

A regular meeting of the University Curriculum Committee was held on August 27, 2007 at 3:00 p.m.

Members present: Chair Carole Makela, Professors W. Marshall Frasier, David Gilliland, Patrick Fitzhorn, Donna Rouner, John Ridley, Steven Strauss, C.W. Miller, Cathy Cranston, graduate representative Trena Anastasia, Alan Lamborn (*ex-officio*).

Member absent: Undergraduate representative.

Guest: Linda Selkirk.

Minutes

The minutes of April 30, 2007, were approved.

CURRICULAR REQUESTS

The following curricular requests were approved.

New Courses

Approved Effective Date

BMS 260 03(2-0-1). Biomedical Sciences. S. Prerequisite: LIFE 102.

Spring Semester 2008

Opportunities and challenges in biomedical sciences; business of science, ethics, model systems, cellular and systemic physiology.

BMS 487 Var [1-6]. Internship. Prerequisite: Written consent of department.

Spring Semester 2008

Work/research experience with an approved preceptor outside of a university laboratory.

BMS 498 Var [1-3]. Research. Prerequisite: BMS 300 or BMS 360.

Spring Semester 2008

Faculty-directed research in biomedical sciences.

Major Change in Courses

AS 196 Var [1-3]. Aerospace Studies Group Study I, **change to:**

Spring Semester 2008

AS 196 01(0-2-0). Aerospace Studies Group Study I. F, S.

Leadership Group Study is mandatory for students who are members of ROTC or are eligible to pursue a commission as determined by the Professor of Aerospace Studies.

AS 296 Var [1-3]. Aerospace Studies Group Study II, **change to:**

Spring Semester 2008

AS 296 01(0-2-0). Aerospace Studies Group Study II. F, S.

Leadership Group Study is mandatory for students who are members of ROTC or are eligible to pursue a commission as determined by the Professor of Aerospace Studies.

MIP 298 Var. Introductory Research, **change to:**

Spring Semester 2008

MIP 298 Var [1-3]. Introductory Research. Prerequisite: Written consent of instructor.

Freshman/sophomore research experience in a working research environment.

Course Drops

AS 250 03(3-0-0). Introduction to Aeronautics and Aviation.

Spring Semester 2008

Major Changes in Curricula

College of Veterinary Medicine and Biomedical Sciences
 Department of Environmental Health and Radiological Sciences
 Master of Science in Environmental Health
 Epidemiology Specialization

Effective Spring 2008

(The entire program is shown. Deletions are in ~~strikeout~~; additions are in underline.)

<u>Course</u>	<u>Title (Prerequisite)</u>	<u>Cr</u>
Core Courses		
ERHS 520	Environmental and Occupational Health Issues (BZ 110 or LIFE 102; CHEM 245 or CHEM 341 or CHEM 345)	3
ERHS 532	Epidemiologic Methods (ERHS 307/STAT 307)	3
ERHS 542	Biostatistical Methods for Qualitative Data (ERHS 307/STAT 307 or STAT 301)	3
ERHS 544/ STAT 544	Biostatistical Methods for Quantitative Data (ERHS 307/STAT 307 or STAT 301)	3
<u>ERHS 640</u>	<u>Advanced Epidemiology (ERHS 532)</u>	<u>3</u>
<u>ERHS 658</u>	<u>Environmental/Occupational Epidemiology (ERHS 532)</u>	<u>3</u>
ERHS 692	Seminar⁺	Var.
ERHS 693A	Research Seminar-Epidemiology ¹	1
	<u>Epidemiology-related courses²</u>	<u>2-12</u>
	Out of department requirement ²³	3
ERHS 695	Independent Study ³⁴	Var.6
OR		
ERHS 699	Thesis ⁴⁵	Var.6
One course from ONE of the following areas (3 or more credits):⁶		
<i>Environmental/Occupational Health/Industrial Hygiene</i>		
<u>ERHS 520</u>	<u>Environmental and Occupational Health Issues (BZ 110 or LIFE 102; CHEM 245 or CHEM 341 or CHEM 345)</u>	<u>3</u>
ERHS 526	Industrial Hygiene (CHEM 245 or CHEM 341 or CHEM 345; ERHS 520 or concurrent reg.; PH 110 or PH 121)	3
ERHS 536	Advanced Occupational Health (ERHS 446 or ERHS 526)	3
<u>ERHS 540</u>	<u>Principles of Ergonomics</u>	<u>3</u>
<i>Toxicology/Cancer Biology</i>		
ERHS 502	Fundamentals of Toxicology (BMS 300 or BMS 360; CHEM 245 or CHEM 341 or CHEM 345)	3
<u>ERHS 510</u>	<u>Cancer Biology (BC 351 or BC 403 or concurrent reg. or BIO 310 or CM 501)</u>	<u>3</u>
<u>ERHS 611</u>	<u>Cancer Genetics (BZ 350 or MIP 450)</u>	<u>2</u>
ERHS 733	Environmental Carcinogenesis (BC 403)	3
<i>Microbiology⁶</i>		
<u>MIP 420</u>	<u>Medical and Molecular Virology (BC 351 or concurrent reg. or BC 401 or concurrent reg.; MIP 342)</u>	<u>4</u>
MIP 530	Advanced Molecular Virology (BC 351 or BC 401; MIP 450)	3
MIP 651	Immunobiology (MIP 342)	3

