

OFFICE OF THE ASSOCIATE VICE-PRESIDENT, ACADEMIC AND
ASSOCIATE PROVOST

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MEMORANDUM

ATTENTION	Senate	DATE	December 2, 2011
FROM	Bill Krane, Chair	PAGES	1/1
	Senate Committee on		
	Undergraduate Studies		
RE:	Faculty of Health Sciences (SCUS 11-54)		

For information:

Acting under delegated authority at its meeting of December 1, 2011, SCUS approved the following curriculum revisions effective Fall 2012:

1. Upper Division Requirement changes to the:

- BA and BSc Major and Honors programs
- BSc Program with Population and Quantitative Health Sciences Concentration
- BSc Program with Life Sciences Concentration

Senators wishing to consult a more detailed report of curriculum revisions may do so by going to Docushare: <https://docushare.sfu.ca/dsweb/View/Collection-12682>
If you are unable to access the information, please call [778-782-3168](tel:778-782-3168) or email shelley_gair@sfu.ca.



SIMON FRASER UNIVERSITY
THINKING OF THE WORLD

FACULTY OF HEALTH SCIENCES

PHONE (778) 782-4821
FAX (778) 782-5927

MEMORANDUM

TO: Senate Committee on Undergraduate Studies

FROM: Mark Lechner, Director, Undergraduate Programs, Faculty of Health Sciences

RE: Change in Program Requirements for B.Sc. and B.A. in the Faculty of Health Sciences

DATE: November 22, 2011

On November 7th, 2011 the Faculty of Health Sciences Undergraduate Studies Committee approved revisions to the calendar descriptions of B.Sc. and B.A. programs.

- Program change for B.Sc. with Population and Quantitative Health Sciences Concentration
- Program change for B.Sc. with Life Sciences Concentration
- Program change for B.A.

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

Regards,

A handwritten signature in black ink, appearing to read "Mark S Lechner", is written over a horizontal line.

Mark S Lechner

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MEMORANDUM

TO: Senate Committee on Undergraduate Studies

FROM: Mark Lechner, Director, Undergraduate Programs, Faculty of Health Sciences

RE: Change in BA ^{AND BSc} Program Requirements ^{FOR THE MAJOR AND HONORS DEGREE PROGRAMS.}

DATE: November 22, 2011

We are asking SCUS to consider approval of the following change in BSc Program Requirements:

FROM

^{AND}
BA

Upper Division Requirements

Students complete a total of at least 45 units, including all of

- * HSCI 304-3 Perspectives on Environmental Health
- * HSCI 305-3 The Canadian Health System
- * HSCI 307-3 Research Methods in Health Sciences
- * HSCI 312-3 Health Promotion: Individuals and Communities
- * HSCI 330-3 Exploratory Strategies in Epidemiology
- * HSCI 340-3 Social Determinants of Health
- * STAT 302-3 Analysis of Experimental and Observational Data

and one of

- * HSCI 319W-3 Applied Health Ethics
- * HSCI 320-3 Global Health Ethics
- * PHIL 319W-3 Applied Health Ethics

and one of

- * HSCI 481-3 Senior Seminar in Social Health Science

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- * HSCI 482-3 Senior Seminar in Infectious Diseases
- * HSCI 483-3 Senior Seminar in Environmental Health
- * HSCI 484-3 Senior Seminar in Population Health Research
- * HSCI 485-3 Senior Seminar in Mental Health and Addictions
- * HSCI 486-3 Senior Seminar in Global Health

and a minimum of six additional upper division courses related to the major, including at least 12 HSCI units.

TO

Upper Division Requirements

Students complete a total of at least 45 units, including all of

- * HSCI 304-3 Perspectives on Environmental Health
- * HSCI 305-3 The Canadian Health System
- * HSCI 307-3 Research Methods in Health Sciences
- * HSCI 312-3 Health Promotion: Individuals and Communities
- * HSCI 330-3 Exploratory Strategies in Epidemiology
- * HSCI 340-3 Social Determinants of Health
- * **STAT 305-3 Introduction to Biostatistical Methods for Health Sciences**

and one of

- * HSCI 319W-3 Applied Health Ethics
- * **HSCI 327-3 Global Health Ethics**
- * PHIL 319W-3 Applied Health Ethics

and one of

- * HSCI 481-3 Senior Seminar in Social Health Science
- * HSCI 482-3 Senior Seminar in Infectious Diseases
- * HSCI 483-3 Senior Seminar in Environmental Health
- * HSCI 484-3 Senior Seminar in Population Health Research
- * HSCI 485-3 Senior Seminar in Mental Health and Addictions
- * HSCI 486-3 Senior Seminar in Global Health

and a minimum of six additional upper division courses related to the major, including at least 12 HSCI units.

