

# **Academic Programs Committee of Council**

# **University Course Challenge**

**Scheduled posting: November 2022** 

The following types of curricular and program changes are approved by the University Course Challenge -- additions and deletions of courses, lower levels of study and program options; straightforward program changes; and curricular changes which affect other colleges.

# Contents include submissions for information and approval from the following colleges:

College of Agriculture and Bioresources
College of Arts and Science
College of Education
College of Engineering
College of Graduate and Postdoctoral Studies
College of Kinesiology
College of Pharmacy and Nutrition
School of Environment and Sustainability

**Approval:** Date of circulation: November 16, 2022

Date of effective approval if no challenge received: November 30, 2022

# **Next scheduled posting:**

The next scheduled posting will be December 14, 2022, with a submission deadline of **December 12, 2022.** Urgent items can be posted on request.

Please direct challenges to both of the following: <a href="mailto:seanine.warrington@usask.ca">seanine.warrington@usask.ca</a> in Registrarial Services and <a href="mailto:amanda.storey@usask.ca">amanda.storey@usask.ca</a> in the Governance Office.

## College of Agriculture and Bioresources – University Course Challenge Submission, November 2022

The following curricular changes were approved through the College of Agriculture and Bioresources and are being submitted to University Course Challenge for approval.

Contact: Sarah Bector (sarah.bector@usask.ca)

# **Program Revisions:**

The following is an update to the required courses within the diplomas and the addition of a new structure around elective courses including new electives. There are no newly-created courses.

# Kanawayihetaytan Askiy

Diploma in Indigenous Lands Governance, Dip.(K.A.I.L.G.)

- Kanawayihetaytan Askiy Diploma in Indigenous Lands Governance (60 credit units)
- Required Certificate Courses (21 credit units)
- Core Requirements (21 33 credit units)
- Restricted Electives (15 12 credit units)
- Open Electives (3 9 credit units)

# Kanawayihetaytan Askiy Diploma in Indigenous Lands Governance (60 credit units)

The Diploma in Indigenous Lands Governance provides students with a broad background in governance, management, administration and political science as they relate to Indigenous communities. The diploma prepares them for roles in governance in their communities and leadership in local, provincial and national settings. The program has a strong focus on experiential learning. It teaches students the skills required for future employment as land managers as well as the scientific and traditional knowledge required for research and decision-making. The diploma is entirely offered through a combination of on-line and condensed (i.e., one-week) delivery courses, although student may also opt to take face-to-face courses. Students enrolling in the diploma would normally complete the Kanawayihetaytan Askiy Certificate before enrolling in the diploma. The diploma consists of a combination of in-person and online courses to allow students flexibility in their scheduling. Students who have completed the Kanawayihetaytan Askiy Certificate can ladder into the program and complete the Diploma in Indigenous Lands Governance with the completion of 39 credit units.

# Required Certificate Courses (21 credit units)

 Completion of the Kanawayihetaytan Askiy Certificate (21 credit units). This would mean completion of the following courses:

- ASKI 101.3 Field Studies in the Environment
- ASKI 102.3 Introduction to Legal Concepts in Resource Management
- ASKI 103.3 Legal Process and Instruments in Resource Management
- ASKI 104.3 Introduction to Management Issues
- ASKI 105.3 Economics and Planning
- ASKI 201.3-Resource Management Project Assessment
- INDG 107.3 Introduction to Canadian Indigenous Studies
- Or, completion of the Indigenous Peoples' Resource Management Certificate plus <u>INDG</u>
   107.3 Introduction to Canadian Indigenous Studies

# Core Requirements (21 33 credit units)

- AGRC 110.3 Scientific Literacy and Communication for the Agricultural Sciences
- ASKI 202.1 Introduction to Land Management Frameworks OR RRM 201.1 Geographical Information Systems
- ASKI 204.2 Introduction to the Duty to Consult
- **EVSC 110.3** Renewable Resources and Environment **or** ASKI 101.3 Field Studies in the Environment
- INDG 107.3 Introduction to Canadian Indigenous Studies
- AREC 220.3 History of Indigenous Agriculture in Canada
- AREC 228.3 Natural Resource Economics
- ASKI 105.3 Economics and Planning or AGRC 113.3 Agri Food Issues and Institutions
- ASKI 104.3 Introduction to Management Issues or COMM 101.3 Introduction to Business
- POLS 222.3 Indigenous Governance and Politics
- POLS 322.3 First Nations Management and Administrative Systems
- RRM 114.3 Introductory Resource Economics and Policy
- INDG 264.3 Aboriginal People and Canadian Politics
- POLS 111.3 Democratic Citizenship in Canada
- <u>POLS 112.3</u> Justice and Injustice in Politics and Law
- POLS 222.3 Indigenous Governance and Politics
- POLS 322.3 First Nations Management and Administrative Systems
- POLS 323.3 First Nations Policies and Programs

# **Governance and Ethics (Choose 6 CU)**

- PHIL 121.3 Introduction to World Philosophies
- PHIL 133.3 Introduction to Ethics and Values
- PHIL 233.3 Ethical Theory
- POLS 323.3 First Nations Policies and Programs
- POLS 328.3 Public Policy Analysis
- POLS 422.3 First Nations Governance

INDG 264.3 Aboriginal People and Canadian Politics

Restricted Electives (15 credit units Choose 12 credit units from the following depending on area of interest)

# **Management and Economics**

- AREC 230.3 Innovation and Entrepreneurship
- COMM 105.3 Introduction to Organizational Behaviour
- **COMM 201.3** Introduction to Financial Accounting
- COMM 204.3 Introduction to Marketing
- **COMM 211.3** Human Resource Management
- RRM 312.3 Natural Resource Management and Indigenous Peoples
- AREC 222.3 Introduction to Farm Business Management
- AREC 432.3 Rural Development Theory and Applications
- **GEOG 385.3** Analysis of Environmental Management and Policy Making

#### **Environmental Studies**

- ASKI 102.3 Introduction to Legal Concepts in Resource Management
- ASKI 103.3 Legal Process and Instruments in Resource Management
- ASKI 201.3 Resource Management Project Assessment
- ENVS 201.3 Foundations of Sustainability
- **GEOG 204.3** Geography of the Prairie Region
- **GEOG 280.3** Environmental Geography
- **GEOG 385.3** Analysis of Environmental Management and Policy Making

Preparation for Articulation to B.Sc. Renewable Resource Management (Resource Economics and Policy major); BSA (Agricultural Economics major); B.Sc. Agribusiness.