<u>Course</u>	<u>Title (Prerequisite)</u>	<u>Cr</u>
<u>MIP 760</u> <u>Statistics⁶</u>	<u>Mechanisms of Bacterial Pathogenesis (BC 351; MIP 342)</u>	<u>3</u>
<u>ERHS 642</u>	<u>Applied Logistic Regression (ERHS 532; ERHS 542)</u>	<u>3</u>
STAT 460	Applied Multivariate Analysis (STAT 340)	3
<u>STAT 511</u>	<u>Design and Data Analysis for Researchers I (STAT 301 or STAT 307/ERHS 307 or STAT 311 or STAT 315)</u>	<u>4</u>
<u>STAT 512</u>	<u>Design and Data Analysis for Researchers II (STAT 511)</u>	<u>4</u>
STAT 523/ NR 523	Quantitative Spatial Analysis (STAT 301 or STAT 307/ERHS 307)	3
<u>STAT 525</u>	<u>Analysis of Time Series I (STAT 430)</u>	<u>3</u>
<u>STAT 526</u>	<u>Analysis of Time Series II (STAT 525)</u>	<u>3</u>
STAT 547/ CIVE 547	Statistics for Environmental Monitoring (STAT 301)	3
<u>STAT 560</u>	<u>Applied Multivariate Analysis (STAT 520; STAT 540)</u>	<u>3</u>
PROGRAM TOTAL = 30-40 credits⁵⁷		

¹ ~~Full time students must register each semester.~~ Registration every semester is strongly recommended.
² Other courses in epidemiology or related areas, as approved by graduate advisory committee. Plan A students take 2 credits; Plan B students take 12 credits.
²³ ~~At least one three credit 500 level or above graduate course.~~ Graduate level (500 or above) course work approved by graduate advisory committee (3 or more credits).
³⁴ ~~For Plan B students, minimum of 6 credits, for preparation of professional paper. Credits determined by adviser and graduate committee.~~
⁴⁵ ~~For Plan A students, minimum of 6 credits. Credits determined by adviser and graduate committee.~~
⁶ A non-ERHS course cannot be used to meet these requirements and out-of-department requirements.
⁵⁷ Depending on whether in Plan A (30 credits; thesis required) or Plan B (40 credits; professional paper required and either one year of professional experience in epidemiology-related areas or an approved internship in epidemiology).

Ph.D. in Environmental Health Epidemiology Specialization **Effective Spring 2008**

(The entire program is shown. Deletions are in ~~strikeout~~; additions are in underline.)

<u>Course</u>	<u>Title (Prerequisite)</u>	<u>Cr</u>
Core Courses		
ERHS 520	Environmental and Occupational Health Issues (BZ 110 or LIFE 102; CHEM 245 or CHEM 341 or CHEM 345)	3
ERHS 532	Epidemiologic Methods (ERHS 307/STAT 307)	3
<i>Select two courses from the following:</i>		
ERHS 533/ MIP 533	Epidemiology of Infectious Diseases/Zoonoses (MIP 300)	3
ERHS 658	Environmental/Occupational Epidemiology (ERHS 532)	3
ERHS 662/ VS 662	Applied Research Planning/Design/Analysis	3
ERHS 542	Biostatistical Methods for Qualitative Data (ERHS 307/STAT 307 or STAT 301)	3
ERHS 544/ STAT 544	Biostatistical Methods for Quantitative Data (ERHS 307/STAT 307 or STAT 301)	3
<u>ERHS 640</u>	<u>Advanced Epidemiology</u>	
<u>ERHS 658</u>	<u>Environmental/Occupational Epidemiology (ERHS 532)</u>	<u>3</u>