RATIONALE

We are replacing STAT 302-3 Analysis of Experimental and Observational Data with STAT 305 - 3 Introduction to Biostatistical Methods for Health Sciences. STAT 305 - 3 was expressly developed to address the learning focus and needs of students majoring in the Health Sciences.

HSCI 327 - 3 Global Health Ethics replaced HSCI 320 - 3 Global Health Ethics and that change has been approved by SCUS and the Senate.



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MEMORANDUM

TO: Senate Committee on Undergraduate Studies

FROM: Mark Lechner, Director, Undergraduate Programs, Faculty of Health Sciences

RE: Change in BSc Program Requirements - Population and Quantitative Health Sciences Concentration

DATE: November 22, 2011

We are asking SCUS to consider approval of the following change in BSc Program Requirements:

FROM

Population and Quantitative Health Sciences Concentration

Upper Division Requirements (45 units minimum)

Students complete all of

- * HSCI 305-3 The Canadian Health System
- * HSCI 307-3 Research Methods in Health Sciences
- * HSCI 324-3 Human Population Genetics and Evolution
- * HSCI 330-3 Exploratory Strategies in Epidemiology
- * HSCI 484-3 Senior Seminar in Population Health Research
- * STAT 302-3 Analysis of Experimental and Observational Data

and one of

- * HSCI 319W-3 Applied Health Ethics
- * HSCI 320-3 Global Health Ethics
- * PHIL 319W-3 Applied Health Ethics

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and at least six of the following courses, which include a minimum of one as indicated by *:

- * BISC 441-3 Evolution in Health and Disease
- * BISC 422-3 Population Genetics
- * HSCI 304-3 Perspectives on Environmental Health
- * HSCI 340-3 Social Determinants of Health
- * HSCI 410-3 Exploratory Data Analysis*
- * HSCI 424-4 Strategic Applications of GIS in Health*
- * HSCI 431-3 The Global HIV/AIDS Epidemic
- * HSCI 432-3 Infectious Disease Epidemiology*
- * HSCI 478-3 Seminar in Molecular Epidemiology of Infectious Diseases*
- * HSCI 481-3 Senior Seminar in Social Health Science
- * HSCI 483-3 Senior Seminar in Environmental Health
- * HSCI 485-3 Senior Seminar in Mental Health and Addictions
- * HSCI 486-3 Senior Seminar in Global Health
- * MBB 435-3 Genome Biology
- * MBB 441-3 Bioinformatics
- * REM 412-3 Environmental Modeling
- * SA 355-4 Quantitative Methods*

and a minimum two additional upper division HSCI courses (6 units minimum).

TO

Population and Quantitative Health Sciences Concentration

Upper Division Requirements (45 units minimum)

Students complete all of

- * HSCI 305-3 The Canadian Health System
- * HSCI 307-3 Research Methods in Health Sciences
- * HSCI 324-3 Human Population Genetics and Evolution
- * HSCI 330-3 Exploratory Strategies in Epidemiology
- * HSCI 484-3 Senior Seminar in Population Health Research

and one of

- * **STAT 302-3 Analysis of Experimental and Observational Data**
- * **STAT 305-3 Introduction to Biostatistical Methods for Health Sciences**

and one of

- * HSCI 319W-3 Applied Health Ethics
- * **HSCI 327-3 Global Health Ethics**
- * PHIL 319W-3 Applied Health Ethics

and at least six of the following courses, which include a minimum of one as indicated by *:

- * BISC 441-3 Evolution in Health and Disease
- * BISC 422-3 Population Genetics
- * HSCI 304-3 Perspectives on Environmental Health
- * HSCI 340-3 Social Determinants of Health
- * HSCI 410-3 Exploratory Data Analysis*
- * HSCI 424-4 Strategic Applications of GIS in Health*
- * HSCI 431-3 The Global HIV/AIDS Epidemic
- * HSCI 432-3 Infectious Disease Epidemiology*
- * HSCI 478-3 Seminar in Molecular Epidemiology of Infectious Diseases*
- * HSCI 481-3 Senior Seminar in Social Health Science
- * HSCI 483-3 Senior Seminar in Environmental Health
- * HSCI 485-3 Senior Seminar in Mental Health and Addictions
- * HSCI 486-3 Senior Seminar in Global Health
- * MBB 435-3 Genome Biology
- * MBB 441-3 Bioinformatics
- * REM 412-3 Environmental Modeling
- * SA 355-4 Quantitative Methods*

and a minimum two additional upper division HSCI courses (6 units minimum).

