# Academic Programs Committee of Council University Course Challenge 

## Scheduled posting: December 2011

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## Approval:

Date of circulation: December 16, 2011
Date of effective approval if no Challenge received: January 6, 2012

## Next scheduled posting:

University Course Challenge is now being posted once a month, on a regular schedule. The next scheduled Challenge document posting will be in January 2012, with a submission deadline of January 10, 2012. Please include in this submission all changes for the 2012-13 Course and Program Catalogue. Urgent items can still be posted on request.

## College of Agriculture and Bioresources

## Prerequisite Changes

## BPBE 395 Creative Thinking and the Entrepreneurial Process

Change prerequisite from BPBE 230
to Successful completion of 45 credit units, or permission of the instructor.

## BPBE 400 Entrepreneurial Leadership: Leading Development, Change and Growth in New Business

Change prerequisite from BPBE 395
to Successful completion of 75 credit units or permission of the instructor. Rationale: Prerequisites for BPBE 395 and 400 are being realigned. Previous prereqs were not based on subject content. This change allows students who are not completing the Food and Bioproduct Entrepreneurship minor to take individual courses as electives

## PLSC 411 Plant Breeding

Remove PLSC 405, Genetics of Plant Populations as prerequisite and add Biology 226, Genes to Genomics.
Add "PLSC 405 is strongly recommended" to the note section.

## Change in Course Titles

Agriculture 111, Change title from Agriculture Science I to Sustainable Plant and Soil Management
Agriculture 112, Change title from Agriculture Science II to Animal Agriculture and Food Science
IPRM 102, Change title from Environmental Studies I: Economics and Law, to Economics and Planning I

## Minor Curriculum Revisions

Diploma in Agronomy
The following changes to the restricted elective list were approved:
Remove SLSC 273, Land Evaluation and Sustainable Management Practices
Add
SLSC 232, Soil Genesis and Classification, pre or co req: one of BLE 212, EVSC 220, SLSC 240, GEOG 235 or RRM 215;
PLSC 220, Fundamentals of Horticulture, prereq: AGRC 111 and Biol 120;
PLSC 213, Principles of Plant Ecology, prereq: n/a;
PLSC 234, Weed Control in Organic Agriculture, prereq: introductory course in biology;
PLSC 235, Urban Food Production, prereq: 30 cu ;
PLSC 308, Global Plant Genetic Resources, prereq: Biol 120 and one of Biol 121, 222 or EVSC 110;
PLSC 311, General Apiculture, prereq: n/a;
PLSC 314,Statistical Methods, prereq: n/a;

PLSC 330, Ornamental Plants, prereq: n/a;
PLSC 333, Tropical Crops of the World, prereq: Biol 120;
PLSC 420, Grain Chemistry and Technology, prereq: $\mathrm{n} / \mathrm{a}$;
PLSC 418, Management of Arable Grassland, prereq: n/a;
PLSC 445, Experiential Learning Internship, prereq: 60 cu ;
AGRC 112, Agriculture Science II, prereq: n/a;
BPBE 251, Intro to Agricultural Policy, prereq: Econ 111; BPBE 320, Intro to Farm Business Management, prereq: 60 cu
Rationale: The restricted elective list for the Diploma in Agronomy has been expanded to allow students' greater flexibility in scheduling and in following their interests. Diploma in Agronomy students are required to choose a total of 12 credit units from 21 credit units in approved courses. This has been expanded to 12 credit units from a total of 63 credit units. Soil Science 273 is deleted because it is no longer offered.

## Agronomy Major

Add Biology 121, The Diversity of Life, as a requirement to term two of the first year of the Agronomy major in the Bachelor of Science in Agriculture (BSA)

Change Biology 222, The Living Plant, from term two of the first year of the Agronomy major and to term two of second year

Change requirement in second year for both of PLSC 213, Principles of Plant Ecology and PLSC 220, Fundamentals of Horticulture to one of PLSC 213 or PLSC 220

Add BPBE 343, Crops and Livestock Marketing to Year 3 and 4 requirements
Add SLSC 480, Soils and Boreal Landscapes, to Soil Science Category
Delete Farm Management Category (3 credits added to major requirements)
Add PLSC 333, Tropical Crops of the World, as an option to the Plant Production Category.
Restricted elective list: Add RRM 215, Identification of Saskatchewan Plants and Soils; BPBE 346, Principles of Selling, BPBE 347, Agribusiness Marketing Management, and BPBE 254, Agricultural Policy

Rationale: Biology 121 is added back into first year of the Agronomy major to realign the program with the BSA Core requirement for 6 credit units of junior biology. Students will take Biology 222 in second year of the program and will be better prepared having taken both biology 120 and 121. To accommodate the addition of biology 121, the requirement for both Plant Science 213 and 220 is reduced to one of Plant Science 213 or 220. The Farm Management Category, choose 3 credit units from BPBE 343.3, 346.3, 254.3 or 347.3 has been deleted, and BPBE 343.3, Crops and Livestock Marketing, is added to the requirements for Years 3 and 4 of the major. This change is to address prerequisite and enrolment management issues. Students will still be able to take a range of business courses in the restricted elective category if they so desire.

Minor adjustments to the restricted elective list are made adding courses commonly requested by students.

## Applied Plant Ecology Major

Move English 3 cu requirement from Year 1 to Year 2 and bring the 3 cu Social Sciences, Humanities or Fine Arts requirement from Year 2 to Year 1.

Increase open electives from 9 to 12 credit units.

Delete Biology 373, Community Ecology from Year 3 and 4 requirements and add to Restricted Elective List

Add Plant Science 335, Integrated Pest Management; Plant Science 345, Pesticides and Crop Protection; Plant Science 405, Genetics of Plant Populations; Biology 345, Introductory Plant Pathology; Biology 331, Plant Physiology, Soil Science 232, Soil Genesis and Classification; Biology 312, Life in the North; Soil Science 343, Soil Microbiology to the Restricted Elective List

Remove Animal Science 410, Cow Calf Management, from Restricted Elective list.
Rationale: The majority of majors in the BSA degree program designate English as a second year requirement. Moving English to second year and 3 cu of humanities, social science or fine arts to first year realigns this major with the common first year of the BSA Core program. Other minor changes address prerequisite, scheduling and access issues of this program (including the deletion of Biology 373) and the increase in open electives from 9 to 12 also aligns with the BSA Core recommended number.

## Minor in Applied Plant Ecology

| Current |
| :--- |
| Requirements: |
| Plant Science 213, Principles of Plant Ecology |
| Plant Science 413, Advanced Plant Ecology |
| Plant Science 425, Forest Ecology |
| Biology 424, Grasses and Grasslands |
| AND |
| 6 credit units chosen from Plant Science 423, |
| Landscape Ecology and Vegetation |
| Management; Renewable Resource |
| Management 215, Identification of |
| Saskatchewan Plants and Soils, Biology 323, |
| Plant Systematics and Evolution, Biology 373 |
| Community Ecology, and Environmental |
| Science 380, Grassland Soils and Vegetation, |
| or Soil Science 480, Soils and Boreal |
| Landscapes |

## Change to:

Requirements:
Plant Science 213, Principles of Plant Ecology or Biology 228, An Intro to Ecology and Ecosystems
Plant Science 413, Advanced Plant Ecology, Environmental Science 380, Grassland Soils and Vegetation
AND
9 credit units chosen from Plant Science 423, Landscape Ecology and Vegetation Management, Plant Science 425, Forest Ecology, Renewable Resource Management 215, Identification of Saskatchewan Plants and Soils Biology 323, Plant Systematics and Evolution, Biology 373, Community Ecology, Biology 424, Grasses and Grasslands and Soil Science 480, Soils and Boreal Landscapes

Rationale: Revisions to the Applied Plant Ecology minor address scheduling and access issues for students. Biology 424 and Plant Science 425 have been removed from the Required section of the minor and added to the 9 credit unit Elective options.

Crop Science Major
Add PLSC 333, Tropical Crops of the World, to the list of restricted electives from plant sciences

## Field Crop Production Minor

Current
Requirements:
Plant Science 222, Intro to Field Crops
Plant Science 401, Sustainable Crop
Production

6 credit units from PlSc 340, Weed Biology and Ecology, Plant Science 345, Pesticides and Crop Protection, Plant Science 411, Plant Breeding, Plant Science 416, Applied Plant Biotechnology, Plant Science 417, Crop
Physiology, Plant Science 418, Management of
Arable Grassland and Plant Science 420, Grain
Chemistry
6 credit units from Biology 345, Intro Plant
Pathology, Biological Engineering 309, Water
Management, Plant Science 213, Principles of
Plant Ecology, and Soil Science 240,
Agricultural Soil Science

## Change to:

Plant Science 222, Intro to Field Crops, or Plant Science 201, Field Crops of Western Canada,
Soil Science 240, Agricultural Soil Science Agronomy 382, Field Diagnostic School

9 Credit units from PLSC 220, Horticulture Crops, PLSC 234, Organic Agriculture, PLSC 235, Urban Agriculture, PLSC 333, Tropical Crops of the World, PLSC 335, Integrated Pest Management, PLSC 340, Weed Biology and Ecology, PLSC 345, Pesticides and Crop Protection, PLSC 401, Sustainable Crop Production, PLSC 420, Grain Chemistry, SLSC 312, Soil Fertility, BIO 345, Intro to Plant Pathology, AGRN 375, Special Topics in Agronomy

Rationale: The current Field Crop Production minor has not been accessible, because of prerequisite issues, to the students the minor is intended to serve. These changes to the requirements will allow more students to complete the minor and as well will provide a good foundation of agronomic content.

## Horticulture Science Major

Remove EVSC 110 as an option to BIO 121 in term two of year one.
Move English requirement from Year 1 to Year 2 and bring the 3 cu Social Sciences, Humanities or Fine Arts from Year 2 to Year 1

## Minor in Horticulture

Add PLSC 235, Urban Agriculture and PLSC 333, Tropical Crops of the World as options in the 'Choose 9 credit units of the following' elective category in the minor.

Rationale: Environmental Science has been removed as an option to Biology 121 in the Horticulture Science major. For the majority of students who choose the major the six credit
biology requirement outlined in the BSA Core is more appropriate and less confusing to first year students. Therefore, EVSC 110 is deleted from Biology 121 or Environmental Science 110. Moving English to second year and 3 cu of humanities, social science or fine arts to first year realigns this major with the common first year of the BSA Core program.

## Bachelor of Science in Renewable Resource Management

RRM 212.3, Introductory Resource Economics and Policy: Prereq EVSC 110.
Change level and course number to RRM 114.3. Change title to Resource Economics and Policy, and remove prerequisite. Move from term 2 of year 2 of the BSC (RRM) degree to term 2 of year 1 . Move 3 credit units open elective from year 1 to year 2 .

This course is repositioned to first year of the RRM degree program in order to introduce resource economics earlier in the program and to provide 6 credits of the program in first year.

## Interdisciplinary use of subject codes:

Two RRM courses (RRM 312 Natural Resource Management and Indigenous Peoples, and RRM 114 Resource Economics and Policy) will be under the academic authority of the Department of Bioresource Policy, Business and Economics because they are resourced from this department.

## COLLEGE OF ARTS AND SCIENCE

The curricular revisions listed below were approved through the Arts \& Science College Course and Program Challenge and are now submitted to the University Course Challenge for approval or information.

## DIVISION OF HUMANITIES \& FINE ARTS

## Art and Art History

## Minor Course Revisions

ARTH 253.3 Aboriginal Art History I
Prerequisite Change:
Old: 3 credit units in Art History or 3 credit units in Native Studies or Aboriginal-specific courses.
New: 3 credit units ARTH or Aboriginal cognate course: NS; IPJP; ANTH 224.3; ARCH 353.3, 454.3, 457.3; ENG 242.3, 335.3, 338.3; HIST 264.3, 265.3, 266.3, 482.3; POLS 222.3, 322.3, 323.3, 422.3; SOC 219.3, 319.3, 341.3; OR other course on Aboriginal peoples approved by the course instructor.
New Course Description: An introductory survey of Aboriginal art history within the Canadian regions of the West Coast, Plateau, Western Sub-Arctic and Arctic.
Rationale: Prerequisite change serves to make students aware that the course is accessible to a wide range of students interested in Aboriginal Art History. Title better describes current course content.