- **ECON 111.3** Introductory Microeconomics
- MATH 104.3 Elementary Calculus
- AREC 272.3 Introduction to Agricultural Economics
- ANBI 475.3 Field Studies in Arctic Ecosystems and Aboriginal Peoples
- GEOG 120.3 Introduction to Global Environmental Systems
- GEOG 150.3 Introduction to the Circumpolar World
- <u>GEOG 280.3</u> Environmental Geography
- GEOG 352.3

- GEOG 381,3 Development in the Canadian North Issues and Challenges or GEOG 302.3 Quantitative Methods in Geography offered by Athabasca University
- GEOG 385.3 Analysis of Environmental Management and Policy Making
- GEOG 386.3 Environmental Impact Assessment or ENVS 305.3 offered by Athabasca **University**
- INDG 210.3 Indigenous Ways of Knowing
- PLAN 329.3 Integrated Water Resource Planning
- POLS 225.3 Canadian Public Administration and Administrative Law
- POLS 226.3 Canadian Public Policy
- POLS 422.3 Indigenous Governance and Self Determined Sustainable Development

# Open Electives (3 9 credit units)

Please choose 3 9 credit units of open electives.

# Kanawayihetaytan Askiy

Diploma in Indigenous Resource Management, Dip.(K.A.I.R.M.)

- Kanawayihetaytan Askiy Diploma in Indigenous Resource Management (60 credit units)
- Required Certificate Courses (21 credit units)
- Core Requirements (21 credit units)
- Restricted Electives (15 27 credit units)
- Open Electives (3 6 credit units)

# Kanawayihetaytan Askiy Diploma in Indigenous Resource Management (60 credit units)

The Diploma in Indigenous Resource Management provides students with a broad background in resource management for Indigenous communities. The diploma builds on the Kanawayihetaytan Askiy Certificate and prepares students to become land managers in their communities and to provide leadership in local, provincial, and national settings. The program teaches students the skills required for future employment as land managers as well as the scientific and traditional knowledge required for research and decision-making. The diploma is entirely offered through a combination of on-line and condensed (i.e., one-week) delivery courses, although students may also opt to take face-to-face courses. Students enrolling in the diploma would normally complete the Kanawayihetaytan Askiy Certificate before enrolling in the diploma. The diploma consists of a combination of in-person and online courses to allow students flexibility in their scheduling. Students who have completed the Kanawayihetaytan Askiy Certificate can ladder into the program and complete the Diploma in Indigenous Resource Management with the completion of 39 credit units.

- Completion of the Kanawayihetaytan Askiy Certificate (21 credit units). This would mean completion of the following courses:
- ASKI 101.3 Field Studies in the Environment
- ASKI 102.3 Introduction to Legal Concepts in Resource Management
- ASKI 103.3 Legal Process and Instruments in Resource Management
- ASKI 104.3 Introduction to Management Issues
- ASKI 105.3 Economics and Planning
- ASKI 201.3 Resource Management Project Assessment
- INDG 107.3 Introduction to Canadian Indigenous Studies
- Or, completion of the Indigenous Peoples' Resource Management Certificate plus <u>INDG</u>
   107.3 Introduction to Canadian Indigenous Studies

# Core Requirements (21 credit units)

- GEOG 120.3 Introduction to Global Environmental Systems
- GEOG 150.3 Introduction to the Circumpolar World
- GEOG 280.3 Environmental Geography
- GEOG 386.3 Environmental Impact Assessment
- PLAN 329.3 Integrated Water Resource Planning
- SLSC 232.3 Soil Genesis and Classification

# Choose 3 of the following one credit unit courses:

- EVSC 204.1 Soil Sampling Design and Implementation
- RRM 201.1 Geographical Information Systems
- SLSC 205.1 Introduction to Field Description of Soils
- AGRC 110.3 Scientific Literary and Communication for the Agricultural Sciences
- ASKI 202.1 Introduction to Land Management Frameworks
- ASKI 204.2 Introduction to Duty to Consult
- EVSC 110.3 Renewable Resources and Environment
- INDG 107.3 Introduction to Canadian Indigenous Studies
- **GEOG 120.3** Introduction to Global Environmental Systems
- AGRC 111.3 Discovery in Plant and Soil Sciences or ASKI 101.3 Field Studies in the Environment
- RRM 114.3 Introductory Resource Economics and Policy or ASKI 105.3 Economics and Planning

# **Indigenous Studies (Choose 6 CU)**

- AREC 220.3 History of Indigenous Agriculture in Canada
- INDG 210.3 Indigenous Ways of Knowing
- INDG 241.3 Weaving Indigenous Science and Western Science
- INDG 264.3 Aboriginal People and Canadian Politics
- INDG 265.3 Aboriginal People and Development
- POLS 222.3 Indigenous Governance and Politics
- POLS 322.3 First Nations Management and Administrative Systems
- POLS 323.3 First Nations Policies and Programs
- RRM 312.3 Natural Resource Management and Indigenous Peoples

# Restricted Electives (15-Choose 27 credit units from the following depending on area of interest)

Please note that BIOL 204 and 207 are recommended for students who intend to ladder into the [B.Sc.(RRM)] programs. The following courses are not available on-line: INDG 210.3 Indigenous Ways of Knowing, EVSC 380.3, ANBI 375.3 Animals and the Environment, ANBI 475.3 Field Studies in Arctic Ecosystems and Aboriginal Peoples, RRM 301.9 Field Course in Renewable Resource Management, INDG 221.3 Indigenous Food Sovereignty and INDG 241.3 Weaving Indigenous Science and Western Science.