RATIONALE

We are adding STAT 305 - 3 Introduction to Biostatistical Methods for Health Sciences option for upper division statistics. STAT 305 - 3 was expressly developed to address the learning focus and needs of students majoring in the Health Sciences.

HSCI 327 - 3 Global Health Ethics replaced HSCI 320 - 3 Global Health Ethics and that change has been approved by SCUS and the Senate.



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MEMORANDUM

TO: Senate Committee on Undergraduate Studies

FROM: Mark Lechner, Director, Undergraduate Programs, Faculty of Health Sciences

RE: Change in BSc Program Requirements - Life Sciences Concentration

DATE: November 22, 2011

We are asking SCUS to consider approval of the following change in BSc Program Requirements:

FROM

Life Sciences Concentration

Upper Division Requirements (46 units minimum)

Students complete all of

- * HSCI 305-3 The Canadian Health System
- * HSCI 321-3 Human Pathophysiology
- * HSCI 324-3 Human Population Genetics and Evolution
- * HSCI 330-3 Exploratory Strategies in Epidemiology
- * MBB 308-3 Molecular Biology Laboratory
- * MBB 331-3 Molecular Biology
- * STAT 302-3 Analysis of Experimental and Observational Data

and one of

- * HSCI 319W-3 Applied Health Ethics
- * HSCI 320-3 Global Health Ethics
- * PHIL 319W-3 Applied Health Ethics

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Students must complete a minimum of at least seven of the following courses, which include a minimum of one as indicated by *, a minimum of one indicated by **, and a minimum of two indicated by ***.

- * BISC 300-3 Evolution
- * BISC 302-3 Genetic Analysis
- * BISC 303-4 Microbiology
- * BISC 304-3 Animal Ecology
- * BISC 313-3 Environmental Toxicology
- * BISC 333-3 Developmental Biology
- * BISC 405-3 Neurobiology
- * BISC 418-3 Parasitology
- * BISC 422-3 Population Genetics
- * BISC 441-3 Evolution of Health and Disease

- * CHEM 360-3 Thermodynamics and Chemical Kinetics
- * CHEM 371-3 Chemistry of the Aqueous Environment
- * CHEM 372-3 Chemistry of the Atmospheric Environment

- * HSCI 323-3 Principles of Pharmacology and Toxicology*
- * HSCI/MBB 426-4 Immune System I: Basis of Innate and Adaptive Immunity*
- * HSCI/MBB 427-3 Immune System II: Immune Responses in Health and Disease***
- * HSCI 438-3 Animal Virology*
- * HSCI 439-3 Pathogenesis of Human and Animal Viral Infectious Diseases***
- * HSCI 440-4 Cell Pathophysiology Laboratory**
- * HSCI 441-4 Virology Laboratory**
- * HSCI 442-4 Immunology Laboratory**
- * HSCI 443-4 Molecular Toxicology Laboratory**
- * HSCI 474-3 Seminar in Neuropharmacology***
- * HSCI 475-3 Seminar in Molecular Mechanisms of Epigenetics***
- * HSCI 476-3 Seminar in Molecular Basis of Drug Action and Environmental Exposure***
- * HSCI 477-3 Seminar in Vaccine Immunology***
- * HSCI 478-3 Seminar in Molecular Epidemiology of Infectious Diseases***
- * HSCI 479-3 Seminar in Aging-Related Neurodegenerative Disease***
- * HSCI 482-3 Senior Seminar in Infectious Diseases***

- * KIN 305-3 Human Physiology I
- * KIN 306-3 Human Physiology II (Principles of Physiological Regulation)
- * KIN 407-3 Human Physiology Laboratory
- * KIN 412-3 Molecular and Cellular Cardiology
- * KIN 431-3 Environmental Carcinogenesis
- * KIN 446-3 Neurological Disorders

- * MBB 309-4 Biochemistry Laboratory
- * MBB 321-3 Intermediary Metabolism
- * MBB 322-3 Molecular Physiology
- * MBB 323-3 Introduction to Physical Biochemistry
- * MBB 421-3 Nucleic Acids
- * MBB 422-3 Biomembranes
- * MBB 423-3 Protein Structure and Function