## ARTH 255.3 Aboriginal Art History II

Prerequisite Change:
Old: 3 credit units in Art History or 3 credit units in Native Studies or Aboriginal-specific courses.
New: 3 credit units ARTH or Aboriginal cognate course: NS; IPJP; ANTH 224.3; ARCH 353.3, 454.3, 457.3; ENG 242.3, 335.3, 338.3; HIST 264.3, 265.3, 266.3, 482.3; POLS 222.3, 322.3, 323.3, 422.3; SOC 219.3, 319.3, 341.3; OR other course on Aboriginal peoples approved by the course instructor.
New Course Description: An introductory survey of Aboriginal art history within the Canadian regions of the Plains, Woodlands, Eastern Sub-Arctic and East Coast.
Rationale: Prerequisite change serves to make students aware that the course is accessible to a wide range of students interested in Aboriginal Art History. Title better describes current course content.

## ARTH 355.3 Contemporary Aboriginal Art I

Prerequisite Change:
Old: 6 credit units in Art History or cognate Native Studies or Aboriginal-specific courses.
New: ARTH 253 or ARTH 255 or any 3 credit units ARTH or Aboriginal cognate course from: NS; IPJP; ANTH 224.3; ARCH 353.3, 454.3, 457.3; ENG 242.3, 335.3, 338.3; HIST 264.3,
265.3, 266.3, 482.3; POLS 222.3, 322.3, 323.3, 422.3; SOC 219.3, 319.3, 341.3; OR other course on Aboriginal peoples approved by the course instructor.
New Course Description: This seminar will examine contemporary Aboriginal art, from the mid to late 1900s. Emphasis will be on Canadian artists.
Rationale: Prerequisite change serves to make students aware that the course is accessible to a wide range of students interested in Aboriginal Art History. Title better describes current course content.

## ARTH 455.3 Contemporary Aboriginal Art II

Prerequisite Change:
Old: 6 credit units in Art History or cognate Native Studies or Aboriginal-specific courses. New: ARTH 253 or ARTH 255 or any 3 credit units ARTH or Aboriginal cognate course from: NS; IPJP; ANTH 224.3; ARCH 353.3, 454.3, 457.3; ENG 242.3, 335.3, 338.3; HIST 264.3, 265.3, 266.3, 482.3; POLS 222.3, 322.3, 323.3, 422.3; SOC 219.3, 319.3, 341.3; OR other course on Aboriginal peoples approved by the course instructor.
New Course Description: This seminar will examine contemporary Aboriginal art, from the late 1900s to the present day. Emphasis will be on Canadian artists.
Rationale: Prerequisite change serves to make students aware that the course is accessible to a wide range of students interested in Aboriginal Art History. Title better describes current course content.

## History

## Change to approved electives for a program - item for information only HIST 245.6 African History

Add
"HIST 245.6 ( 3 credit units counted in this category)"
to the "End Date of 1815 or Earlier" and the "Start Date of 1815 or Later" lists of courses which may be used to meet the Temporal Requirements for all History programs. This course spans both time frames, and therefore will be counted half in each.

## New Courses

## HIST 334.3 History of Medicine: Bugs to Drugs, 1800-Present

1 or 2 This course examines the changing content, practice and organisation of medicine since 1800. We will explore the social and cultural history of medicine alongside some of the technological, scientific and professional developments in the field.
Prerequisite(s): 6 credit units 200-level HIST or permission of the instructor
Note: Students with credit for HIST 398: History of Medicine, 1800-Present may not take HIST 334 for credit. Post 1815.
Instructor(s): Erika Dyck
Rationale: This course was taught as a special topics course (HIST 398.3) for two years. It was positively reviewed and the department would now like to include it in the regular offerings. Improves department's offerings in the field, reflects the research interests of the instructor and responds to student demands.

## HIST 335.3 Spectacles of Death in the Roman World

1or 2 Ridley Scott's film Gladiator (2000) brought the bloodlust of the Roman arena to a $21^{\text {st }}$ century audience. The film appears to confirm that the Romans, especially emperors and the plebeian masses, were a cruel and bloodthirsty lot. Trained killers- gladiators- slaughtered innocent victims, or savage lions mauled and devoured them, all for the pleasure of the Roman people. This course takes a critical look at the varied deadly activities (munera, venationes, damnatio ad bestias), held in the Roman arena by examining ancient textual and visual sources, and modern scholarship. We will examine these spectacles in the broader context of Roman performance culture, religion and politics. Were these spectacles merely the product of a debased and declining culture? How has modern scholarship understood the apparent madness of the Roman arena?
Prerequisite(s): 6 credit units 200-level HIST and permission of the department
Note: Pre 1815; Europe and Great Britain
Instructor(s): Angela Kalinowski or other faculty member in History
Rationale: Improves department's offerings in the field, reflects the research interests of the instructor and responds to student demands.

## Languages \& Linguistics

## LINGUISTICS

## New Course(s) <br> LING 350.3 Career Internship

This course provides Linguistics students with an internship experience that allows them to develop their professional skills in the areas of linguistics, applied linguistics and sociolinguistics by engaging in experiential learning and volunteer work with host institutions.
Prerequisite(s): Minimum 48 credit units of university study and permission of the Linguistics Program Chair
Instructor(s): Veronika Makarova, Peter Wood
Rationale: This course is created to provide students with first-hand community learning experience aimed at developing a better appreciation of their potential careers as well as develop leadership roles in community while fostering the outreach connections between the university and community. The course also answers demonstrated need in the community for involving young scholars of linguistics into workforce and community events.

## Music

## Minor Program Revisions

## Bachelor of Music (all concentrations)

Add MUS 160.0 (Keyboard Proficiency) to all programs in requirement G2 Music.
Rationale: In March 2011, the Department of Music cancelled the three Keyboard Skills classes (MUS 117.1, MUS 217.1, MUS 317.1) from the B.Mus. degrees as these classes were no longer seen by faculty as necessary to teach as a structured class. In their place, a core Music History class (MUS 250.3) was added in order to better service the students' academic needs in the
B.Mus. degree streams. However, the Department of Music faculty also feels that students should be showing a minimum proficiency in keyboard which, with the cancellation of MUS $117.1,217.1$, and 317.1 , is no longer being addressed. As such, the Department would like to add the class MUS 160.0 to all six B.Mus. degree streams.
MUS 160.0 will be a way for students to prove to the Department of Music that they have the minimum keyboard proficiency before they graduate. They will be able to complete the MUS 160.0 class any time during their four years of study (it will be offered in T2 of every year), and will receive a Pass/Fail grade. They can prove their keyboard proficiency in one of two ways: 1) bring a certificate showing that they have completed a minimum of RCM Grade IV Piano; OR 2) perform at a level of at least RCM Grade IV Piano (a level that shows minimum expected competence and ability) for a Department of Music faculty member.
It is important for students to prove that they have proficiency in keyboard/piano for a number of practical reasons. For those students who need to work towards completing this proficiency during their B.Mus. degree, obtaining stronger keyboard skills will inevitably help them in all of their Music classes (especially Music Theory). For all B.Mus. students, a proficiency in piano will inevitably help them in their future professional life.
This is proposed to be a 0 credit unit course because of the variety of levels of work that students will have to complete to obtain a passing grade. Many students will have already completed this proficiency (i.e. by obtaining at least an RCM Grade IV Piano certificate) before they enter as B.Mus. students, and therefore will have to complete no extra work. Some students will have to test with a faculty member, but will have to do very little in the way of practice in order to prove their proficiency. Those B.Mus. students that enter the Department of Music with absolutely no keyboard knowledge may have to gradually work over their four years in order to complete their proficiency - however, they will achieve a higher level of overall musicianship at the end of their degree than if they did not complete this proficiency.

## New Course

## MUS 160.0 Keyboard Proficiency

1 or 2 Students show a minimum keyboard proficiency to the Department of Music either by providing their Royal Conservatory of Music (RCM) Grade IV Piano certificate or by performing piano at an RCM Grade IV level for a faculty member.
Note: Bachelor of Music students who have not completed this course will be assigned faculty keyboard proficiency testers in September of every year. It is the student's responsibility to arrange assessment and testing.
Instructors: Music Department faculty.
Rationale: See program change above.

## Philosophy

## Minor Program Revision

Philosophy B.A. Honours, 4-year, 3-year - St. Thomas More College

| Current requirements |
| :--- |
| B.A. 4-year |
| A6 Major Requirement ( $\mathbf{3 0}$ |
| credit units) |
| Choose 30 Credit Units from the |
| following: |
| At least 9 credit units at the 300- |
| level or higher. |
| Students are required to take <br> PHIL 240.3 and are encouraged to <br> take PHIL 404.3 in their fourth <br> year. <br> - 200-Level, 300-Level or 400- <br> $\underline{\text { Level PHIL Courses }}$ |

Proposed Requirements
B.A. 4-year

## A6 Major Requirement ( 30 credit units)

Students must choose at least 12 credit units at the 300 -level or higher.

- PHIL 202.3
- PHIL 208.3
- PHIL 241.3
- PHIL 404.3

Choose 6 credit units from the following:

- PHIL 206.3
- PHIL 209.3
- PHIL 210.3
- PHIL 211.3
- PHIL 212.3
- PHIL 215.3
- PHIL 218.3
- PHIL 219.3
- PHIL 240.3
- PHIL 306.3
- PHIL 312.3
- PHIL 313.3
- PHIL 314.3
- PHIL 315.3
- PHIL 319.3
- PHIL 412.3
- PHIL 413.3

Choose 3 credit units from the following:

- PHIL 226.3
- PHIL 231.3
- PHIL 233.3
- PHIL 234.3
- PHIL 235.3
- PHIL 236.3
- PHIL 237.3
- PHIL 238.3
- PHIL 262.3

|  | - PHIL 271.3 <br> - PHIL 333.3 <br> - PHIL 337.3 <br> - PHIL 362.3 <br> - PHIL 433.3 <br> - Other Philosophy courses approved by the STM Philosophy Department Head <br> Choose 9 credit units from the following: <br> - 200-Level, 300-Level or 400-Level PHIL Courses |
| :---: | :---: |
| B.A. 3-year | B.A. 3-year |
| A6 Major Requirement (24 credit units) <br> Choose 24 Credit Units from the following: <br> at least 6 credit units at the 300 level or higher. Students are recommended to take PHIL 240.3 <br> - 200-Level, 300-Level or $400-$ Level PHIL Courses | A6 Major Requirement ( 24 credit units) <br> Students must choose at least 6 credit units at the 300 -level or higher. <br> - PHIL 202.3 <br> - PHIL 208.3 <br> - PHIL 241.3 <br> Choose 3 credit units from the following: <br> - PHIL 206.3 <br> - PHIL 209.3 <br> - PHIL 210.3 <br> - PHIL 211.3 <br> - PHIL 212.3 <br> - PHIL 215.3 <br> - PHIL 218.3 <br> - PHIL 219.3 <br> - PHIL 240.3 <br> - PHIL 306.3 <br> - PHIL 312.3 <br> - PHIL 313.3 <br> - PHIL 314.3 <br> - PHIL 315.3 <br> - PHIL 319.3 <br> - PHIL 412.3 <br> - PHIL 413.3 <br> Choose at least 3 credit units from the following: <br> - PHIL 226.3 <br> - PHIL 231.3 <br> - PHIL 233.3 |


|  | - PHIL 234.3 <br> - PHIL 235.3 <br> - PHIL 236.3 <br> - PHIL 237.3 <br> - PHIL 238.3 <br> - PHIL 262.3 <br> - PHIL 271.3 <br> - PHIL 333.3 <br> - PHIL 337.3 <br> - PHIL 362.3 <br> - PHIL 433.3 <br> - Other Philosophy courses approved by the STM Philosophy Department Head <br> Choose 9 credit units from the following: <br> - 200-Level, 300-Level or 400-Level PHIL Courses |
| :---: | :---: |
| B.A. Honours | B.A. Honours |
| A6 Major Requirements (42 to 54 credit units) | A6 Major Requirements ( 42 to 54 credit units) Choose 42 to 54 Credit Units from the following: |
| Choose 42 to 54 Credit Units from the following: <br> At least 12 credit units must be at the 300 level or higher. Students are required to take PHIL 240.3 and PHIL 404.3. | Students must choose at least 12 credit units at the 300 -level or higher. <br> - PHIL 202.3 <br> - PHIL 208.3 <br> - PHIL 233.3 <br> - PHIL 241.3 <br> - PHIL 404.3 |
| - 200-Level, 300-Level or 400 Level PHIL Courses | Choose 3 credit units from the following: <br> - PHIL 204.3 <br> - PHIL 224.3 <br> - PHIL 226.3 <br> - PHIL 227.3 <br> - PHIL 243.3 <br> - PHIL 251.3 <br> - PHIL 265.3 <br> - PHIL 281.3 <br> - PHIL 285.3 <br> - PHIL 292.3 <br> - PHIL 294.3 <br> - PHIL 296.3 <br> - PHIL 302.3 |