- AGRC 111.3 Discovery in Plant and Soil Sciences
- AGRC 112.3 Animal Agriculture and Food Science
- ANBI 375.3 Animals and the Environment
- ANBI 475.3 Field Studies in Arctic Ecosystems and Aboriginal Peoples
- <u>EVSC 380.3</u> Grassland Soils and Vegetation
- GEOG 352.3
- GEOG 381.3 Development in the Canadian North Issues and Challenges
- GEOG 385.3 Analysis of Environmental Management and Policy Making
- INDG 210.3 Indigenous Ways of Knowing
- INDG 221.3 Indigenous Food Sovereignty
- INDG 241.3 Weaving Indigenous Science and Western Science
- INDG 264.3 Aboriginal People and Canadian Politics
- PLSC 234.3 Weed Control in Organic Agriculture
- POLS 323.3 First Nations Policies and Programs
- RRM 301.9 Field Course in Renewable Resource Management

# **Tools and Techniques**

- EVSC 204.1 Soil Sampling Design and Implementation
- GEOG 222.3 Geomatics

- GEOG 322.3 Geographic information systems or RRM 323.2 Resource Data and Environmental Modeling and RRM 201.1 Geographical Information Systems
- RRM 215.3 Identification of Saskatchewan Plants and Soils
- SLSC 205.1 Introduction to Field Description of Soils
- PLSC 202.3 Introduction to Precision Agriculture

#### **Land-based Field Studies**

- RRM 301.9 Field Course in Renewable Resource Management
- SLSC 350.3 Terrestrial Restoration
- SLSC 498.3 Practical and Applied Restoration
- EVSC 380.3 Grassland Soils and Vegetation
- **SLSC 480.3** Soils and Boreal Landscapes
- ANBI 475.3 Field Studies in Arctic Ecosystems and Aboriginal Peoples

# **Soils and Landscapes**

- EVSC 380.3 Grassland Soils and Vegetation
- **GEOG 150.3** Introduction to the Circumpolar World
- **GEOG 204.3** Geography of the Prairie Region
- **GEOG 280.3** Environmental Geography
- SLSC 240.3 Agricultural Soil Science or EVSC 220.3 Environmental Soil Science
- **SLSC 232.3** Soil Genesis and Classification
- SLSC 312.3 Soil Fertility and Fertilizers

# **Plants and Biology**

- BIOL 120.3 The Nature of Life
- **BIOL 121.3** The Diversity of Life
- PLSC 201.3 Field Crops of Western Canada
- PLSC 213.3 Principles of Plant Ecology
- PLSC 220.3 Fundamentals of Horticulture
- PLSC 222.3 Introduction to Field Crops
- PLSC 234.3 Weed Control in Organic Agriculture
- PLSC 235.3 Urban Agriculture

# Policy, Planning, and Law

- ASKI 102.3 Introduction to Legal Concepts in Resource Management
- ASKI 103.3 Legal Process and Instruments in Resource Management
- ASKI 104.3 Introduction to Management Issues or COMM 101.3 Introduction to Business
- ASKI 201.3 Resource Management Project Assessment
- **GEOG 381.3** Development in the Canadian North Issues and Challenges

- **GEOG 385.3** Analysis of Environmental Management and Policy Making
- **GEOG 386.3** Environmental Impact Assessment
- PLAN 329.3 Integrated Water Resource Planning

# **Food Security and Sovereignty**

- AGRC 211.3 Global Food Security
- INDG 221.3 Indigenous Food Sovereignty

# **Animal Science**

- AGRC 112.3 Animal Agriculture and Food Science
- AGRC 113.3 Agri Food Issues and Institutions
- ANSC 212.3 Livestock and Poultry Production
- ANBI 375.3 Animals and the Environment

# Open Electives (3 6 credit units)

Please choose 3 credit units of open electives.

Rationale: Revisions to the Kanawayihetaytan Askiy diplomas (Indigenous Resource Management Diploma and the Indigenous Lands Governance Diploma) were made to create new direct entry pathways for students who wish to enroll directly into these diplomas without first completing the Kanawayihetaytan Askiy certificate. The revisions give students the option of either laddering in to either diploma from the KA certificate, or choosing a direct entry pathway.

## **University Course Challenge – November 2022**

The curricular revisions listed below were approved through the Arts & Science College Course and Program Challenge, and by the relevant college-level Academic Programs Committee, and are now submitted to the University Course Challenge for approval.

Contact: Alexis Dahl (alexis.dahl@usask.ca)

# **Archaeology**

## Minor program revisions

# Bachelor of Science Honours, Double Honours and Four-year in Archaeology

Add ANTH 231.3, 304.3, 305.3, 329.3, 332.3, and ARCH 259.3, 359.3, and the 200-400-level ANTH Special Topics (x98.3/x99.6) to lists of restricted elective courses in the C4 Major Requirement for all levels, as shown below. Remove ARCH 457.3 from this list for all levels. Add ARCH 462.3 to this list for the Double Honours. Recognize approved course split for ARCH 458.6 into ANTH 457.3 and 458.3 (see information items below).