<u>Course</u>	<u>Title (Prerequisite)</u>	<u>Cr</u>
ERHS 693A	Research Seminar-Epidemiology ¹	3
ERHS 792	Seminar⁴	Var.
ERHS 799	Dissertation ²	Var.
	<u>Epidemiology-related courses³</u>	<u>12</u>
	Out of department requirement ^{3,4}	6
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One course from TWO of the following areas (6 or more credits):⁵		
<u>Environmental/Occupational Health/Industrial Hygiene</u>		
<u>ERHS 520</u>	<u>Environmental and Occupational Health Issues (BZ 110 or LIFE 102; CHEM 245 or CHEM 341 or CHEM 345)</u>	<u>3</u>
ERHS 526	Industrial Hygiene (CHEM 245 or CHEM 341 or CHEM 345; ERHS 520 or concurrent reg.; PH 110 or PH 121)	3
ERHS 536	Advanced Occupational Health (ERHS 446 or ERHS 526)	3
<u>ERHS 540</u>	<u>Principles of Ergonomics</u>	<u>3</u>
<u>Toxicology/Cancer Biology</u>		
ERHS 502	Fundamentals of Toxicology (BMS 300 or BMS 360; CHEM 245 or CHEM 341 or CHEM 345)	3
<u>ERHS 510</u>	<u>Cancer Biology (BC 351 or BC 403 or concurrent reg. or BIO 310 or CM 501)</u>	<u>3</u>
<u>ERHS 611</u>	<u>Cancer Genetics (BZ 350 or MIP 450)</u>	<u>2</u>
ERHS 733	Environmental Carcinogenesis (BC 403)	3
<u>Microbiology⁵</u>		
MIP 530	Advanced Molecular Virology (BC 351 or BC 401; MIP 450)	3
MIP 651	Immunobiology (MIP 342)	3
MIP 760	Mechanisms of Bacterial Pathogenesis (BC 351; MIP 342)	3
<u>Statistics⁵</u>		
STAT 460	Applied Multivariate Analysis (STAT 340)	3
<u>STAT 511</u>	<u>Design and Data Analysis for Researchers I (STAT 301 or STAT 307/ERHS 307 or STAT 311 or STAT 315)</u>	<u>4</u>
<u>STAT 512</u>	<u>Design and Data Analysis for Researchers II (STAT 511)</u>	<u>4</u>
STAT 523/ NR 523	Quantitative Spatial Analysis (STAT 301 or STAT 307/ERHS 307)	3
<u>STAT 525</u>	<u>Analysis of Time Series I (STAT 430)</u>	<u>3</u>
<u>STAT 526</u>	<u>Analysis of Time Series II (STAT 525)</u>	<u>3</u>
STAT 547/ CIVE 547	Statistics for Environmental Monitoring (STAT 301)	3
<u>STAT 560</u>	<u>Applied Multivariate Analysis (STAT 520; STAT 540)</u>	<u>3</u>
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PROGRAM TOTAL = 72 credits		

¹ ~~Full time students must register each semester.~~ Minimum of three credits (three semesters). Registration every semester is strongly recommended.

² ~~Credits determined by adviser and graduate committee.~~ Minimum of 27 credits.

³ Other courses in epidemiology or related areas, as approved by graduate advisory committee.

^{3,4} ~~At least two three-credit 500-level or above graduate courses.~~ Graduate level (500 or above) course work approved by graduate advisory committee (6 or more credits).

⁴ Non-ERHS courses cannot be used to meet these requirements and out-of-department requirements.

**Master of Science in Environmental Health
 Toxicology Specialization**

Effective Spring 2008

(The entire program is shown. Deletions are in ~~strikeout~~; additions are in underline.)