|  | - PHIL 343.3 <br> - PHIL 404.3 <br> - PHIL 418.3 <br> - PHIL 446.3 <br> - PHIL 451.3 <br> - PHIL 455.3 <br> - PHIL 485.3 <br> - PHIL 492.3 <br> - Other Philosophy courses approved by the STM Philosophy Department Head <br> Choose 9 credit units from the following: <br> - PHIL 206.3 <br> - PHIL 209.3 <br> - PHIL 210.3 <br> - PHIL 211.3 <br> - PHIL 212.3 <br> - PHIL 215.3 <br> - PHIL 218.3 <br> - PHIL 219.3 <br> - PHIL 240.3 <br> - PHIL 306.3 <br> - PHIL 312.3 <br> - PHIL 313.3 <br> - PHIL 314.3 <br> - PHIL 315.3 <br> - PHIL 319.3 <br> - PHIL 412.3 <br> - PHIL 413.3 <br> Choose at least 3 credit units from the following: <br> - PHIL 226.3 <br> - PHIL 231.3 <br> - PHIL 234.3 <br> - PHIL 235.3 <br> - PHIL 236.3 <br> - PHIL 237.3 <br> - PHIL 238.3 <br> - PHIL 262.3 <br> - PHIL 271.3 <br> - PHIL 333.3 <br> - PHIL 337.3 <br> - PHIL 362.3 |
| :---: | :---: |


|  | - PHIL 433.3 <br> - Other Philosophy courses approved by the STM Philosophy Department Head <br> Choose 12-30 credit units from the following: <br> - 200-Level, 300-Level or 400-Level PHIL Courses |
| :---: | :---: |

Rationale: The STM Philosophy department is proposing to change its program requirements in various key areas in response to recommendations made on the occasion of an external review. The program changes are structured such as to maintain and strengthen the distinctiveness of the program (in accordance with STM Academic Plan Strategic Area of Focus 3) and adequately prepare students in light of changing entrance requirements for graduate programs in philosophy. The revisions change the logic requirement and introduce more specific requirements in the following areas 1) history of philosophy, 2) epistemology/metaphysics/ philosophy of religion and 3) ethics/social/political/legal philosophy.

## New Course

## PHIL 115.3 Introductory Indigenous Philosophy

This course introduces students to key concepts in indigenous philosophy, covering the main areas of philosophy such as value theory, the nature and limits of human knowledge, and the fundamental nature of existence. Sample topics include the unique character of Indigenous moral systems, Aboriginal ways of knowing, and the differences between Indigenous and Western European philosophies.
Instructor(s): Robert Hudson, Karl Pfeifer
Rationale: The Department of Philosophy currently has no course offerings in the area of Indigenous Philosophy, and the need for innovative and culturally relevant academic programming is clearly identified in the areas of focus for IP3. The course is being pitched at the 100 level so that it is accessible to new students to the university, and addresses a need specified in the Final Report of the First-Year Review Steering Committee (for example, it could play a role in the projected Aboriginal Student Achievement Program). The course could also become a useful curricular resource for the Learning Communities offered through the University Learning Center, and additionally could be offered through the Arts and Science Transition Program offered at the University of Saskatchewan's Royal West campus. The primary faculty contact for the course (Dr. Hudson) has a research interest in the area of indigenous philosophy, and employs a graduate student on the topic of aboriginal ways of knowing. Improves department's offerings in the field, reflects the research interests of the instructor and responds to student demands.

## DIVISION OF SCIENCE

## Revision to "Natural Science" headings - item for information only

The Calendar currently uses the heading "Natural Science" for the science courses offered in Arts \& Science. This will be changed to "Science" for future publications. This will better align with the name of the Division of Science, and will be more inclusive, as some science courses offered under this heading do not fall under the category of "natural sciences", as commonly defined. This change affects main category headings C1, A3, B3, D3 in Arts \& Science programs, as well as a number of sub-headings within requirements in Arts \& Science, Agriculture \& Bioresources and Engineering.

## Course listing - item for information only BIOL 224/BMSC 224

Biology 224 and Biomedical Sciences 224 are the same course, cross listed for administrative reasons. Currently these courses are listed in program requirements in the same way as two different courses would be listed, which has caused significant confusion for students, who try to find two, different courses. To alleviate this, the courses will now be listed as "BIOL 224/BMSC $224 "$ in the requirements for all relevant programs. This course is required in the Anatomy \& Cell Biology; Archaeology (B.Sc.); Biochemistry; Biochemistry \& Biotechnology; Biology; Biology \& Biotechnology; Biomolecular Structure Studies; Biotechnology, Microbiology \& Immunology; Environmental Biology; Microbiology \& Immunology; Palaeobiology; Physiology \& Pharmacology; and Toxicology programs. The course is a restricted elective in the Bioinformatics; Geology; and Psychology (B.Sc.) programs.

## Environmental Biology

## Minor Program Revision

## Environmental Biology B.Sc. Honours and 4-year

Change current Requirement C2 to the standard C2 "Humanities Writing Requirement" as listed in Biology, Biology \& Biotechnology, Chemistry, Geology, etc. The requirement as it appears in this program should be automatically included in any update made to this standard list.
Change from:
C2 Humanities Writing Requirement (6 credit units)
Choose 6 Credit Units from the following:

- 100-Level ENG Courses
- 100-Level HIST Courses
- INTS 101.12

To:
C2 Humanities Writing Requirement (6 credit units)
Choose 6 Credit Units from the following:

- ENG 110.6
- ENG 111.3
- ENG 112.3
- ENG 113.3
- ENG 114.3
- HIST 110.3
- HIST 111.3
- HIST 114.6
- HIST 120.6
- HIST 121.3
- HIST 122.3
- HIST 140.6
- HIST 150.6
- HIST 151.3
- HIST 152.3
- HIST 170.6
- INTS 101.12
- LIT 100.6
- PHIL 110.6
- PHIL 120.3
- PHIL 133.3

Rationale: The current, shorter list for the C 2 requirement was used as a placeholder during development of the Environmental Biology program and was not replaced with the full Standard C 2 requirement when the program was submitted. This change will make the Environmental Biology C2 requirement equivalent to other BSc programs in the College and permit easier transfer in to this program by permitting previous C2-eligible courses to be used.

## Interactive Systems Design

## Minor Program Revision <br> Interactive Systems Design BA\&Sc 4-year

Remove ASTR 102.3 from the Science Distribution Requirements

## Science Distribution Requirements (18 credit units)

- CMPT 106.3
- CMPT 115.3

Choose $\mathbf{3}$ Credit Units from the following:

- STAT 245.3 or PLSC 314.3
- Note that STAT 245.3 has a prerequisite of MATH 100.3, MATH 101.3, MATH 110.3, STAT 103.3, or AP MATH

Remaining credit units to be selected from the following areas, such that no more than 6 credit units are from any one area; no more than 3 credit units from MATH:

## Mathematics

- MATH 110.3
- MATH 116.3
- MATH 264.3
- MATH 266.3


## Physics \& Astronomy

- ASTR 102.3
- ASTR 103.3
- PHYS 111.6
- PHYS 121.6
- PHYS 128.3


## Chemistry

- CHEM 112.3
- CHEM 115.3
- CHEM 250.3


## Earth Science

- GEOG 120.3
- GEOL 121.3
- GEOL 122.3


## Biological Science

- BIOL 120.3
- BIOL 121.3

Rationale: ASTR 102.3 is not a Type C science course, and therefore cannot be used in this requirement.

## Food Science

Minor Program Revision
Food Science BSc Honours and 4-year
Add MATH 166 as an option to MATH 112

## C4 Mathematics/Statistics Requirement ( 6 credit units)

- MATH 110.3
- MATH 112.3 or MATH 116

Rationale: MATH 112 has not been offered recently; therefore it is necessary to include another course option.

## DIVISION OF SOCIAL SCIENCES

## Archaeology and Anthropology

## Minor Course Revision

ANTH 302.3 The Practice of Ethnography
Prerequisite Change:
Old: 6 credit units of 200-level anthropology and at least 3 credit units from ANTH 311, 321, $322,326,327,328,329,337$, or 339.
New: 3 credit units 200-level ANTH
Change to Note:
Old: Each student is expected to undergo the experience of designing and executing a research project during the term as a practical training component of this course. For all ethnology students this is a highly recommended course.
New: Students who have credit for ANTH 430 may not take ANTH 302 for credit.
Rationale: These changes should have been included in the previous (and now approved) course revision whereby ANTH 430.2 (The Practice of Ethnology) was recast as ANTH 302.3 (The Practice of Ethnography). They in no way affect the content or evaluation criteria for ANTH 302.3.

## International Studies

## Minor Program Revisions

## International Studies B.A. Honours, 4-year

International Cooperation \& Conflict Stream, Requirement B6:
Remove HIST 244.6, 262.3, 378.3, and LAW 433.3, 457.3 from list of optional courses
Latin American Studies Stream, Requirement B6:
Remove HIST 377.3 from list of optional courses
Move GEOG 395.3 from list of optional courses to Guatemala Term Abroad
Remove SOC 385.3 from Guatemala Term Abroad

Development Studies Stream, Requirement B6:
Remove HIST 244.6, NS 365.3, SOC 201.3 and WGST 202.3 and 353.3 from list of optional courses
Remove POLS 444.6 and SOC 385.3 from Guatemala Term Abroad

Rationale: Deleted courses are no longer available. GEOG 395.3 will now be offered as part of the Guatemala Term Abroad.

## Native Studies

## New Course <br> NS 373.3 Indigenous Masculinities in the Global Context

1 or 2 Though the literature on masculinity has increased dramatically in the last 15 years, researchers have only recently begun to explore the notion of Indigenous masculinities. The majority of research has emerged in the pacific islands and Africa, but has garnered sparse attention in North America. Through articles and books, lectures, class discussion, and written assignments, this course will introduce students to the issues of masculinity from global Indigenous perspectives and provide an introduction to the general masculinity literature. The course will explore to what degree the notions of masculinity in general, and global Indigenous masculinities specifically, applies to the North American context.
Prerequisite(s): 12 credits in Native Studies
Note: NS 271.3 is a recommended course.
Instructor(s): Robert Innes
Rationale: This course provides an opportunity for students to explore issues facing Indigenous men. As yet, there is no such course being offered in Canada. Improves department's offerings in the field, reflects the research interests of the instructor and responds to student demands.

## Northern Studies

## Minor Program Revision

Northern Studies BA Honours, 4-year, 3year
Requirement B1:
Delete NS 105.3 and 106.3 as required courses and replace with NS 107.3.
Add POLS 111.3 and 112.3 as required courses.
Change note regarding GEOG 130.

## B1 Basic Social Science Requirements (12 credit units)

- NS 105.3
- NS 106.3
- NS 107.3
- POLS 111.3
- POLS 112.3

Choose 63 Credit Units from the following:
GEOG 130.3 is recommended (required for Environmental Impact Assessment Stream)

- POLS 111.3 and POLS 112.3 required for Aboriginal Administration Stream (see B6)
- GEOG 130.3 and 3 credit units Social Science required for Environmental Impact

Assessment Stream (see B6)

## Social Sciences list (unchanged)

Requirement B6:
Move NRTH 101.3 to the major requirement from requirement B7.
Increase required credit units by 3 (to account for NRTH 101)
Requirement B7:
Decrease required credit units by 3 to account for the move of NRTH 101.3.
Rationale: NS 105.3 and 106.3 have been converted to NS 107.3, necessitating an addition of 3 c.u. to the NRTH program. POLS 111.3 and POLS 112.3 are regularly offered online, meeting the needs and interests of the target audience of the Northern Studies program - Northerners taking courses by distance education. GEOG 130.3 is not usually offered online, and so it is not a basic social science requirement, but is still a basic requirement for the Environmental Impact Assessment stream. Adding NRTH 101.3 to the major requirement makes explicit that this course provides the foundation for all other Northern Studies courses.

## Minor Course Revision

## NRTH 101.3 Introduction to Circumpolar World

Change to Note:
Old: This course may only be used as an elective in requirement 7.
New: This course may be used in the General or Elective requirement for Arts \& Science programs.
Rationale: NRTH 101 is an interdisciplinary (and interdivisional, as defined by Arts \& Science) course. The General requirement exists to ensure students have a breadth of study. As this course has breadth built-in, it is appropriate that it may be used in this requirement as well.