# Bachelor of Science Honours (B.Sc. Honours) - Archaeology

C4 Major Requirement (54 credit units)

ARCH 361.6 Archaeological Field Methods

Choose 6 credit units from the following:

- ANTH 111.3 One World Many Peoples Introduction to Cultural Anthropology
- ARCH 112.3 The Human Journey Introduction to Archaeology and Biological Anthropology
- ARCH 116.3 Introduction to Near Eastern and Classical Archaeology

Choose 42 credit units from the following:

At least 15 credit units must at the 300-level or higher.

- ANTH 231.3 Cross Cultural Perspectives on Health and Illness
- ANTH 298.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 299.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 304.3 Anthropology Research Course
- ANTH 305.3 Anthropology Reading Course
- ANTH 329.3 Environmental Anthropology
- ANTH 332.3 Anthropology of Infectious Disease
- ANTH 398.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 399.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 457.3 Zooarchaeology I
- ANTH 458.3 Zooarchaeology II
- ANTH 498.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 499.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ARCH 250.3 Introduction to Archaeological Science
- ARCH 251.3 Introduction to Archaeological Interpretation
- ARCH 259.3 Archaeology of North America
- ARCH 270.3 Human Evolution
- ARCH 330.3 The Archaeology of Human Environmental Impact
- ARCH 350.3 Introduction to Boreal Forest Archaeology

- ARCH 352.3 Historical Archaeology
- ARCH 353.3 Plains Archaeology
- ARCH 359.3 Archaeology of the Northwest Coast and Plateau
- ARCH 385.3 Computer Applications in Archaeology
- ARCH 457.3
- ARCH 458.6 Zooarchaeology
- ARCH 459.3 Geoarchaeology
- ARCH 462.3 Contemporary Archaeological Theory
- ARCH 465.3 Spatial Analysis of Archaeological Data
- ARCH 470.3 Human Osteology
- ARCH 471.3 Forensic Anthropology
- ARCH 472.3 Palaeopathology
- ARCH 475.3 Bioarchaeology
- BIOL 324.3 Plants and Human Affairs
- CPPS 310.3 Basic Human Anatomy
- GEOG 235.3 Earth Processes and Natural Hazards A Canadian Perspective
- GEOL 245.3 Introduction to Sedimentary Rocks (formerly GEOL 243)
- GEOL 247.3 Palaeontology (formerly GEOL 246)

# Bachelor of Science Four-year (B.Sc. Four-year) - Archaeology

C4 Major Requirement (42 credit units)

Choose 6 credit units from the following:

- ANTH 111.3 One World Many Peoples Introduction to Cultural Anthropology
- ARCH 112.3 The Human Journey Introduction to Archaeology and Biological Anthropology
- ARCH 116.3 Introduction to Near Eastern and Classical Archaeology

Choose 36 credit units from the following:

At least 9 credit units must at the 300-level or higher.

- ANTH 231.3 Cross Cultural Perspectives on Health and Illness
- ANTH 298.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 299.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 304.3 Anthropology Research Course
- ANTH 305.3 Anthropology Reading Course
- ANTH 329.3 Environmental Anthropology
- ANTH 332.3 Anthropology of Infectious Disease
- ANTH 398.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 399.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 457.3 Zooarchaeology I
- ANTH 458.3 Zooarchaeology II
- ANTH 498.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 499.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ARCH 250.3 Introduction to Archaeological Science
- ARCH 251.3 Introduction to Archaeological Interpretation
- ARCH 259.3 Archaeology of North America
- ARCH 270.3 Human Evolution
- ARCH 330.3 The Archaeology of Human Environmental Impact

- ARCH 350.3 Introduction to Boreal Forest Archaeology
- ARCH 352.3 Historical Archaeology
- ARCH 353.3 Plains Archaeology
- ARCH 359.3 Archaeology of the Northwest Coast and Plateau
- ARCH 361.6 Archaeological Field Methods
- ARCH 385.3 Computer Applications in Archaeology
- ARCH 457.3
- ARCH 458.6 Zooarchaeology
- ARCH 459.3 Geoarchaeology
- ARCH 462.3 Contemporary Archaeological Theory
- ARCH 465.3 Spatial Analysis of Archaeological Data
- ARCH 470.3 Human Osteology
- ARCH 471.3 Forensic Anthropology
- ARCH 472.3 Palaeopathology
- ARCH 475.3 Bioarchaeology
- BIOL 324.3 Plants and Human Affairs
- CPPS 310.3 Basic Human Anatomy
- GEOG 235.3 Earth Processes and Natural Hazards A Canadian Perspective
- GEOL 245.3 Introduction to Sedimentary Rocks (formerly GEOL 243)
- GEOL 247.3 Palaeontology (formerly GEOL 246)

# Bachelor of Science Double Honours - Archaeology - Major 1

C4 Major Requirement (36 credit units)

ARCH 361.6 Archaeological Field Methods

Choose 6 credit units from the following:

- ANTH 111.3 One World Many Peoples Introduction to Cultural Anthropology
- ARCH 112.3 The Human Journey Introduction to Archaeology and Biological Anthropology
- ARCH 116.3 Introduction to Near Eastern and Classical Archaeology

## Choose 9 credit units from the following:

- ARCH 250.3 Introduction to Archaeological Science
- ARCH 251.3 Introduction to Archaeological Interpretation
- ARCH 270.3 Human Evolution
- GEOG 235.3 Earth Processes and Natural Hazards A Canadian Perspective
- GEOL 245.3 Introduction to Sedimentary Rocks (formerly GEOL 243)
- GEOL 247.3 Palaeontology (formerly GEOL 246)

# Choose 15 credit units from the following:

- ANTH 231.3 Cross Cultural Perspectives on Health and Illness
- ARCH 259.3 Archaeology of North America
- ANTH 298.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 299.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 304.3 Anthropology Research Course
- ANTH 305.3 Anthropology Reading Course
- **ANTH 329.3** Environmental Anthropology