<u>Course</u>	<u>Title (Prerequisite)</u>	<u>Cr</u>
Core Courses:		
ERHS 502	Fundamentals of Toxicology (BMS 300 or BMS 360; CHEM 245 or CHEM 341 or CHEM 345)	3
ERHS 520	Environmental and Occupational Health Issues (BZ 110 or LIFE 102; CHEM 245 or CHEM 341 or CHEM 345)	3
ERHS 601	Metabolism and Disposition of Toxic Agents (ERHS 502)	3
<u>ERHS 602</u>	<u>Toxicological Mechanisms (ERHS 502)</u>	<u>3</u>
ERHS 693C	Research Seminar Toxicology	2-3¹
ERHS 699	Thesis ²¹	Var.
	Biostatistics³	3
	Epidemiology or industrial hygiene³	3
	Out-of-department requirement ⁴²	3
	<u>Seminar³</u>	<u>1</u>
Other Courses <u>Departmental Electives (minimum of 39 credits):⁴</u>		
<u>ERHS 446</u>	<u>Environmental Toxicology (CHEM 245 or CHEM 345 or CHEM 346)</u>	<u>3</u>
<u>ERHS 510</u>	<u>Cancer Biology (BC 351 or BC 403 or concurrent reg. or BIO 310 or CM 501)</u>	<u>3</u>
<u>ERHS 520</u>	<u>Environmental and Occupational Health Issues (BZ 110 or LIFE 102; CHEM 245 or CHEM 341 or CHEM 345)</u>	<u>3</u>
<u>ERHS 526</u>	<u>Industrial Hygiene (CHEM 245 or CHEM 341 or CHEM 345; ERHS 520 or concurrent reg.; PH 110 or PH 121)</u>	<u>3</u>
<u>ERHS 532</u>	<u>Epidemiologic Methods (ERHS 307/STAT 307)</u>	<u>3</u>
<u>ERHS 536</u>	<u>Advanced Occupational Health (ERHS 446 or ERHS 526)</u>	<u>3</u>
ERHS 547	Equipment and Instrumentation (ERHS 446)	3
<u>ERHS 550</u>	<u>Principles of Radiation Biology (BIO 310, ERHS 300 or ERHS 530)</u>	<u>5</u>
<u>ERHS 563</u>	<u>Environmental Contaminant Modeling (MATH 155)</u>	<u>2</u>
<u>ERHS 565</u>	<u>Chemical and Biological Warfare Agents (CHEM 245 or CHEM 346)</u>	<u>2</u>
<u>ERHS 568</u>	<u>Pharmaceutical and Regulatory Toxicology (ERHS 502)</u>	<u>3</u>
<u>ERHS 601</u>	<u>Metabolism and Disposition of Toxic Agents (ERHS 502)</u>	<u>3</u>
ERHS 602	Toxicological Mechanisms (ERHS 502)	3
<u>ERHS 603</u>	<u>Toxicological Pathology (ERHS 502)</u>	<u>3</u>
<u>ERHS 611</u>	<u>Cancer Genetics (BZ 350 or MIP 450)</u>	<u>2</u>
ERHS 648	Environmental Health Risk Assessment (ERHS 446; ERHS 520)	3
<u>ERHS 665</u>	<u>Radiochemistry (CHEM 114; ERHS 530 or concurrent reg.; MATH 155)</u>	<u>3</u>
ERHS 696	Group Study⁵	1-3
ERHS 733	Environmental Carcinogenesis (BC 403)	3
ERHS 795	Independent Study	1-6
PROGRAM TOTAL = 30-<u>36</u> credits²		

¹Maximum of 1 credit per year.

²¹ Credits determined by adviser and graduate committee. Students in the Plan B do not take ERHS 699. These students need additional course work to complete the 36 credits required for the program.

³One course at the 500 level or above.

⁴² At least one 3-Three credit 500 level or above graduate course minimum. Suggested classes include: BC ~~519~~565,

BMS 501, BMS 531, BMS 545, BMS 575, CM 501, CM 502/NB 502, FW 544, MIP 555.

³ One credit of seminar course. Eligible seminar courses include all approved course listings in seminar format.

⁴ Eligible courses can be from approved course listings within the department. Suggested electives for interests in environmental toxicology, environmental health, and risk assessment within toxicology are listed here.

⁵ M.S. Plan A programs have a minimum of 30 semester credits with a thesis. M.S. plan B programs have a minimum of 36 semester credits with a comprehensive examination.

~~⁵ Must be mentored by a TOX section faculty member.~~

**Ph.D. in Environmental Health
 Toxicology Specialization**

Effective Spring 2008

(The entire program is shown. Deletions are in ~~strikeout~~; additions are in underline.)