## Political Studies

## Course Split - Item for information only

POLS 247.6 Comparative Politics of Latin America
Course is split into POLS 253.3 and POLS 254.3
Rationale: The department is removing 6 credit unit courses from the offerings. Splitting the 6 credit unit courses gives student greater flexibility and choice.

## POLS 353.3 Conquest and Revolution in Latin America

1 or 2 This course is a comparative analysis of Latin American politics at the introductory level and it has three main objectives: Firstly, it aims to introduce students to the key issues and concepts of politics in the region. Secondly, it intends to study critically the roots of the revolutionary upheavals that engulfed the region in the latter part of the $20^{\text {th }}$ century, the legacies of these revolutions, and the factors that led to 'wave' of democratic transitions by century's end.
Finally, the course seeks to develop student's research, writing and analytical skills.
Prerequisite(s): POLS 111.3 and (POLS 112.3 or IS 100.3); or 60 credit units at the university level
Note: Students with credit for POLS 247.6 may not take POLS 253.3 for credit.
Instructor(s): Kalowatie Deonandan
AND

## POLS 354.3 Democratization and Development in Latin America

1 or 2 This course is a comparative analysis of Latin American politics at the introductory level and it has three main objectives: Firstly, it aims to introduce students to the key issues and concepts of politics in the region. Secondly, it intends to study critically two major developments which have marked Latin America's recent history (since the end of the $20^{\text {th }}$ century), the twin developments of democratization and neoliberalism, which some have referred to as the silent revolutions. Finally, the course seeks to develop student's research, writing and analytical skills.
Prerequisite(s): POLS 111.3 and (POLS 112.3 or IS 100.3); or 60 credit units at the university level
Note: Students with credit for POLS 247.6 may not take POLS 254.3 for credit.
Instructor(s): Kalowatie Deonandan

## COLLEGE OF ENGINEERING

The following items have been approved by Academic Programs \& Standards Committee:

## 1. Biological Engineering 2012-13 Catalogue Changes

i) Making BLE 312.3/EE 204.3 a Required Course

That BLE 312.3/EE 204.3 be a required course in the Biological Engineering curriculum.

From: Year 3 Term 1
BLE 312.3
To: Year 3 Term 1
BLE 312.3 or EE 204.3
Rationale: Students need this in preparation for BLE 313 (Dr. Noble). It is currently unofficially required.
ii) Course Title Change

From: BLE 482.3 Environmental Engineering in Biosystems

## To: BLE 482.3 Waste Management and Utilization

Rationale: The content is complementary to other classes in the college but is unique enough to stand alone and potentially act as an elective to other programs.
iii) Change to Catalogue Description and Title

From: BLE 495.6 Design Capstone I
Design is presented as both art and science, where solutions are developed using creative design processes that include analysis, synthesis and iterative decision making. Students explicitly define design problems, goals, objectives and constraints, complete an information search, and propose a plan for the analysis and specification of the design solution. A presentation of the design problem and the proposed approach to the design solution will be presented in a seminar to the department.

## To: BLE 495.6 - Design Capstone

In the first part of the course (Term 1), design is presented as both art and science, where solutions are developed using creative design processes that include analysis, synthesis and iterative decision making. Students explicitly define design problems, goals, objectives and constraints,
complete an information search, and propose a plan for the analysis and specification of the design solution. A presentation of the design problem and the proposed approach to the design solution will be presented in a seminar to the department. The second part of the course (Term 2) is a self-directed. Students perform the analysis associated with the design problem and are able to specify a design solution at the end of the course including an economic analysis. Students must submit a comprehensive report, describing the design solution. The final design solution is also presented to the faculty and staff of the department in the form of poster and oral presentations.

Rationale: The current description was used when we had ABE395 and ABE495. We need to update the Catalogue description to reflect the current program.
iv) Change to Catalogue Description and Prerequisite

From: BLE 475.3 Off Highway Equipment Design
This class involves the design, construction and testing of an off highway pulling unit to compete in the ASABE International Quarter Scale Tractor Design Competition. Students will gain experience in working with a design group, machine design, setting design constraints, component testing, fabrication, machine performance testing, design report preparation and business management. Students taking this course for credit will be required to assume responsibility for one aspect of the machine and prepare all design documentation, operating and safety procedures and component testing reports. Students are also required to liaison with industrial suppliers and sponsors of the University of Saskatchewan entry. Solid Works graphics design software is used extensively.
Formerly: ABE 475
Prerequisite(s) or Corequisite(s): BLE 495 or ME 495.

## To: $\quad$ BLE 475.3 Off Highway Equipment Design

This class involves the design, construction and testing of an off highway prototype. Students will gain experience in working with a design group, machine design, setting design constraints, component testing, fabrication, machine performance testing, design report preparation and business management. Students taking this course for credit will be required to assume responsibility for one aspect of the machine and prepare all design documentation, operating and safety procedures and component testing reports. Students are also required to liaison with industrial suppliers and sponsors of the program. Solid Works graphics design software is used extensively.
Formerly: ABE 475

Prerequisite(s) or Corequisite(s): BLE 495, ME 495 or EE 495.
Rationale: There is interest from other groups of students in taking the course that would be building other prototypes. The class would remain a design class with the same syllabus. The SAE program is one such group would like to take the course.
v) Course Title Change

From: BLE 303.3 Principles of Food and Feed Processing Equipment

## To: BLE 303.3 Principles of Food and Bioproducts Engineering

Rationale: Changes to BLE 303, long term plan and requested by the College of Agriculture and Bioresources as this is a service course for that college.
vi) Catalogue Description for Biological Engineering

From: Biomechanical Systems Engineering, creating safer, more efficient, and environmentally sustainable production systems for plants and animals; machinery design for agriculture, horticulture, acquaculture, and forestry; building systems for livestock, laboratory animals, horticulture, controlled-environment chambers, and storage of agricultural and food products; instrumentation, monitors and controls; standards and safety.

Bioprocess Engineering, improving and converting biological materials; value-added processing (drying, binding, separation) of agricultural crops for use as food, feed, fibre, energy; nutraceuticals and pharmaceuticals; primary processing of waste materials for land application; quality control in processing operations; handling systems for granular and fibrous materials; energy conservation and utilization; computer image analysis; engineering in support of biotechnology.

Students wanting to apply to the College of Medicine from the Biological Engineering program under the "Prerequisites Only Requirement" must complete the Bioprocess Engineering theme with restricted elective choices and obtain "a minimum overall average of $78 \%$ with no individual prerequisite below $60 \%$ "
(http://www.medicine.usask.ca/education/medical/undergrad/admissions/admissionsinformation/index.html)

## To: $\quad$ Consult with the department for further information on the following themes:

Biomechanical Systems Engineering: mechanical design that interacts with biological materials and living systems; creating safer, more efficient, and environmentally sustainable production systems for plants, animals and human. Students study for careers in the following areas:
$\square$ Agricultural Machinery Design - Machinery design for agriculture and forestry production systems; instrumentation, monitors and controls; standards and safety. Students go on to careers with many of the major machinery manufacturers worldwide.

## $\square$ Plant and Animal Production Systems Engineering -

 production systems for plants and animals; building systems for livestock, horticulture, and storage of agricultural and food products; transportation systems for animals and horticultural products; instrumentation, monitors and controls.Biomedical Engineering - the application of engineering principles and design concepts to medicine and biology.
o The Biomedical Engineering focus has many of the same classes as the Machinery Design and Plant and Animal Production Systems. It is intended as preparation for continued education in the field such as graduate studies in the Division of Biomedical Engineering. Students may also be interested in Mechanical Engineering, Electrical Engineering or Engineering Physics as a pathway to an engineering career associated with the medical field.

Bioprocess Engineering, improving and converting biological materials; value-added processing (drying, binding, separation) of agricultural crops for use as food, feed, fiber, energy, nutraceuticals and pharmaceuticals; primary processing of waste materials for land application; quality control in processing operations; handling systems for granular and fibrous materials; energy conservation and utilization; computer image analysis; engineering in support of biotechnology. Students study for careers in the following areas:

Post-harvest Process Engineering - includes design for preprocessing, densification, disinfections, extraction, transportation, or other related activities.

Food and Bioproducts Engineering - includes design for human food and animal feed production and processing systems,
biofuels production, extraction of higher value components and other related activities.

Biotechnical Engineering - includes design for extraction and processing of higher value components for food products, nutraceuticals, pharmaceuticals and other related activities.

Waste Management and Utilization - design of waste management, processing and utilization systems for production and processing of agricultural products and other biomass processing industries.

Pre-Medicine/Pre-Vet: prepares students for entry into the College of Medicine, Western College of Veterinary Medicine or graduate work in the Division of Biomedical Engineering. Classes for the first three years are similar to the Bioprocess Engineering with the restriction of 3cu in Biology and 6cu of English for selective electives. Students can meet the requirements of application to the College of Medicine under the "prerequisite only" category.

Note: Students wanting to apply to the College of Medicine from the Biological Engineering program under the "Prerequisites Only Requirement" must complete the Bioprocess Engineering theme with restricted elective choices and obtain "a minimum overall average of $78 \%$ with no individual prerequisite below $60 \%$ " http://www.medicine.usask.ca/education/medical/undergrad/admissions/admissio ns-information/index.html).

Soil and Water Engineering, land and water management, managing and protecting resources; soil and water conservation; water management for irrigation and drainage; soil remediation and reclamation; utilization of waste materials in plant-soil systems. Students study for careers in the following areas:
$\square$ Water Management Engineering - design for management of water for utilization in the production of agricultural crops and plant and animal production systems. Includes management of waters potentially impacted from these activities.

Irrigation Engineering - design of water utilization systems for agricultural crop production

Land Management - design of systems for the conservation and preservation of lands disturbed by agricultural activities. (99\% of all land disturbance is for agricultural production)
$\square$ Soil Reclamation and Remediation - design for reclamation and remediation of soils that interact with plant and animals systems. Includes both the design to mitigate adverse impacts as well as design to correct adverse impacts.

Rationale: The name Biomechanical Engineering Systems Engineering is not particularly descriptive of what we actually offer. Neither is it a name that student will search for on the internet. The name Natural Resources Engineering is causing some concern with other disciplines as it can be taken to refer to mining or water engineering. In addition, it is also not a common name found at other schools or in the CSBE/ASABE. Undergraduate students are requesting a clearer description of the areas of engineering that are associated with the Biological Engineering Program. Keep the current headings of "Biomechanical Engineering" and "Bioprocess Engineering" and add additional information to explain the subareas and the career opportunities. Change the "Natural Resources Engineering" to "Soil and Water Engineering" to match the traditional name of the area of study used by CSBE and ASABE. Attempt to integrate key terms such as "Agricultural Machinery Design" and buzz words such as "biomass" and "biological materials" into the descriptions to facilitate internet searches to tie to the Biological Engineering Program web page.

## 2. Chemical Engineering 2012-13 Catalogue Changes

## i) Change Course Descriptions

From: CHE 210.3 - Fluid Mechanics I 2(3L-2T alt weeks)
Single phase fluid flow is considered for both gas and liquids. The mechanical energy balance and fluid force balance equations are developed with applications. Newtonian and non-Newtonian concepts are introduced including rheological measurement. The concepts of laminar and turbulent flow are developed and applied to flow in pipes and networks, and fluid metering. Compressible fluid flow is also introduced.

## To: CHE 210.3 - Fluid Mechanics I 2(3L-2T alt weeks)

Single phase fluid flow is considered for both gas and liquids. Newtonian and non-Newtonian concepts are introduced. Mass, energy and momentum balance equations, including Bernoulli equation (mechanical energy) are developed and applied to various fluid flow systems. The concepts of laminar and turbulent flow regimes are discussed and applied to flow in pipes and networks, and fluid metering. Other topics include pump and compressors and flow through consolidated and unconsolidated porous media.

From: CHE 320.3 - Fluid Mechanics I 1(3L-2T alt weeks)
Pumping of fluids, gas-liquid pipe flow, flow through consolidated and
unconsolidated porous media, fluidization and two-phase separation processes. Applications include topics of interest in the petroleum and mineral processing industries.

To: CHE 320.3 - Fluid Mechanics II 1(3L-2T alt weeks)
Navier-stokes equations are developed and applied to solve chemical processing and applications. Dimensional analysis, stream function, vorticity, and potential flow are introduced. Selected topics of advanced fluidic mechanics include two-phase flow, fluidization, non-Newtonian fluids, compressible fluids, turbulent, and computational fluid dynamics (CFD).