- * MBB 424-3 Membrane Transport Mechanisms
- * MBB 428-3 Molecular Mechanisms of Microbial Pathogenesis
- * MBB 430-3 Mechanisms of Secretory Transport
- * MBB 431-3 Cells and Disease
- * MBB 432-3 Advanced Molecular Biology Techniques
- * MBB 435-3 Genome Biology
- * MBB 436-3 Gene Expression
- * MBB 437-3 Selected Topics in Signal Transduction
- * MBB 438-3 Human Molecular Genetics
- * MBB 441-3 Bioinformatics
- * MBB 442-3 Proteomics
- * MBB 443-3 Protein Biogenesis and Degradation
- * MBB 444-3 Developmental Neurobiology

- * PHYS 347-3 Introduction to Biological Physics
- * PHYS 433-3 Biological Physics Laboratory
- * REM 445-3 Environmental Risk Assessment

TO

Life Sciences Concentration

Upper Division Requirements (46 units minimum)

Students complete all of

- * HSCI 305-3 The Canadian Health System
- * HSCI 321-3 Human Pathophysiology
- * HSCI 324-3 Human Population Genetics and Evolution
- * HSCI 330-3 Exploratory Strategies in Epidemiology
- * MBB 308-3 Molecular Biology Laboratory
- * MBB 331-3 Molecular Biology

and one of

- * **STAT 302-3 Analysis of Experimental and Observational Data**
- * **STAT 305-3 Introduction to Biostatistical Methods for Health Sciences**

and one of

- * HSCI 319W-3 Applied Health Ethics
- * **HSCI 327-3 Global Health Ethics**
- * PHIL 319W-3 Applied Health Ethics

Students must complete a minimum of at least seven of the following courses, which include a minimum of one as indicated by *, a minimum of one indicated by **, and a minimum of two indicated by ***.

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- * BISC 302-3 Genetic Analysis
- * BISC 303-4 Microbiology
- * BISC 304-3 Animal Ecology
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- * BISC 405-3 Neurobiology
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- * BISC 422-3 Population Genetics
- * BISC 441-3 Evolution of Health and Disease

- * CHEM 360-3 Thermodynamics and Chemical Kinetics
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- * HSCI/MBB 426-4 Immune System I: Basis of Innate and Adaptive Immunity*
- * HSCI/MBB 427-3 Immune System II: Immune Responses in Health and Disease***
- * HSCI 438-3 Animal Virology*
- * HSCI 439-3 Pathogenesis of Human and Animal Viral Infectious Diseases***
- * HSCI 440-4 Cell Pathophysiology Laboratory**
- * HSCI 441-4 Virology Laboratory**
- * HSCI 442-4 Immunology Laboratory**
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- * HSCI 475-3 Seminar in Molecular Mechanisms of Epigenetics***
- * HSCI 476-3 Seminar in Molecular Basis of Drug Action and Environmental Exposure***
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- * HSCI 482-3 Senior Seminar in Infectious Diseases***

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- * KIN 306-3 Human Physiology II (Principles of Physiological Regulation)
- * KIN 407-3 Human Physiology Laboratory
- * KIN 412-3 Molecular and Cellular Cardiology
- * KIN 431-3 Environmental Carcinogenesis
- * KIN 446-3 Neurological Disorders

- * MBB 309-4 Biochemistry Laboratory
- * MBB 321-3 Intermediary Metabolism
- * MBB 322-3 Molecular Physiology
- * MBB 323-3 Introduction to Physical Biochemistry
- * MBB 421-3 Nucleic Acids
- * MBB 422-3 Biomembranes
- * MBB 423-3 Protein Structure and Function
- * MBB 424-3 Membrane Transport Mechanisms
- * MBB 428-3 Molecular Mechanisms of Microbial Pathogenesis
- * MBB 430-3 Mechanisms of Secretory Transport
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- * MBB 432-3 Advanced Molecular Biology Techniques

- * MBB 435-3 Genome Biology
- * MBB 436-3 Gene Expression
- * MBB 437-3 Selected Topics in Signal Transduction
- * MBB 438-3 Human Molecular Genetics
- * MBB 441-3 Bioinformatics
- * MBB 442-3 Proteomics
- * MBB 443-3 Protein Biogenesis and Degradation
- * MBB 444-3 Developmental Neurobiology

- * PHYS 347-3 Introduction to Biological Physics
- * PHYS 433-3 Biological Physics Laboratory
- * REM 445-3 Environmental Risk Assessment

RATIONALE

We are adding STAT 305 - 3 Introduction to Biostatistical Methods for Health Sciences as an option for upper division statistics. STAT 305 - 3 was expressly developed to address the learning focus and needs of students majoring in the Health Sciences.

HSCI 327 - 3 Global Health Ethics replaced HSCI 320 - 3 Global Health Ethics and that change has been approved by SCUS and the Senate.