spring 2012

SFU

SENATE COMMITTEE ON
UNDERGRADUATE STUDIES

COURSE CHANGE/DELETION

OCTOBER 2007

EXISTING COURSE, CHANGES RECOMMENDED

Please check appropriate revision(s)

☐ Course number ☐ Credit ☐ Title Description X Pre-requisite ☐ Deletion

Indicate number of hours for: Lecture_____ Seminar _____ Tutorial _____ Lab _____

FROM : **TO:**

Course Number CHEM 380 Course Number CHEM 380 Credit

Hour 4 Credit Hour 4

TITLE

(1) Long title for calendar and schedule, no more than 100 characters including spaces and punctuation.

(2) Short title for enrollment and transcript, no more than 30 characters including spaces and punctuation.

DESCRIPTION

PREREQUISITE

CHEM 260 and 282 and 286, or permission of the department.	CHEM 260 and 283 and 286, or permission of the department.

RATIONALE

This change is a housekeeping move that reflects the recently approved creation of CHEM 283 as an add-on to CHEM 282 for Chemistry majors. All CHEM majors are expected to take CHEM 283.

Does this course replicate the content of a previously approved course to such an extent that students should not receive credit for both courses? If so, this should be **noted in the prerequisite**.

Effective term and year Spring 2012

SFU

SENATE COMMITTEE ON
UNDERGRADUATE STUDIES

COURSE CHANGE/DELETION

OCTOBER 2007

EXISTING COURSE, CHANGES RECOMMENDED

Please check appropriate revision(s)

☐ Course number ☐ Credit ☐ Title Description X Pre-requisite ☐ Deletion

Indicate number of hours for: Lecture_____ Seminar _____ Tutorial _____ Lab _____

FROM :	TO:
Course Number CHEM 442	Course Number CHEM 442
Credit Hour 3	Credit Hour 3

TITLE

(1) Long title for calendar and schedule, no more than 100 characters including spaces and punctuation.

(2) Short title for enrollment and transcript, no more than 30 characters including spaces and punctuation.

DESCRIPTION

PREREQUISITE

CHEM 282	CHEM 282 or 283

RATIONALE

This change is a housekeeping move that reflects the recently approved creation of CHEM 283 as a required add-on to CHEM 282 for Chemistry majors. Both Chem. majors (with CHEM 283) and non-majors (with CHEM 282) can take CHEM 442.

Does this course replicate the content of a previously approved course to such an extent that students should not receive credit for both courses? If so, this should be **noted in the prerequisite**.

Effective term and year Spring 2012

SFU

SENATE COMMITTEE ON
UNDERGRADUATE STUDIES

COURSE CHANGE/DELETION

OCTOBER 2007

EXISTING COURSE, CHANGES RECOMMENDED

Please check appropriate revision(s)

☐ Course number ☐ Credit ☐ Title Description X Pre-requisite ☐ Deletion

Indicate number of hours for: Lecture_____ Seminar _____ Tutorial _____ Lab _____

FROM : **TO:**

Course Number CHEM 444 Course Number CHEM 444 Credit

Hour 3 Credit Hour 3

TITLE

(1) Long title for calendar and schedule, no more than 100 characters including spaces and punctuation.

(2) Short title for enrollment and transcript, no more than 30 characters including spaces and punctuation.

DESCRIPTION

PREREQUISITE

CHEM 282	CHEM 282 or 283

RATIONALE

This change is a housekeeping move that reflects the recently approved creation of CHEM 283 as a required add-on to CHEM 282 for Chemistry majors. Both Chem. majors (with CHEM 283) and non-majors (with CHEM 282) can take CHEM 444.

Does this course replicate the content of a previously approved course to such an extent that students should not receive credit for both courses? If so, this should be **noted in the prerequisite**.

Effective term and year Spring 2012

SCUS 11-40d

SFU

SENATE COMMITTEE ON UNDERGRADUATE STUDIES

COURSE CHANGE/DELETION

EXISTING COURSE, CHANGES RECOMMENDED

Please check appropriate revision(s):

☐ Course number ☐ Credit ☑ Title ☑ Description ☐ Prerequisite ☐ Course deletion

Indicate number of hours for: Lecture_____ Seminar_____ Tutorial_____ Lab_____

FROM	**TO**
Course Number Kin 402	Course Number Kin 402
Credits (Units) 3	Credits (Units) 3

TITLE

(1) Long title for calendar and schedule, no more than 100 characters including spaces and punctuation.