<u>Course</u>	<u>Title (Prerequisite)</u>	<u>Cr</u>
Core Courses:		
<u>BMS 500</u>	<u>Mammalian Physiology I (BMS 300 or BMS 360)</u>	<u>4</u>
ERHS 502	Fundamentals of Toxicology (BMS 300 or BMS 360; CHEM 245 or CHEM 341 or CHEM 345)	3
ERHS 520	Environmental and Occupational Health Issues (BZ 110 or LIFE 102; CHEM 245 or CHEM 341 or CHEM 345)	3
ERHS 601	Metabolism and Disposition of Toxic Agents (ERHS 502)	3
ERHS 602	Toxicological Mechanisms (ERHS 502)	3
<u>ERHS 603</u>	<u>Toxicological Pathology (ERHS 502)</u>	<u>3</u>
ERHS 693C	Research Seminar Toxicology	3-5[†]
ERHS 792	Seminar²	Var.
ERHS 799	Dissertation ³¹	Var.
	Biostatistics⁴	3
	Epidemiology or industrial hygiene⁴	3
	Out-of-department requirement ⁵²	6
	<u>Seminar³</u>	<u>2</u>
Other Courses Departmental Electives (minimum of 39 credits):⁴		
<u>ERHS 510</u>	<u>Cancer Biology (BC 351 or BC 403 or concurrent reg. or BIO 310 or CM 501)</u>	<u>3</u>
<u>ERHS 520</u>	<u>Environmental and Occupational Health Issues (BZ 110 or LIFE 102; CHEM 245 or CHEM 341 or CHEM 345)</u>	<u>3</u>
<u>ERHS 526</u>	<u>Industrial Hygiene (CHEM 245 or CHEM 341 or CHEM 345; ERHS 520 or concurrent reg.; PH 110 or PH 121)</u>	<u>3</u>
<u>ERHS 532</u>	<u>Epidemiologic Methods (ERHS 307/STAT 307)</u>	<u>3</u>
<u>ERHS 536</u>	<u>Advanced Occupational Health (ERHS 446 or ERHS 526)</u>	<u>3</u>
ERHS 547	Equipment and Instrumentation (ERHS 446)	3
<u>ERHS 550</u>	<u>Principles of Radiation Biology (BIO 310, ERHS 300 or ERHS 530)</u>	<u>5</u>
<u>ERHS 563</u>	<u>Environmental Contaminant Modeling (MATH 155)</u>	<u>2</u>
<u>ERHS 565</u>	<u>Chemical and Biological Warfare Agents (CHEM 245 or CHEM 346)</u>	<u>2</u>
<u>ERHS 568</u>	<u>Pharmaceutical and Regulatory Toxicology (ERHS 502)</u>	<u>3</u>
<u>ERHS 611</u>	<u>Cancer Genetics (BZ 350 or MIP 450)</u>	<u>2</u>
ERHS 648	Environmental Health Risk Assessment (ERHS 446; ERHS 520)	3
<u>ERHS 665</u>	<u>Radiochemistry (CHEM 114; ERHS 530 or concurrent reg.; MATH 155)</u>	<u>3</u>
ERHS 696	Group Study⁶	1-3
<u>ERHS 726</u>	<u>Aerosols and Occupational Health (PH 141)</u>	<u>3</u>
ERHS 733	Environmental Carcinogenesis (BC 403)	3
ERHS 795	Independent Study	1-6

<u>Course</u>	<u>Title (Prerequisite)</u>	<u>Cr</u>
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PROGRAM TOTAL = 72 credits⁷⁵

~~¹ Maximum of 1 credit per year.~~

~~² Full time students register each semester.~~

³¹ Credits determined by adviser and graduate committee.

~~⁴ One course at the 500 level or above.~~

~~⁵² At least two 3-credit 500 level or above graduate courses.~~ Minimum of three credits required. Suggested classes include: BC ~~519~~565, BMS 501, BMS 531, BMS 545, BMS 575, CM 501, CM 502/NB 502, FW 544, MIP 555.

³ Eligible seminar courses include all approved course listings in seminar format.

⁴ Eligible courses can be from approved course listings within the department. Suggested electives are included in this list, but are not limited to these courses.

~~⁶ Must be mentored by a TOX section faculty member.~~

⁷⁵ Ph.D. programs have a minimum of 72 credits. Up to 30 credits from a masters degree program may be transferred to the Ph.D. program.

All-University Core Curriculum (AUCC)

Category 3B, Arts/Humanities

A request by the Department of Foreign Languages & Literatures to remove LITA 200, Second-Year Italian I, and LITA 201, Second-Year Italian II, from category 3B was approved. The effective date for this change is Spring Semester 2008.

Deadlines for 2007-2008 Curricular Changes

The deadlines proposed by the curriculum and catalog administration office were approved. The deadlines will be published on the UCC web pages and dean's and department offices will be notified of the document's location.

The meeting adjourned at 5:00 p.m.

(FC) 9/10/07

Carole Makela, Chair
Waneta Boyce, Secretary