- ANTH 332.3 Anthropology of Infectious Disease
- ANTH 398.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 399.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 457.3 Zooarchaeology I
- ANTH 458.3 Zooarchaeology II
- ANTH 498.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 499.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ARCH 330.3 The Archaeology of Human Environmental Impact
- ARCH 350.3 Introduction to Boreal Forest Archaeology
- ARCH 352.3 Historical Archaeology
- ARCH 353.3 Plains Archaeology
- ARCH 359.3 Archaeology of the Northwest Coast and Plateau
- ARCH 385.3 Computer Applications in Archaeology
- ARCH 457.3
- ARCH 458.6 Zooarchaeology
- ARCH 459.3 Geoarchaeology
- ARCH 462.3 Contemporary Archaeological Theory
- ARCH 465.3 Spatial Analysis of Archaeological Data
- ARCH 470.3 Human Osteology
- ARCH 471.3 Forensic Anthropology
- ARCH 472.3 Palaeopathology
- ARCH 475.3 Bioarchaeology
- BIOL 324.3 Plants and Human Affairs
- CPPS 310.3 Basic Human Anatomy

# <u>Double Honours - Archaeology - Major 2 (Science Option)</u>

# Requirements (36 credit units)

ARCH 361.6 Archaeological Field Methods

## Choose 6 credit units from the following:

- ANTH 111.3 One World Many Peoples Introduction to Cultural Anthropology
- ARCH 112.3 The Human Journey Introduction to Archaeology and Biological Anthropology
- ARCH 116.3 Introduction to Near Eastern and Classical Archaeology

# Choose 9 credit units from the following:

- ARCH 250.3 Introduction to Archaeological Science
- ARCH 251.3 Introduction to Archaeological Interpretation
- ARCH 270.3 Human Evolution
- GEOG 235.3 Earth Processes and Natural Hazards A Canadian Perspective
- GEOL 245.3 Introduction to Sedimentary Rocks (formerly GEOL 243)
- GEOL 247.3 Palaeontology (formerly GEOL 246)

## Choose 15 credit units from the following:

- ANTH 231.3 Cross Cultural Perspectives on Health and Illness
- ARCH 259.3 Archaeology of North America
- ANTH 298.3 Special Topics (if the topic relates to archaeology or biological anthropology)

- ANTH 299.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 304.3 Anthropology Research Course
- ANTH 305.3 Anthropology Reading Course
- ANTH 329.3 Environmental Anthropology
- ANTH 332.3 Anthropology of Infectious Disease
- ANTH 398.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 399.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 457.3 Zooarchaeology I
- ANTH 458.3 Zooarchaeology II
- ANTH 498.3 Special Topics (if the topic relates to archaeology or biological anthropology)
- ANTH 499.6 Special Topics (if the topic relates to archaeology or biological anthropology)
- ARCH 330.3 The Archaeology of Human Environmental Impact
- ARCH 350.3 Introduction to Boreal Forest Archaeology
- ARCH 352.3 Historical Archaeology
- ARCH 353.3 Plains Archaeology
- ARCH 359.3 Archaeology of the Northwest Coast and Plateau
- ARCH 385.3 Computer Applications in Archaeology
- ARCH 457.3
- ARCH 458.6 Zooarchaeology
- ARCH 459.3 Geoarchaeology
- ARCH 462.3 Contemporary Archaeological Theory
- ARCH 465.3 Spatial Analysis of Archaeological Data
- ARCH 470.3 Human Osteology
- ARCH 471.3 Forensic Anthropology
- ARCH 472.3 Palaeopathology
- ARCH 475.3 Bioarchaeology
- BIOL 324.3 Plants and Human Affairs
- CPPS 310.3 Basic Human Anatomy

If you require further assistance, please contact the Arts & Science Undergraduate Student Office.

Rationale: The added ANTH and ARCH permanent and special topics courses each incorporate scientific methods and/or concepts of the discipline, and are therefore appropriate to be included in the Major Requirement for these programs. ARCH 457.3 is expected to be deleted through the moribund process, effective 202305. ARCH 462.3 (Contemporary Archeological Theory) is already included in the Honours and Four-year programs, but was accidentally not added to the Double Honours programs as well. Notes on former versions of GEOL 245 and 247 are removed as the old courses have not been offered since 2004-5; students can still see this information in the course entries in the Catalogue.

## Course deletions:

ARCH 300.3 Archaeology Research Course

**ARCH 301.3 Reading Course** 

Rationale: To be replaced by ANTH 304 and 305, respectively. See below.

## **Archaeology and Anthropology**

# New course(s):

## **ANTH 304.3 Anthropology Research Course**

(1/2-3S) Supervised research (literature, laboratory, or field-based) course in a particular aspect of one of anthropology not offered in lecture form in this department. A detailed research program will be designed on an individual basis and will be guided by regular consultation with one or more faculty members. The student is required to consult with prospective faculty member(s) to plan a research project and make arrangements for supervision. The student may register in the course only after a detailed course syllabus has been approved by the Department Head.

Prerequisite(s): 24 credit units ARCH or ANTH courses; and permission of department.

Note: Students may take this course more than once for credit, provided the topic covered in each offering differs substantially. Students must consult the Department to ensure that the topics covered are different. There may be costs additional to tuition fees.

Instructor(s): Department faculty members

Rationale: This course is being created to replace ARCH 300 (to be deleted) as part of the undergraduate programs in (to be) Anthropology. The old course was a research course for only archaeology and bioarchaeology; the new ANTH 304 will be a research course for any sub-discipline of anthropology.

## **ANTH 305.3 Anthropology Reading Course**

(1/2-3S) Supervised reading course in a particular aspect of anthropology not offered in lecture form in this department. A detailed reading program will be designed on an individual basis and will be guided by regular consultation with one or more faculty members. The student is required to consult with prospective faculty member(s) to plan the reading course and make arrangements for supervision. The student may register in the course only after a detailed course syllabus has been approved by the Department Head.