(2) Short title for enrollment and transcript, no more than 30 characters including spaces and punctuation.

Mechanical Behavior of Tissues	Mechanical Behaviour of Biological Tissues
DESCRIPTION	DESCRIPTION
An extension of KIN 201, designed to provide students with an understanding of tissue structure-function relations in health and disease, from a biomechanical perspective. Topics include the effect of disease (and aging) on tissue properties, the mechanics and prevention of tissue injury, and the design of im	see rationale below
PREREQUISITE	PREREQUISITE
KIN 201	KIN 201

RATIONALE

Extension of KIN 201, provides students with an understanding of structure-function relationships in musculoskeletal tissues (bone, cartilage, and muscle) in health and disease. Includes effect of disease and aging on physiological and biomechanical properties, mechanics and prevention of tissue injury, and design of implants and prostheses.

Rationale : The revised description is more accurate and specific in reflecting the current course content (especially the focus on musculoskeletal tissues).

Does this course replicate the content of a previously approved course to such an extent that students should not receive credit for both courses? If so, this should be **noted in the prerequisite**.

Effective term and year January 2012

2. BPK MOTION :

A. Add Kin 402, Kin 415 and Kin 417W to the Active Health and Rehabilitation Concentration list of required options within the Kinesiology Major and Honors Programs.

Kinesiology Major Program

Active Health and Rehabilitation Concentration

FROM :

This program option requires a total of 45 upper division units, which is composed of the 19 upper division core courses (see above) and the following additional requirements.

Students who choose this concentration will complete an additional 26 kinesiology units as specified below, including all of

KIN 303-3 Kinanthropometry
KIN 310-3 Exercise/Work Physiology
KIN 343-3 Active Health: Assessment and Programming

and four of

KIN 311-3 Applied Human Nutrition
KIN 312-3 Nutrition for Fitness and Sport
KIN 375-3 Human Growth and Development
KIN 412-3 Molecular and Cellular Cardiology
KIN 426-3 Neuromuscular Anatomy
KIN 431-3 Environmental Carcinogenesis
KIN 444-3 Cardiac Rehabilitation
KIN 445-3 Advanced Cardiac Rehabilitation
KIN 446-3 Neurobiology of Disease
KIN 448-3 Rehabilitation of Movement Control
KIN 461-3 Physiological Aspects of Aging
KIN 481-3 Activity-Generated Musculo-Skeletal Disorders
KIN 496-3 Directed Study I*
KIN 498-3 Directed Study II*

and one additional upper division kinesiology course, excluding KIN 325, 342, 497, 499.

and an additional two units of upper division units chosen from any discipline within the University

*can be counted toward area of concentration if relevant to active health or rehabilitation kinesiology. Please see the head of the area of concentration for permission to count any of these courses toward the area of concentration requirement.

Students admitted in September 2006 or later are also required to complete the University's writing, quantitative and breadth (WQB) requirements, which includes the requirement of completing three units of writing-intensive credit at the upper division. The W component may be included within the 45 upper division unit total for this general program.

TO :

This program option requires a total of 45 upper division units, which is composed of the 19 upper division core courses (see above) and the following additional requirements.

Students who choose this concentration will complete an additional 26 kinesiology units as specified below, including all of

KIN 303-3 Kinanthropometry
KIN 310-3 Exercise/Work Physiology
KIN 343-3 Active Health: Assessment and Programming

and four of

KIN 311-3 Applied Human Nutrition
KIN 312-3 Nutrition for Fitness and Sport
KIN 375-3 Human Growth and Development
KIN 402-3 Mechanical Behaviour of Tissues
KIN 412-3 Molecular and Cellular Cardiology
KIN 415-3 Neural Control of Movement
KIN 417W-3 Obesity, Adipocyte Function and Weight management
KIN 426-3 Neuromuscular Anatomy
KIN 431-3 Environmental Carcinogenesis
KIN 444-3 Cardiac Rehabilitation

KIN 445-3 Advanced Cardiac Rehabilitation
KIN 446-3 Neurobiology of Disease
KIN 448-3 Rehabilitation of Movement Control
KIN 461-3 Physiological Aspects of Aging
KIN 481-3 Activity-Generated Musculo-Skeletal Disorders
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and one additional upper division kinesiology course, excluding KIN 325, 342, 497, 499.

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