From: CHE 326.3 - Plant Design Project 2(3L-1.5T)
Students will perform a detailed design of a chemical engineering process including plant location, plant layout, Process Flow Diagram (PFD), material and energy balances, simulation, equipment sizing, costing, safety, control, piping and instrumentation diagram (PID) and economics. Each student will act as a process manager for a specific phase of the project. Projects will be provided by the course instructor.

To: $\quad$ CHE 326.3 — Plant Design Project 2(3L-1.5T)
Students will work in teams and perform a detailed design of a chemical engineering process including plant layout, Process Flow Diagram (PFD), material and energy balances, simulation, equipment sizing, costing, safety, and economics. Each student will act as team manager for a specific phase of the project. Projects will be provided by the course instructor.

Rationale: To update the course descriptions as they are being taught.
ii) Technical Elective Group B

ADD GEOE 377.3 Introduction to Mining and Mineral Processing Engineering to the Group B of the technical electives.

Rationale: To give students a wide range of electives to choose from.
iii) Replace EE 201.3 with EE 204.3

From: Year 2 Term 1
BLE 312.3 or EE 201.3
To: Year 2 Term 1
BLE 312.3 or EE 204.3

Rationale: The EE 201.3 has been modified to better sit the Electrical and Computer Engineering program and the EE 204.3 has been developed specifically to address the needs for electrical knowledge for nonelectrical disciplines.
iv) Course Title Change

From: CHE 470.0 Field Trip

## To: CHE 470.0 Industrial Site Visitation

Rationale: To make the title more consistent with the course content.
v) Prerequisite Change

From: CHE 453.3 Corrosion Engineering Prerequisite(s) or Corequisite(s): CHE 223

To: CHE 453.3 Corrosion Engineering Prerequisite(s) or Corequisite(s): CHE 223 or ME 227

Rationale: To make this course available to ME students.

## 3. Civil and Geological Engineering 2012-13 Catalogue Changes

i) Prerequisite Change

From: CE 318.3 Applied Engineering Mathematics
Prerequisite(s): CMPT 116.3 (taken) and CE 225.3 (taken) and GE 213.3 (taken) and MATH 224.3 (taken)

To: CE 318.3 Applied Engineering Mathematics
Prerequisite(s): CMPT 113.3 (taken) and CE 225.3 (taken) and GE 213.3 (taken) and MATH 224.3 (taken)

Rationale: This was missed last year when CMPT 113.3 was approved in lieu of CMPT 116.3.

## Civil Engineering Changes

i) $\quad$ Delete CE 316.3

To DELETE CE 316 Geomatics from the Civil Engineering program, Year 3 Term 2. (LAST OFFERED 2012-13)

Rationale: The primary impetus for deleting CE 316 at this time is the upcoming retirement of the sole faculty member in the Department of Civil and Geological Engineering with expertise in this field. It is thought to be highly unlikely that a replacement faculty member with expertise in Geomatics will be pursued, as this is not an identified strategic direction for the department or the college.
Furthermore, Geomatics as a topic area is not generally taught in civil engineering programs, but instead evolved in our program largely due to the interest and background of the faculty member in question. An informal survey of civil engineering programs across Canada showed that, of the seven programs investigated, only one offered a compulsory course in Geomatics, while one other program offered a 4th year technical elective in this area. Implementation Plan: The existing CE 316 course will be offered for the final time in the 201213 academic year. This will allow students who entered the CE program this year to access the course. After that time, students with irregular programs that still require CE 316 as part of their program will be allowed to take GEOG 222 or 322 as approved alternatives, a substitution which has been used several times in the past several years for other reasons.
Impact on Other Programs: CE 316 will also be deleted from the GeoE program (as detailed in a separate document), the only other program to routinely take CE 316. No other impacts are anticipated.

Coverage of Deleted Material: A review is currently underway to evaluate what portion, if any, of the material currently being taught in CE 316 can and should be retained in the CE program. One possibility that is being considered is to include some the CE 316 material in an expanded CE 271 Spring Survey Camp. In addition, the possibility of adding the related courses of GEOG 222 and 322 to the CE Group F technical elective list is being explored; preliminary discussions have taken place with the Department of Geography.

## ii) Creation of New course CE 330.3 Geotechnical Engineering

## NEW - CE 330.3 Geotechnical Engineering as a required course in Year 3 Term 2 in the Civil Engineering program. (FIRST OFFERED 2013-14)

Rationale and Description: The sequencing of material in the geotechnical/geoenvironmental stream of courses within the CE program has been a concern since our program was last revised. Since all compulsory material has to be covered by the end of 3 rd year, as technical courses in $4^{\text {th }}$ year are electives, it was apparent that too much material has been forced into GeoE 218 (Engineering Geology) and CE 328 (Introduction to Geotechnical Engineering). It is therefore
proposed to move the existing 4th year technical elective CE 416 (Geotechnical Practice) to become a new compulsory course in the 3rd year of the program. At the same time, some of the material currently taught in CE 328 will be relocated to this new course to improve the overall flow and pace of the two courses. A description of the new course is provided below:

Catalogue Description of CE 330 Geotechnical Engineering: The course focuses on practical application of soil mechanics concepts to the analysis and design of foundations, excavations, slopes, earthworks and earth-retaining systems. Topics include: design and construction of shallow foundations on soils and rocks based on bearing capacity and settlement analysis; design and installation of deep foundations including driven and bored piles; design and construction of earth retaining systems; slope stability; geosynthetics and soil reinforcement; ground improvement; and, special construction techniques. Practicum component includes hands-on experience in extracting design parameters from results of site investigation and laboratory tests and preparing a geotechnical design report. A detailed course outline, along with the new course proposal form is attached. Resource Implications: Since the new course is essentially a replacement for the existing CE 416, and takes the place of the deleted CE 316, there will be a net reduction in teaching resources required since there will be one less course taught. Moving the second geotechnical course to 2nd term from its existing location in 1 st term will also improve the scheduling in the geotechnical undergraduate laboratory since it will remove potential conflicts with CE 328. The only negative resource implication will be the increase in the number of students taking the $2^{\text {nd }}$ geotechnical course when it is converted from an elective to a compulsory course; however, this will be more than offset by the resources freed up by the deletion of CE 316.
Impact on Other Programs: The GeoE program will also adopt the new course as a compulsory part of its 3rd year program (as described in a separate document). No other programs are directly affected.
iii) Deletion of CE 416.3

DELETE CE 416.3- Geotechnical Engineering Practice and
REMOVE from the Group C elective list in the Civil Engineering program. (LAST OFFERED 2012-13)

Rationale and Description: As described above, CE 416 is being converted into the new course CE 330 which will be located in the 2nd term of the 3rd year program.
Implementation Plan: The existing CE 416 course will be offered for the last time in the 2012-13 academic year. After that, students in the existing program that wish to take CE 416 as a technical elective will be allowed to substitute the new CE 330 course.

## iv) Change Course Name and Catalogue Description

From: CE 328.3 Introduction to Geotechnical Engineering
Covers essential concepts in soil mechanics and foundation engineering. Topics include phase relationships, consistency limits, soil classification, compaction, seepage and groundwater flow, effective stress concept, shear strength of soils, transient pore-water pressure and consolidation, lateral
earth pressure, bearing capacity of soils and its application to the design of shallow and deep foundations. A brief introduction to slope stability analysis is also provided.

## To: CE 328.3 Fundamentals of Soil Mechanics

The course covers essential concepts in soil mechanics. Topics include compaction, seepage theory, groundwater flownets, stresses and strains in soils, effective stress concept, consolidation, shear strength of soils, and earth pressure theory. The course emphasizes the learning of soil mechanics concepts. Some examples of application of these concepts to geotechnical engineering practice are also provided to reinforce these concepts. Laboratory practicum component of the course provides handson experience of laboratory tests that are commonly used for determination of geotechnical properties of soils.

Rationale: As noted above, the creation of the new compulsory course CE 330 enables some redistribution of material to improve the sequencing and pace of material contained in the two geotechnical courses. As the name change suggests, the revised CE 328 course will now focus more on soil mechanics fundamentals, providing a better foundation in these concepts, rather than including some aspects of geotechnical design (which will now be contained in CE 330). Extent of Changes to CE 328: Approximately 7 lectures (out of 39) of material currently taught in CE 328, or approximately $18 \%$ of the course content, will be revised.
Impact on Other Programs: Two other programs access CE 328: GeoE and EnvE. Since the GeoE students will now be taking both CE 328 and CE 330 as compulsory courses, their coverage of the material involved in both soil mechanics and geotechnical design will be significantly enhanced. In discussions with Charles Maule, coordinator of the EnvE program, it is also believed that the proposed changes to CE 328 will also be beneficial to EnvE students as the enhanced focus on soil mechanics is more relevant to environmental issues as compared to the foundation design material that is being moved out of the course.

## Change in Prerequisite

From: CE 466.3 Geotechnical Modelling Prerequisite(s): CE 328 and CE 318 (taken)

## To: CE 466.3 Geotechnical Modelling (First Offered 2014-15) Prerequisite(s): CE 330 and CE 318 (taken)

Rationale: Some of the prerequisite material for CE 466, particularly that relating to earth retaining systems; slope stability; geosynthetics and soil reinforcement, will now be taught in the new CE 330, rather than CE 328 where it has been covered previously.

Impact on Other Programs: Since this elective course is routinely accessed by only CE and GeoE students, both of which will have the required prerequisites, no other impact is anticipated.
v) Change in Prerequisite

From: CE 329.3 Transportation Engineering Prerequisite(s) or Corequisite(s): CE 316

To: CE 329.3 Transportation Engineering (First Offered 2013-14)
Prerequisite(s) or Corequisite(s): CE 271 and GE 210 (taken)
Rationale: With the deletion of CE 316, the addition of the CE 271 prerequisite will ensure students have the required exposure to concepts involving horizontal and vertical measurement control, as well as an introduction to horizontal curves; these concepts are used in the CE 329 design project. The addition of the GE 210 prerequisite will ensure that students have the necessary statistical background for the study of traffic control.
Impact on Other Programs: No impact is anticipated, since only CE students routinely take this course.

## Geological Engineering Changes

i) $\quad$ Deletion of CE 316.3

DELETE CE 316.3 Geomatics from the Geological Engineering program, Year 3 Term 2. (Effective 2013-14)

Rationale: This course is offered by the CE program and is being deleted. Implementation Plan: The existing CE 316 course will be offered for the final time in the 2012-13 academic year. This will allow students who entered the GeoE program this year to access the course. After that time, students with irregular programs that still require CE 316 as part of their program will be allowed to take GEOG 222 or 322 as approved alternatives, a substitution which has been used several times in the past several years for other reasons. Coverage of Deleted Material: A review is currently underway to evaluate what portion, if any, of the material currently being taught in CE 316 can and should be retained in the GeoE program.
ii) Addition of New Course CE 330.3

ADD CE 330.3 Geotechnical Engineering as a required course in Year 3 Term 2 in the Geological Engineering program. (Effective 2013-14)

Rationale: The new course will take the place of CE 316 in the 3rd year GeoE program. Since this new course contains a significant amount of material that is relevant to geological engineering, including the design of foundations on rock, it is thought to be a valuable addition to the program.
iii) Removal of CE 416.3 Elective List

## REMOVE CE 416.3 Geotechnical Engineering Practice from the Group C elective list in the Geological Engineering program. (Effective 2013-14)

Rationale and Description: As described above, CE 416 is being converted into the new course CE 330 which will be located in the 2nd term of the 3rd year program.
iv) Change in the Geological Program Catalogue Description

From: Geological Engineering is designed for those persons interested in the exploration, development and recovery of subsurface resources. A broad background in aspects of geotechnical, mining, and petroleum engineering is provided. Some degree of specialization in each of these areas is possible in the selection of upper year course.

To: Geological Engineering is designed for those persons interested in the exploration, development and recovery of subsurface resources, subsurface waste disposal, assessment and protection of groundwater resources and the design and development of stable foundations for civil structures such as buildings, bridges, highways and dams. A broad background in aspects of geotechnical, mining, and petroleum engineering is provided. Some degree of specialization in each of these areas is possible in the selection of upper year course.

Rationale: The new description more closely reflects the current scope of the program.