Prerequisite(s): 24 credit units ARCH or ANTH courses; and permission of department.

Note: Students may take this course more than once for credit, provided the topic covered in each offering differs substantially. Students must consult the Department to ensure that the topics covered are different.

Instructor(s): Department faculty members

Rationale: This course is being created to replace ARCH 301 (to be deleted) as part of our departmental, program. The old course was a reading course for only archaeology and bioarchaeology; the new ANTH 305 will be a reading course for any sub-discipline of anthropology.

## **Art History**

#### Minor course revision

# ARTH 455.3 Contemporary Indigenous Art II

Prerequisite change:

Old prerequisite(s): ARTH 355.3 or permission of the instructor.

New prerequisite(s): ARTH 355; and 3 credits ARTH or INDG courses or permission from the instructor.

Rationale: This change helps to clarify the prerequisite pathway for this course.

# **Mathematics**

#### Minor program revisions:

# **Bachelor of Science Double Honours in Mathematics**

Add MATH 133.4 and 134.3 where MATH 110.3/176.3 and 116.3/177.3 appear, respectively.

## **Bachelor of Science Double Honours - Mathematics - Major 1**

C4 Major Requirement (42 credit units)

- MATH 163.3 Introduction to Mathematical Reasoning
- MATH 164.3 Introduction to Linear Algebra
- MATH 238.3 Introduction to Differential Equations
- MATH 266.3 Linear Algebra II
- MATH 276.3 Vector Calculus I
- MATH 277.3 Vector Calculus II
- MATH 361.3 Group Theory
- MATH 362.3 Rings and Fields
- MATH 371.3 Real Analysis I
- MATH 379.3 Complex Analysis

- MATH 402.0 Honours Thesis in Mathematics
- **STAT 241.3** Probability Theory

Note: <u>MATH 402.0</u> Honours Thesis in Mathematics is not required for students completing <u>CMPT 400.3</u> Research Topics in Computer Science as part of their Major 1 requirements.

Choose 3 credit units from the following:

- MATH 110.3 Calculus I
- MATH 133.4 Engineering Mathematics I
- MATH 176.3 Advanced Calculus I

Choose **3 credit units** from the following:

- MATH 116.3 Calculus II
- MATH 134.3 Engineering Mathematics II
- MATH 177.3 Advanced Calculus II

Choose the remaining **3 credit units** from the following, using the following rules:

- 300-Level or 400-Level MATH Courses
- 300-Level or 400-Level STAT Courses
- MATH 211.3 Numerical Analysis I

# **Double Honours - Mathematics - Major 2**

Requirements (42 credit units)

- MATH 110.3 Calculus I or MATH 176.3 Advanced Calculus I
- MATH 116.3 Calculus II or MATH 177.3 Advanced Calculus II
- MATH 163.3 Introduction to Mathematical Reasoning
- MATH 164.3 Introduction to Linear Algebra
- MATH 238.3 Introduction to Differential Equations
- MATH 266.3 Linear Algebra II
- MATH 276.3 Vector Calculus I
- MATH 277.3 Vector Calculus II
- MATH 361.3 Group Theory
- MATH 362.3 Rings and Fields
- MATH 371.3 Real Analysis I
- MATH 379.3 Complex Analysis
- MATH 402.0 Honours Thesis in Mathematics
- STAT 241.3 Probability Theory

MATH 402.0 Honours Thesis in Mathematics is not required for students completing CMPT 400.3 Research Topics in Computer Science as part of their Major 1 requirements.

Choose 3 credit units from the following:

- MATH 110.3 Calculus I
- MATH 133.4 Engineering Mathematics I

MATH 176.3 Advanced Calculus I

## Choose 3 credit units from the following:

- MATH 116.3 Calculus II
- MATH 134.3 Engineering Mathematics II
- MATH 177.3 Advanced Calculus II

Choose the remaining **3 credit units** from the following, using the following rules:

- MATH 300-Level, 400-Level
- STAT 300-Level, 400-Level
- MATH 211.3 Numerical Analysis I

## **Recommended Electives**

Computer Science

- CMPT 141.3 Introduction to Computer Science or CMPT 116.3 (recommended options)
- CMPT 145.3 Principles of Computer Science or CMPT 117.3 (recommended options)

Rationale: This change will make clear to Engineering students that these courses will be used in the Double Honours programs in Mathematics.

# **Psychology**

## Minor program revisions

# Bachelor of Arts Honours, Double Honours, and Four-year in Psychology

Reduce the requirement for 300-level courses by 3 credit units as shown below; add requirement to take 3 credit units of 200-level PSY courses.

# Bachelor of Arts Honours (B.A. Honours) - Psychology

B4 Major Requirement (60 credit units)

- PSY 120.3 Biological and Cognitive Bases of Psychology
- PSY 121.3 Social Clinical Cultural and Developmental Bases of Psychology
- PSY 233.3 Statistical Methods in Behavioural Sciences
- PSY 234.3 Statistical Methods in Behavioural Sciences
- PSY 235.3 Research Methods and Design
- PSY 472.6 BA Honours Thesis

# Group 1

Courses related to the cultural, social, and environmental influences on behaviour

Choose 6 credit units from the following:

- PSY 207.3 Psychology of Death and Dying
- PSY 213.3 Child Development

- PSY 214.3 Adolescent Development
- PSY 216.3 Psychology of Aging
- PSY 222.3 Personality
- PSY 223.3 Abnormal Psychology
- PSY 224.3 Introduction to Culture and Psychology
- PSY 225.3 Group Dynamics and Intergroup Relations
- PSY 226.3 Social Psychology
- PSY 227.3 Human Sexuality
- PSY 230.3 Criminal Behaviour
- PSY 231.3 Psychology and Law
- PSY 236.3 Qualitative Research in Psychology
- PSY 257.3 Clinical and Counselling Psychology
- PSY 260.3 Health Psychology
- PSY 261.3 Community Psychology