## v) Change in Prerequisites

From: GEOE 378.3 Engineering Geological Mapping
Prerequisites(s): GEOL 224 and GEOL 245 and GEOL 258 and GEOE 315.

To: GEOE 378.3 Engineering Geological Mapping
Prerequisites(s): GEOL 245 and GEOL 258 and GEOE 315.

Rationale: Geol 224 is Mineralogy. This course is not used in the GeoE 378 Engineering Geological Mapping. Sufficient geology is taught in Geol 245, Sedimentary Rocks and Geol 258, Structural Geology.

## 8. Mechanical Engineering 2012-13 Catalogue Changes

i) ME Technical and Science elective List

CHE 453.3 Corrosion Engineering and GEOE 377.3 Introduction to Mining and Mineral Processing Engineering be ADDED to the ME Technical and Science elective list.

Rationale: Students will have a wide variety of courses to take.
ii) Prerequisite Change

From: ME 335.3 Fluid Mechanics II
Prerequisite(s): MATH 224 (taken), ME 215 and ME 251
To: ME 335.3 Fluid Mechanics II
Prerequisite(s): MATH 224 (taken), and ME 215
Rationale: Vector Algebra is no longer being taught in ME 251.
iii) Prerequisite Change

From: ME 321.3 Engineering Analysis II
Prerequisite(s): ME 251 and MATH 224 (taken)
To: ME 321.3 Engineering Analysis II
Prerequisite(s): ME 251(taken) and MATH 224 (taken)
Rationale: ME 251 consists of probability and statistics, linear algebra, and numerical solutions. The parts that ME 321 requires from ME 251 are linear algebra and numerical solutions, which are about $40 \%$ of the ME 251 content.
iv) Replace EE 201.3

REPLACE EE 201.3 with EE 204.3 in the Mechanical Engineering Program, Year 2 Term 1.

Rational: The EE 201.3 has been modified to better sit the Electrical and Computer Engineering program and the EE 204.3 has been developed
specifically to address the needs for electrical knowledge for nonelectrical disciplines.

## 9. General Engineering 210.3 2012-13 Catalogue Changes

From: GE 210.3 Probability and Statistics
Note: Students with credit for PLSC 314, STAT 244 or STAT 245 may not take this course for credit.

To: GE 210.3 Probability and Statistics
Note: Students with credit for PLSC 314 or STAT 245 may not take this course for credit.

Rational: STAT 244 is NOT used to fulfill the GE 210 requirement towards the BE degree. This was an error.

## 10. Items for Information:

Interdisciplinary use of subject codes:
Two Environmental Engineering courses ENVE 201.3 Principles of Environmental Engineering and ENVE 495.6 Capstone Design Project are being moved to the academic authority of the Department of Civil and Geological Engineering.

## College of Engineering programs: Revised list of Humanities or Social Science Electives

| Current | Revised |
| :---: | :---: |
| ANTH 220.3 | Anth 111.3 Introduction to Cultural Anthropology |
| ANTH 224.3 | Anth 220.3 Introduction to Ethnological Theory and Social Structure |
| ANTH 225.3 | Anth 224.3 North American Plains Ethnography |
| ANTH 230.3 | Anth 225.3 Peoples and Cultures of East Asia |
| ANTH 231.3 | Anth 226.3 Business and Industrial Anthropology |
| ANTH 232.3 | Anth 227.3 Cultures of Central and Eastern Europe |
| ANTH 235.3 | Anth 230.3 Introduction to Cultural Dynamics |
| ARCH 250.3 | Anth 231.3 Cross Cultural Perspectives on Health System |
| ARCH 251.3 | Anth 232.3 Peoples and Culture of South Asia |
| ARCH 257.3 | Anth 233.3 Anthropological Perspectives on Contemporary Ukraine |
| ARCH 258.3 | Anth 235.3 Anthropological Approaches to Ethnicity and Ethnic Groups |
| CLAS 225.3 | Arch 112.3 The Human Journey Introduction to Archaeology and Biological |
| CLAS 226.3 | Anthropology |
| CLAS 227.3 | Arch 116.3 Introduction to Near Eastern and Classical Archaeology |
| CLAS 228.3 | Arch 243.3 Introduction to Archaeology of Ancient Israel and Syria |
| CLAS 233.3 | Arch 244.3 Archaeology and Cultural Development Ancient Israel and Syria: Late |
| CLAS 234.3 | Bronze to Hellenistic Period |
| CLAS 240.3 | Arch 250.3 Introduction to Archaeological Science |
| CLAS 242.3 | Arch 251.3 Introduction to Archaeological Interpretation |
| CLAS 247.3 | Arch 257.3 Archaeology of Ancient Egypt |
| CLAS 248.3 | Arch 258.3 Archaeology of Ancient Mesopotamia |
| CLAS 252.3 | Arch 270.3 Human Evolution |
| CLAS 259.3 | Clas 110.3 Greek Civilization |
| ECON 211.3 | Clas 111.3 Roman Civilization |
| ECON 213.3 | Clas 220.3 Daily Life in Ancient Greece and Rome |
| ECON 221.3 | Clas 225.3 Women in Antiquity |
| ECON 231.3 | Clas 227.3 Comedy |


| ECON 234.3 | Clas 228.3 Epic |
| :---: | :---: |
| ECON 254.3 | Clas 240.3 Ancient Art and Architecture I (Bronze Age to Classical Greece) |
| ECON 256.3 | Clas 242.3 Ancient Art and Architecture II (Graeco Roman World) |
| GEOG 202.3 | Clas 247.3 Introduction to Greek Archaeology |
| GEOG 204.3 | Clas 248.3 Introduction to Roman Archeology |
| GEOG 208.3 | Clas 252.3 Paganism and Christianity in Early Christian Centuries of Roman Empire |
| GEOG 240.3 | Clas 259.3 Ancient Christian Literature |
| GERM 212.3 | Cmrs 110.3 The Graeco Roman Tradition Evolution and Reception |
| HIST 283.3 | Cmrs 111.3 Medieval and Renaissance Civilization |
| HIST 284.3 | Econ 111.3 Price Theory and Resource Allocation |
| PHIL 204.3 | Econ 114.3 Money and Income |
| PHIL 208.3 | Econ 211.3 Intermediate Microeconomic Theory |
| PHIL 209.3 | Econ 213.3 Applied Microeconomics |
| PHIL 224.3 | Econ 214.3 Intermediate Macroeconomic Theory |
| PHIL 226.3 | Econ 221.3 Women and the Economy |
| PHIL 227.3 | Econ 223.3 Labour Economics |
| PHIL 231.3 | Econ 227.3 Wage Determination |
| PHIL 233.3 | Econ 231.3 Co operatives |
| PHIL 234.3 | Econ 234.3 Economics of Health Care |
| PHIL 235.3 | Econ 254.3 International Trading System |
| PHIL 236.3 | Econ 256.3 International Monetary System |
| PHIL 240.3 | Econ 270.3 Development in Non Industrialized Countries |
| PHIL 251.3 | Econ 272.3 Economics of Transition |
| PHIL 265.3 | Econ 277.3 Economics of the Environment |
| PHIL 294.3 | Econ 280.3 Classical Economics |
| PHIL 296.3 | Econ 285.3 Economics of Central American Development |
| RCM 400.3 | Eng 110.6 Literature and Composition |
| RCM 401.3 | Eng 202.6 Reading Canon Texts and Contexts |
| RCM 402.3 | Eng 203.6 Reading English Critical Approaches |
| RCM 403.3 | Eng 204.6 History and Future of the Book |
| RCM 404.3 | Eng 207.3 Decolonizing Literatures and Their Cultural and Expressive Contexts |
| RCM 405.3 | Eng 209.3 Transnational Literatures |
| RCM 406.3 | Eng 215.3 Life Writing |
| RCM 407.3 | Eng 217.3 Mythologies of Northern Europe |
| RLST 211.3 | Eng 221.6 Shakespeare |
| RLST 214.3 | Eng 226.3 Fantasy and Speculative Fiction |
| RLST 217.3 | Eng 232.3 Gothic Narrative |
| RLST 218.3 | Eng 233.3 Page and Stage |
| RLST 221.3 | Eng 242.3 Indigenous Storytelling of the Prairies |
| RLST 223.3 | Eng 246.3 Short Fiction |
| RLST 224.3 | Eng 253.6 Canadian Literature in English |
| RLST 225.3 | Eng 277.3 Literary Uses of Mythology |
| RLST 227.3 | Eng 278.3 English Satire |
| RLST 228.3 | Eng 281.6 Feministe Critical Theory and Literature by Women |
| RLST 230.3 | Eng 284.3 Beowulf and Tales of Northern Heroes |
| RLST 231.3 | Eng 386.3 Courtly Love and Medieval Romance |
| RLST 234.3 | Eng 288.3 Introduction to Film |
| RLST 240.3 | Eng 290.6 Introduction to English Linguistics and History of English Language |
| RLST 253.3 | Eng 294.3 Techniques of English Poetry |
| RLST 254.3 | Geog 130.3 Space Place and Society: An Intro to Human Geography |
| RLST 280.3 | Geog 202.3 Regional Geography of Canada |
| RLST 282.3 | Geog 204.3 Geography of Prairie Region |
| RLST 283.3 | Geog 208.3 World Regional Development |
| RLST 284.3 | Geog 240.3 Sustainable Cities and Regions |
| RLST 285.3 | Geog 280.3 Environmental Geography |
| WGST 201.3 | Hist 110.3 Landmarks of Ancient History |
| WGST 204.3 | Hist 111.3 Landmarks of Medieval History |
| WGST 206.6 | Hist 114.6 Ancient and Medieval World |
| WGST 210.3 | Hist 120.6 History of Europe from Renaissance to Present |
|  | Hist 121.3 Europe to Modern Age 1348 to 1789 |
|  | Hist 122.3 Europe in Age of Mass Culture 1789 to Present |
|  | Hist 151.3 Canadian History from Pre Contact Period to 1867 |

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Hist 152.3 Post Confederation Canada
Hist 170.6 The Americas
Hist 200.6 History of Greece
Hist 201.6 History of Rome
Hist 202.3 Formation of Europe 300 to 1000
Hist 205.3 Europe and World in High Middle Ages 1000 to 1300
Hist 207.3 Greek Tragedy and the Culture of Fifth Century Athens
Hist 213.6 Medieval England to 1509
Hist 214.3 History in Film
Hist 215.6 Byzantine Empire 330 to 1453
Hist 216.6 Opportunities and Dangers Womens Lives in PreModern Europe
Hist 220.6 Russian History from the 9th Century to Present
Hist 225.6 Age of Renaissance 1300 to 1555
Hist 226.6 Early Modern Europe 1555 to 1789
Hist 228.6 Europe in 19th Century 1789 to 1914
Hist 229.6 Europe in the 20th Century
Hist 236.3 Italy in Age of Baroque 1550 to 1789
Hist 245.6 African History An Introduction
Hist 246.6 The Rise and Fall of Imperial Britain 1500 to 2000
Hist 249.6 China and Japan in the 20th Century
Hist 251.3 History of the Civil War in the United States
Hist 257.3 The Canadian Prairie to 1905
Hist 258.3 The Canadian Prairie since 1905
Hist 259.3 Canadian Women from Pre Contact Period to 1918
Hist 260.3 Canadian women form 1919 to Present
Hist 263.6 The Canadian North
Hist 264.3 Native Newcomer Relations in Canada to 1880
Hist 265.3 Native Newcomer Relations in Canada 1880 to Present
Hist 266.3 History Wars Issues in Native Newcomer Relations
Hist 270.6 A History of the United States
Hist 271.6 Modern Latin American History
Hist 281.6 Military History
Hist 283.3 Society and Rise of Science from the Renaissance to Industrial Revolution
Hist 284.3 Society and Rise of Science from the Industrial Revolution to 20th Century
Hist 285.6 Christianity in Europe from 1500 to 1965
Hist 288.3 Cooperatives in the World
Hist 289.6 The Menace of Progress A History of Colonialism \& the Failure of
Development
Hist 290.3 Topics in Environmental History
Hist 291.6 The World Wars
Ling 111.3 Structure of Language
Ling 112.3 Dynamics of Language
Lit 100.6 Masterpieces of European Literature in English Translation
NS 105.3 Local Aboriginal Peoples
NS 106.3 Aboriginal Canada
NS 107.3 Introduction to Canadian Native Studies
NS 220.3 Aboriginal Rights and the Courts
NS 225.3 Cultural Survival of Aboriginal Family
NS 261.3 Aboriginal Intellect and Cultural Traditions in Western Canada
NS 262.3 Aboriginal Narratives of Historical Memory
NS 264.3 Aboriginal People and Canadian Politics
NS 265.3 Aboriginal People and Development
NS 271.3 Aboriginal Women in Canada
NS 272.3 Native Americans USA
NS 281.3 First Nations History in Western Canada
Phil 210.3 Medieval Philosophy I
Phil 211.3 Medieval Philosophy II
Phil 212.3 Medieval Intellectuals
Phil 215.3 19th Century European Philosophy
Phil 218.3 Existentialism
Phil 219.3 Phenomenology
Phil 224.3 Philosophy of Sexuality
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Wgst 235.3 Representation Embodiment and the City Part I Saskatoon
Wgst 240.3 Contemporary Body Projects Refashioning the Self in Everyday Life
Wgst 250.3 Performing Masculinities
Wgst 290.3 Feministe Representational Strategies Selected Topics

## Revised list of Complementary Studies Electives

## Current

ANTH 111.3
ANTH 220.3
ANTH 224.3
ANTH 225.3
ANTH 230.3
ANTH 231.3
ANTH 232.3
ANTH 235.3
ARCH 112.3
ARCH 250.3
ARCH 251.3
ARCH 257.3
ARCH 258.3
ARTH 120.3
ARTH 121.3
CLAS 110.3
CLAS 111.3
CLAS 225.3
CLAS 226.3
CLAS 227.3
CLAS 228.3
CLAS 233.3
CLAS 234.3
CLAS 240.3
CLAS 242.3
CLAS 247.3
CLAS 248.3
CLAS 252.3
CLAS 259.3
COMM 201.3
COMM 202.3
COMM 204.3
COMM 205.3
COMM 206.3
COMM 304.3
ECON 111.3
ECON 114.3
ECON 221.3
ECON 231.3
ECON 234.3
ECON 254.3
ECON 256.3
GEOG 130.3
GEOG 202.3
GEOG 204.3
GEOG 208.3
GEOG 240.3
GERM 212.3
HIST 110.3
HIST 111.3
HIST 121.3
HIST 151.3
Anth 111.3 Introduction to Cultural Anthropology
Anth 220.3 Introduction to Ethnological Theory and Social Structure
Anth 224.3 North American Plains Ethnography
Anth 225.3 Peoples and Cultures of East Asia
Anth 226.3 Business and Industrial Anthropology
Anth 227.3 Cultures of Central and Eastern Europe
Anth 230.3 Introduction to Cultural Dynamics
Anth 231.3 Cross Cultural Perspectives on Health System
Anth 232.3 Peoples and Culture of South Asia
Anth 233.3 Anthropological Perspectives on Contemporary Ukraine
Anth 235.3 Anthropological Approaches to Ethnicity and Ethnic Groups
Arch 112.3 The Human Journey Introduction to Archaeology and Biological
Anthropology
Arch 116.3 Introduction to Near Eastern and Classical Archaeology
Arch 243.3 Introduction to Archaeology of Ancient Israel and Syria
Arch 244.3 Archaeology and Cultural Development Ancient Israel and Syria: Late
Bronze to Hellenistic Period
Arch 250.3 Introduction to Archaeological Science
Arch 251.3 Introduction to Archaeological Interpretation
Arch 257.3 Archaeology of Ancient Egypt
Arch 258.3 Archaeology of Ancient Mesopotamia
Arch 270.3 Human Evolution
Arth 120.3 Introduction to History of Art I
Arth 121.3 Introduction to History of Art II
Arth 250.3 Introduction to Visual Culture
Arth 252.6 First Peoples Art History
Arth253.3 Aboriginal Art History I
Arth 255.3 Aboriginal Art History II
Arth 256.3 Introduction to Canadian Art and Architecture I
Arth 257.3 Introduction to Canadian Art and Architecture II
Arth 258.3 Modernism in Art
Arth 260.3 History and Theory of European Architecture 1400 to 1700
Arth 261.3 History and Theory of European Architecture 1700 to 1900
Chin 111.6 Introductory Chinese
Chin 130.6 Introduction to Classical Chinese Language and Literature
Chin 220.6 Intermediate Chinese I and II
Clas 103.3 Medical Terminology
Clas 104.3 Classical Myths
Clas 105.3 Classical Roots of English
Clas 106.3 Advanced Bioscientific Terminologies
Clas 110.3 Greek Civilization
Clas 111.3 Roman Civilization
Clas 220.3 Daily Life in Ancient Greece and Rome
Clas 225.3 Women in Antiquity
Clas 227.3 Comedy
Clas 228.3 Epic
Clas 240.3 Ancient Art and Architecture I (Bronze Age to Classical Greece)
Clas 242.3 Ancient Art and Architecture II (Graeco Roman World)
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Clas 252.3 Paganism and Christianity in Early Christian Centuries of Roman Empire
Clas 259.3 Ancient Christian Literature
Cmrs 110.3 The Graeco Roman Tradition Evolution and Reception
Cmrs 111.3 Medieval and Renaissance Civilization
Comm 201.3 Introduction to Financial Accounting

LING 112.3
PHIL 120.3
PHIL 133.3
PHIL 140.3
PHIL 204.3
PHIL 208.3
PHIL 209.3
PHIL 224.3
PHIL 226.3
PHIL 227.3
PHIL 231.3
PHIL 233.3
PHIL 234.3
PHIL 235.3
PHIL 236.3
PHIL 240.3
PHIL 251.3
PHIL 265.3
PHIL 294.3
PHIL 296.3
POLS 111.3
POLS 112.3
RCM 400.3
RCM 401.3
RCM 402.3
RCM 403.3
RCM 404.3
RCM 405.3
RCM 406.3
RCM 407.3
RLST 211.3
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RLST 254.3
RLST 280.3
RLST 282.3
RLST 283.3
RLST 284.3
RLST 285.3
WGST 201.3
WGST 204.3
WGST 206.6
WGST 210.3

| Comm 203.3 Introduction to Finance |
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| Comm 204.3 Introduction to Marketing |
| Comm 205.3 Introduction to Operations Management |
| Comm 210.3 Introduction to Management Accounting |
| Comm 211.3 Human Resource Management |
| Comm 300.3 Business Communication II |
| Comm 304.3 Introduction to Business Law |
| Comm 306.3 Business Decision Making II |
| Comm 308.3 Cost Management Systems |
| Comm 321.3 Corporate Financial Reporting I |
| Comm 323.3 Corporate Financial Reporting II |
| Comm 329.3 Personal Finance |
| Comm 337.3 Business Information and Accounting Systems |
| Comm 340.3 Introduction to International Business |
| Comm 342.3 Organization Structure and Design |
| Comm 343.3 Recruitment Selection and Engagement |
| Comm 345.3 Business and Public Policy |
| Comm 346.3 Commercialization of Biotechnology |
| Comm 347.3 Aboriginal Business in Canada |
| Comm 348.3 Leadership |
| Comm 349.3 Introduction to Entrepreneurship |
| Comm 352.3 Marketing Strategy |
| Comm 354.3 Consumer Behaviour |
| Comm 357.3 Marketing Research |
| Cree 101.6 Introductory Cree |
| Cree 120.6 Intermediate Cree |
| Econ 111.3 Price Theory and Resource Allocation |
| Econ 114.3 Money and Income |
| Econ 211.3 Intermediate Microeconomic Theory |
| Econ 213.3 Applied Microeconomics |
| Econ 214.3 Intermediate Macroeconomic Theory |
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| Econ 256.3 International Monetary System |
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| Econ 272.3 Economics of Transition |
| Econ 275.3 Economics of Natural Resources |
| Econ 277.3 Economics of the Environment |
| Econ 28.3 Classical Economics |
| Econ 285.3 Economics of Central American Development |
| Eng 110.6 Literature and Composition |
| Eng 111.3 Literature and Composition Reading Poetry |
| Eng 112.3 Literature and Composition Reading Drama |
| Eng 113.3 Literature and Composition Reading Narrative |
| Eng 114.3 Literature and Composition Reading Culture |
| Eng 202.6 Reading Canon Texts and Contexts |
| Eng 203.6 Reading English Critical Approaches |
| Eng 204.6 History and Future of the Book |
| Eng 207.3 Decolonizing Literatures and Their Cultural and Expressive Contexts |
| Eng 209.3 Transnational Literatures |
| Eng 215.3 Life Writing |
| Eng 217.3 Mythologies of Northern Europe |
| Eng 221.6 Shakespeare |
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| Eng 246.3 Short Fiction |

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Comm 308.3 Cost Management Systems
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Comm 323.3 Corporate Financial Reporting II
Comm 329.3 Personal Finance
comm 337.3 Business Information and Accounting Systems

Comm 343.3 Recruitment Selection and Engagement
Comm 345.3 Business and Public Policy
Comm 346.3 Commercialization of Biotechnology
347.3 Aboriginal Business in Canada

Comm 349.3 Introduction to Entrepreneurship
Comm 352.3 Marketing Strategy
Comm 354.3 Consumer Behaviour
Comm 357.3 Marketing Research
Cree 101.6 Introductory Cree
Econ 111.3 Price Theory and Resource Allocation
Econ 114.3 Money and Income
Econ 211.3 Intermediate Microeconomic Theory
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Econ 277.3 Economics of the Environment
Econ 280.3 Classical Economics
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Eng 112.3 Literature and Composition Reading Drama
Eng 113.3 Literature and Composition Reading Narrative

Eng 202.6 Reading Canon Texts and Contexts
Eng 203.6 Reading English Critical Approaches
Eng 204.6 History and Future of the Book
Eng 207.3 Decolonizing Literatures and Their Cultural and Expressive Contexts
Eng 209.3 Transnational Literatures

Eng 217.3 Mythologies of Northern Europe
Eng 221.6 Shakespeare
Eng 226.3 Fantasy and Speculative Fiction
Eng 232.3 Gothic Narrative
Eng 242.3 Indigenous Storytelling of the Prairies
Eng 246.3 Short Fiction


| Hist 263.6 The Canadian North |
| :--- |
| Hist 264.3 Native Newcomer Relations in Canada to 1880 |
| Hist 265.3 Native Newcomer Relations in Canada 1880 to Present |
| Hist 266.3 History Wars Issues in Native Newcomer Relations |
| Hist 270.6 A History of the United States |
| Hist 271.6 Modern Latin American History |
| Hist 281.6 Military History |
| Hist 283.3 Society and Rise of Science from the Renaissance to Industrial Revolution |
| Hist 284.3 Society and Rise of Science from the Industrial Revolution to 20th Century |
| Hist 285.6 Christianity in Europe from 1500 to 1965 |
| Hist 288.3 Cooperatives in the World |
| Hist 289.6 The Menace of Progress A History of Colonialism \& the Failure of |
| Development |
| Hist 290.3 Topics in Environmental History |
| Hist 291.6 The World Wars |
| Latn 112.3 Latin for Beginners I |
| Latn 113.3 Latin for Beginners II |
| Latn 202.3 Intermediate Latin I |
| Latn 203.3 Intermediate Latin II |
| Ling 111.3 Structure of Language |
| Ling 112.3 Dynamics of Language |
| Lit 100.6 Masterpieces of European Literature in English Translation |
| NS 105.3 Local Aboriginal Peoples |
| NS 106.3 Aboriginal Canada |
| NS 107.3 Introduction to Canadian Native Studies |
| NS 220.3 Aboriginal Rights and the Courts |
| NS 225.3 Cultural Survival of Aboriginal Family |
| NS 261.3 Aboriginal Intellect and Cultural Traditions in Western Canada |
| NS 262.3 Aboriginal Narratives of Historical Memory |
| NS 264.3 Aboriginal People and Canadian Politics |
| NS 265.3 Aboriginal People and Development |
| NS 271.3 Aboriginal Women in Canada |
| NS 272.3 Native Americans USA |
| NS 281.3 First Nations History in Western Canada |
| Phil 120.3 Knowledge Mind and Existence as Introductory Topics in Philosophical |
| Problems |
| Phil 133.3 Introduction to Ethics and Values |
| Phil 140.3 Critical Thinking |
| Phil 202.3 Philosophy of Religion Introduction |
| Phil 204.3 Philosophy of Religion Christian Tradition |
| Phil 206.3 Early Modern Philosophy |
| Phil 208.3 Ancient Philosophy Presocratics to Plato |
| Phil 209.3 Ancient Philosophy Aristotle to Plotinus |
| Phil 210.3 Medieval Philosophy I |
| Phil 211.3 Medieval Philosophy II |
| Phil 212.3 Medieval Intellectuals |
| Phil 215.3 19th Century European Philosophy |
| Phil 218.3 Existentialism |
| Phil 219.3 Phenomenology |
| Phil 224.3 Philosophy of Sexuality |
| Phil 226.3 Environmental Philosophy |
| Phil 227.3 Introduction to Feminist Philosophy |
| Phil 231.3 Ethical Problems |
| Phil 233.3 Ethical Theory |
| Phil 234.3 Biomedical Ethics |
| Phil 235.3 Ethical Issues in Business and Professions |
| Phil 236.3 Ethics and Technology |
| Phil 237.3 Law and Morality |
| Phil 238.3 Ethical Issues in Scientific Research |
| Phil 240.3 Aristotelian Logic |
| Phil 251.3 Philosophy of Science |
| Phil 262.3 Social and Political Philosophy |