## Group 2

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

Choose 6 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

Choose **6 credit units** from the following such that 3 credit units are chosen from each of Groups 1A and 1B; or 3 credit units are chosen from each of Groups 2A and 2B:

## **Group 1A**

Courses related to the cultural, social, and environmental influences on behaviour

- PSY 315.3 Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- PSY 323.3 Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I

# **Group 1B**

- PSY 316.3 Advanced Development II Social and Emotional Research
- PSY 318.3 Cognitive Development II Research
- PSY 324.3 Research in Qualitative Study of Lives and Social Practices
- PSY 326.3 Advanced Social Psychology II

## **Group 2A**

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

- PSY 347.3 Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

# **Group 2B**

- PSY 348.3 Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

# **Group 1A**

Courses related to the cultural, social, and environmental influences on behaviour

Choose 3 credit units from the following:

- <u>PSY 315.3</u> Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- PSY 323.3 Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I

# **Group 2A**

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

Choose 3 credit units from the following:

- <u>PSY 347.3</u> Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

# Group 1B or 2B

Choose 3 credit units from the following:

- PSY 316.3 Advanced Development II Social and Emotional Research
- PSY 318.3 Cognitive Development II Research
- PSY 324.3 Research in Qualitative Study of Lives and Social Practices
- PSY 326.3 Advanced Social Psychology II
- <u>PSY 348.3</u> Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

Choose 6 credit units from the following:

• <u>PSY — 400-Level</u>

## Choose 12 credit units from the following:

• PSY — 200-Level, 300-Level, 400-Level

## Choose 3 credit units from the following:

PSY — 200-Level

## Bachelor of Arts Four-year (B.A. Four-year) - Psychology

B4 Major Requirement (36 credit units)

- PSY 120.3 Biological and Cognitive Bases of Psychology
- PSY 121.3 Social Clinical Cultural and Developmental Bases of Psychology
- PSY 233.3 Statistical Methods in Behavioural Sciences
- PSY 234.3 Statistical Methods in Behavioural Sciences
- PSY 235.3 Research Methods and Design

## Group 1

Courses related to the cultural, social, and environmental influences on behaviour

# Choose 6 credit units from the following:

- PSY 207.3 Psychology of Death and Dying
- PSY 213.3 Child Development
- PSY 214.3 Adolescent Development
- PSY 216.3 Psychology of Aging
- PSY 222.3 Personality
- PSY 223.3 Abnormal Psychology
- PSY 224.3 Introduction to Culture and Psychology
- PSY 225.3 Group Dynamics and Intergroup Relations
- PSY 226.3 Social Psychology
- PSY 227.3 Human Sexuality
- **PSY 230.3** Criminal Behaviour
- PSY 231.3 Psychology and Law
- PSY 236.3 Qualitative Research in Psychology
- PSY 257.3 Clinical and Counselling Psychology
- PSY 260.3 Health Psychology
- PSY 261.3 Community Psychology

## Group 2

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

# Choose 6 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology

- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

Choose 3 credit units from the following:

## Group 1A or 2A

Courses related to the cultural, social, and environmental influences on behaviour (1A) and courses related to the cognitive, neuropsychological, and biological influences on behavior (2A)

Choose 3 credit units from the following:

- PSY 315.3 Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- PSY 323.3 Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I
- PSY 347.3 Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

Choose **6 credit units** from the following categories so as to take courses from one of the combinations of 1A and 2A; or 1A and 1B; or 2A and 2B:

## **Group 1A**

Courses related to the cultural, social, and environmental influences on behaviour

- <u>PSY 315.3</u> Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- PSY 323.3 Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I

## **Group 2A**

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

- <u>PSY 347.3</u> Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

## Group 1B

- PSY 316.3 Advanced Development II Social and Emotional Research
- PSY 318.3 Cognitive Development II Research
- PSY 324.3 Research in Qualitative Study of Lives and Social Practices
- PSY 326.3 Advanced Social Psychology II

## **Group 2B**

- PSY 348.3 Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

# **Senior Psychology Courses**

Choose **3 credit units** from the following:

PSY — 400-Level

Choose 3 credit units from the following:

PSY — 200-Level

# Bachelor of Arts Double Honours - Psychology - Major 1

**B4 Major Requirement (42 credit units)** 

- PSY 120.3 Biological and Cognitive Bases of Psychology
- PSY 121.3 Social Clinical Cultural and Developmental Bases of Psychology
- PSY 233.3 Statistical Methods in Behavioural Sciences
- PSY 234.3 Statistical Methods in Behavioural Sciences
- PSY 235.3 Research Methods and Design
- PSY 472.6 BA Honours Thesis

#### Group 1

Courses related to the cultural, social, and environmental influences on behaviour

Choose 3 credit units from the following:

- PSY 207.3 Psychology of Death and Dying
- PSY 213.3 Child Development
- PSY 214.3 Adolescent Development
- PSY 216.3 Psychology of Aging
- PSY 222.3 Personality
- PSY 223.3 Abnormal Psychology
- PSY 224.3 Introduction to Culture and Psychology
- PSY 225.3 Group Dynamics and Intergroup Relations
- PSY 226.3 Social Psychology
- PSY 227.3 Human Sexuality
- PSY 230.3 Criminal Behaviour
- PSY 231.3 Psychology and Law
- **PSY 236.3** Qualitative Research in Psychology
- PSY 257.3 Clinical and Counselling Psychology
- PSY 260.3 Health Psychology
- PSY 261.3 Community Psychology