Span 204.3 Intermediate Spanish II: Oral Skills and Cultural Understanding
Span 214.3 Intermediate Spanish I: Grammar Writing Literary Readings
Span 217.3 Intermediate Spanish II: Grammar Writing Literary Readings
Span 235.3 Mexican Culture
Span 275.3 Business Spanish
Wgst 112.3 Introduction to Womens and Gender Studies
Wgst 201.3 Images of Gender and Sexuality in Popular Culture
Wgst 204.3 Gender and Popular Music
Wgst 205.3 Gender Work and Citizenship in Transnational Contexts
Wgst 210.3 Gendered Perspectives on Current Events
Wgst 220.3 Queering the Terrain Cultural Space and Queer Theory
Wgst 235.3 Representation Embodiment and the City Part I Saskatoon
Wgst 240.3 Contemporary Body Projects Refashioning the Self in Everyday Life
Wgst 250.3 Performing Masculinities
Wgst 290.3 Feminist Representational Strategies Selected Topics

## College of Graduate Studies and Research

SCHOOL OF PUBLIC HEALTH

New Graduate Course
PUBH 810.3 - Environmental Public Health
Prerequisites/Restrictions: Departmental Permission Required.
Calendar Description: This course is an introduction to and an overview of the key areas of environmental public health practice. Using perspectives of the population and community, the course will cover factors associated with the development of environmental health problems. Students will gain an understanding of the interaction of individuals and communities with the environment, the potential impact on health of environmental agents, and specific applications of concepts of environmental public health practice.
Rationale: Currently, the capacity of AGMD 801 - Introduction to Occupational Health is not large enough to accommodate all MPH students who require the course. Additionally, Occupational Health is of interest to some but not all MPH students.
Contact person: a.backman@usask.ca
Approval: Graduate Academic Affairs Committee, November 8, 2011

## SCHOOL OF ENVIRONMENT AND SUSTAINABILITY

## New Graduate Course

ENVS 822.3 - Biodiversity Conservation and Sustainability
Prerequisites/Restrictions: None
Calendar Description: A graduate level course designed to introduce students in an integrative manner to the field of biodiversity conservation and how to apply its principles to best promote sustainability. Understanding biodiversity and its management requires an interdisciplinary approach with particular reference to mechanisms of change and human impacts on the environment.
Rationale: The School sees this class as a needed elective so that students will gain knowledge in the area of biodiversity.
Contact person: karsten.liber@usask.ca
Approval: Graduate Academic Affairs Committee, December 13, 2011

## DEPARTMENT OF ARCHAEOLOGY AND ANTHROPOLOGY

New Graduate Course
ANTH 806.3 - Anthropological Environments
Prerequisites/Restrictions: None
Calendar Description: This course is designed to teach history, theory, and central concerns of Anthropological Environments at an advanced level. It covers the breadth of historical development of the sub-discipline internationally, while covering select topics in depth through a regional focus on North America.
Rationale: This is the proposed core course of an Environmental Anthropology stream at the MA level and will also supplement social science course offerings on environmental topics at the graduate level generally.
Contact person: Clinton.westman@usask.ca

Approval: Graduate Academic Affairs Committee, December 13, 2011

## TOXICOLOGY

New Graduate Course
TOX 821.3 - Human Health Chemical Risk Assessment
Prerequisites/Restrictions: None
Calendar Description: Human health risk assessment is now playing a major role in the environmental management of chemicals, from both operational and regulatory perspectives. The overall objective of this course is to provide the basic knowledge and to conduct, evaluate and interpret risk assessments of chemicals present in the natural and built environments.
Rationale: The impact of chemicals on human health is a subject of investigation across many units on campus. There is no course that explicitly deals with how this subject is dealt with both within the discipline of Risk Assessment as well within the Canadian regulatory framework.
This course will fill this need. In addition, this course supports the NSERC CREATE Human and Ecological Risk Assessment program.
Contact person: steven.siciliano@usask.ca
Approval: Graduate Academic Affairs Committee, November 15, 2011

## DEPARTMENT OF MECHANICAL ENGINEERING

New Graduate Courses

## ME 844.3 - Deformation and Failure of Engineering

Prerequisites/Restrictions: ME 324 or equivalent, and a student in the College of Graduate Studies and Research or with departmental permission.
Calendar Description: The course covers various aspects of failure mechanisms and prevention in metallic, polymeric and ceramic materials. Topics include deformation and failure modes; elements of dislocation theory; strengthening mechanisms in metals and polymers; toughening techniques in ceramic materials; creep, fatigue and impact failures; basic fracture mechanics; failure investigation and analysis; case studies of past failures of engineering structures
Rationale:
Contact person: jim.bugg@usask.ca
Approval: Graduate Academic Affairs Committee, December 13, 2011

## ME 845.3 - Advanced Materials

Prerequisites/Restrictions: A student in the College of Graduate Studies and Research or with departmental permission.
Calendar Description: Provides students with an exposure to advanced materials engineering technology. It covers broad classes of materials and their applications with emphasis on topics related to materials used in high temperature and other hostile environments. Failure analysis, tribology and nanomaterials are also covered.
Rationale: Many graduate students enrolled in graduate program in the College of Engineering do not have enough knowledge in materials engineering for their research. This course is proposed to meet the demands of those students.
Contact person: jim.bugg@usask.ca
Approval: Graduate Academic Affairs Committee, December 13, 2011

## DEPARTMENT OF ANIMAL AND POULTRY SCIENCE Graduate Course Deletions

## ANSC 814.3 - Advanced Laboratory Techniques

Rationale: On June 2011 department faculty passed a motion to discontinue this course. Concerns expressed were that the course is not sufficiently 'graduate' in nature and that techniques taught are part of the students' research project work. It was noted that the course teaches good general practices such as basic lab skills and record keeping. To address this need the department will offer a three-day non-credit course which will be required for all new graduate students undertaking lab work and will be taught by the Laboratory Manager.
Contact person: Andrew.vankessel@usask.ca
Approval: Graduate Academic Affairs Committee, December 13, 2011

## EDWARDS SCHOOL OF BUSINESS

## Graduate Course Deletion

## MBA 844.2 - Integrative Modules

Deleted as a suite of course modifications/new courses from UCC July 2011
Contact person: Gregor@edwards.usask.ca
Approval: Graduate Academic Affairs Committee, November 15, 2011

## COLLEGE OF MEDICINE

## PEDIATRICS

## New Course

Med 110.1 Medical Genetics
One hour lecture per week
Students gain an appreciation of genetic factors involved in determining the health and illness of individuals, populations, principles and knowledge of genetics.
Rationale: We are moving Medical Genetics teaching from Year 2 to Year 1.
Dr. E. Lemire, Course Coordinator

## COLLEGE OF PHARMACY AND NUTRITION

## DIVISION OF NUTRITION

## New course

## NUTR 366.3 Food Service Management Practicum

Prerequisite: NUTR 365.3; Food Safe II; Immunizations and Criminal Record Check
This practicum provides the opportunity for the student to apply the principles of food service operations in the field, while under the supervision of a practicing Food Service Supervisor/Manager. Each student will complete a minimum of 15 days, full time, in a food service facility working with staff, and learning about production and service of meals to clients.

NUTR 366 (Food Service Management Practicum) would be offered during the summer (May 15 - August 15) between year 2 and year 3 of the Nutrition program. NUTR 366 will replace three weeks of the 9-10 week component of the Foodservice management component of NUTR 530.33. In turn, NUTR 530.33 will be reduced to 30 credit units and renumbered to NUTR 531.30 (see rationale below). The course will be offered at various facilities within the Saskatoon Health Region (SHR), Regina Qu'Appelle Health Region (RQHR), as well as at other sites within the province. Sites may include nursing homes, educational institutions and smaller hospitals.

Students who have extensive food service experience may challenge for credit provided their experience is documented in written format.

Rationale The proposed course (NUTR 366) would serve the following two purposes: 1) Allow nutrition students to gain practical skills to carry forward into NUTR 466 and NUTR 530 (531) and
2) To enhance the flexibility of meeting competencies in NUTR 530 (531).

Placement opportunities for NUTR 366 are limited during the regular university academic year (September-April), as NUTR 530 (531) placements take preference. Therefore, a summer practicum is a necessity.
There are many academic reasons for offering the Food Service Practicum prior to Year 3 of the Nutrition program:

- It furthers our goal of integrating internship with academics;
- It provides students with practical food service experiences that allow them to better appreciate the theory of Food Service Management in NUTR 466; and
- To enhance flexibility of meeting competencies in NUTR 530 (531).

NUTR 366 will take three weeks of allotted 'internship' time from NUTR 530.33 (531), thus allowing a later start time for NUTR 530 (531) (currently, it starts late August), and more flexibility for scheduling all the competencies during NUTR 530 (531).

Because NUTR 530.33 is getting reduced to 30 credit units, we are renumbering the course to NUTR 531.30 Professional Practice IV. All other attributes associated with this class will remain the same. The total 33 credit units of overall practicum (NUTR 366.3 plus NUTR 531.30) will also remain the same.
Approval by College: November 23, 2011
Implementation: May 2013

Curriculum for the B.Sc. (Nutrition) (effective September 2012)
First-Year Nutrition
Biomedical Sciences 200.3 (Biomolecules)
Biomedical Sciences 230.3 (Metabolism)
Commerce 102.3 (Introduction to Business
Management)
Food and Bioproduct Sciences 210.3 (Dimensions of Food Science)
Physiology 208.6 (Human Body Systems)
Nutrition 120.3 (Basic Nutrition)
Nutrition 221.3 (Advanced Nutrition: Micronutrients)
Nutrition 230.3 (Professional Practice I)
Plant Sciences 314.3 (Statistical Methods)
3 cu elective*
FOODSAFE I Certificate
Total Credit Units: 33

## Second-Year Nutrition

Microbiology 224.3 (Microbiology for Pharmacy \& Nutrition)
Nutrition 305.3 (Research Methods)
Nutrition 310.3 (Food Culture \& Human Nutrition)
Nutrition 321.3 (Advanced Nutrition: Macronutrients \& Energy)
Nutrition 322.3 (Nutrition Throughout the Lifespan)
Nutrition 330.3 (Professional Practice II)
Nutrition 350.3 (Community Nutrition)
Nutrition 365.3 (Quantity Food Production \& Service)
Pathology 205.3 (Elementary Pathology)
3 cu elective* OR Food and Bioproduct Sciences
323.3 (Food Additives \& Toxicants)

3 cu elective*

FOODSAFE II Certificate
Speechcraft (Public Speaking Certificate)
Nutrition 366.3 (Food Service Management Practicum) - in Spring \& Summer Session Total Credit Units: 33 plus 3 c.u. in spring and summer

## Third-Year Nutrition

Commerce 201.3 (Introduction to Accounting)
Food and Bioproduct Sciences 323.3 (Food Additives
\& Toxicants) OR 3 cu elective*
Nutrition 420.3 (Current Issues in Nutrition)
Nutrition 425.3 (Nutritional Assessment)
Nutrition 430.3 (Professional Practice III)
Nutrition 440.6 (Clinical Nutrition)
Nutrition 450.3 (Nutrition Program Planning \&
Evaluation)
Nutrition 466.3 (Management of Nutrition Services)
6 cu electives*
Total Credit Units: 33

## Fourth-Year Nutrition

Nutrition 531.30 (Professional Practice IV)
36 weeks of internship
Orientation (1 week)
Foodservice Management (10-12 weeks)
Clinical \& Community Nutrition (16-17 weeks)
Research, Development \& Continuing Education (2
weeks)
Public Health (2-3 weeks)
Break (2 weeks)
Total Credit Units: 30