## **Group 2**

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

Choose 3 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- <u>PSY 253.3</u> Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

Choose **6 credit units** from the following such that 3 credit units are chosen from each of Groups 1A and 1B; or 3 credit units are chosen from each of Groups 2A and 2B:

## **Group 1A**

Courses related to the cultural, social, and environmental influences on behaviour

- PSY 315.3 Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- PSY 323.3 Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I

# **Group 1B**

- PSY 316.3 Advanced Development II Social and Emotional Research
- PSY 318.3 Cognitive Development II Research
- PSY 324.3 Research in Qualitative Study of Lives and Social Practices
- PSY 326.3 Advanced Social Psychology II

# **Group 2A**

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

- <u>PSY 347.3</u> Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

## **Group 2B**

- PSY 348.3 Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

# Group 1A:

Courses related to the cultural, social, and environmental influences on behaviour

## Choose 3 credit units from the following:

- PSY 315.3 Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- <u>PSY 323.3</u> Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I

#### Group 2

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

Choose 3 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

# **Group 2A**

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

Choose 3 credit units from the following:

- PSY 347.3 Advanced Human Neuropsychology
- <u>PSY 355.3</u> Research in Advanced Cognitive Science

#### Group 1B or 2B

Choose 3 credit units from the following:

- PSY 316.3 Advanced Development II Social and Emotional Research
- PSY 318.3 Cognitive Development II Research
- PSY 324.3 Research in Qualitative Study of Lives and Social Practices
- PSY 326.3 Advanced Social Psychology II
- PSY 348.3 Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

Choose 6 credit units from the following:

• PSY — 400-Level

Choose 3 credit units from the following:

PSY — 200-Level

# **Double Honours - Psychology - Major 2 (Social Sciences option)**

Requirements (42 credit units)

- <u>PSY 120.3</u> Biological and Cognitive Bases of Psychology and <u>PSY 121.3</u> Social Clinical Cultural and Developmental Bases of Psychology (formerly PSY 110)
- PSY 233.3 Statistical Methods in Behavioural Sciences
- PSY 234.3 Statistical Methods in Behavioural Sciences
- PSY 235.3 Research Methods and Design
- PSY 472.6 BA Honours Thesis

Courses related to the cultural, social, and environmental influences on behaviour

## Choose 3 credit units from the following:

- PSY 207.3 Psychology of Death and Dying
- PSY 213.3 Child Development
- PSY 214.3 Adolescent Development
- PSY 216.3 Psychology of Aging
- PSY 222.3 Personality
- PSY 223.3 Abnormal Psychology
- PSY 224.3 Introduction to Culture and Psychology
- PSY 225.3 Group Dynamics and Intergroup Relations
- PSY 226.3 Social Psychology
- PSY 227.3 Human Sexuality
- PSY 230.3 Criminal Behaviour
- PSY 231.3 Psychology and Law
- PSY 236.3 Qualitative Research in Psychology
- PSY 257.3 Clinical and Counselling Psychology
- PSY 260.3 Health Psychology
- PSY 261.3 Community Psychology

# **Group 2**

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

## Choose **3 credit units** from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

Choose **6 credit units** from the following such that 3 credit units are chosen from each of Groups 1A and 1B; or 3 credit units are chosen from each of Groups 2A and 2B:

## **Group 1A**

Courses related to the cultural, social, and environmental influences on behaviour

- PSY 315.3 Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- PSY 323.3 Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I

## **Group 1B**

- PSY 316.3 Advanced Development II Social and Emotional Research
- PSY 318.3 Cognitive Development II Research
- PSY 324.3 Research in Qualitative Study of Lives and Social Practices
- PSY 326.3 Advanced Social Psychology II

# **Group 2A**

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

- **PSY 347.3** Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

# **Group 2B**

- PSY 348.3 Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

# **Group 1A**

Courses related to the cultural, social, and environmental influences on behaviour

Choose 3 credit units from the following:

- PSY 315.3 Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- PSY 323.3 Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I

# Group 2

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

Choose 3 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes

- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

## **Group 2A**

Choose 3 credit units from the following:

- PSY 347.3 Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

## **Group 1B or Group 2B**

Choose 3 credit units from the following:

- PSY 316.3 Advanced Development II Social and Emotional Research
- PSY 318.3 Cognitive Development II Research
- PSY 324.3 Research in Qualitative Study of Lives and Social Practices
- PSY 326.3 Advanced Social Psychology II
- PSY 348.3 Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

Choose 6 credit units from the following:

PSY — 400-Level

Choose **3 credit units** from the following:

PSY — 200-Level

If you require further assistance, please contact the Arts and Science Undergraduate Student Office.

Rationale: The Department of Psychology and Health Studies engaged in an extensive discussion regarding the need for students to take the current number of 300-level lab courses, and the department's ability to deliver the number of classes needed for students to meet these requirements. In comparison to other institutions, our program will still require more of these courses, even after the changes. Given this, and decreasing faculty resources, we must decrease our reliance on these courses. We are confident that students will still receive excellent experiential research training with the remaining 300-level lab requirements.

## Bachelor of Science Honours, Double Honours and Four-year in Psychology

Reduce the requirements for 300-level PSY courses by 3 credit units as shown below; add requirement to take 3 credit units of 200-level PSY courses from Group 2 (courses related to the cognitive, neuropsychological, and biological influences on behavior).

# Bachelor of Science Honours (B.Sc. Honours) - Psychology

C4 Major Requirement (60 credit units)

- PSY 120.3 Biological and Cognitive Bases of Psychology
- PSY 121.3 Social Clinical Cultural and Developmental Bases of Psychology (PSY 120 and 121 were formerly PSY 110)

## **Psychology Statistics/Research Methods Courses**

# Choose 9 credit units from the following:

- PSY 233.3 Statistical Methods in Behavioural Sciences
- PSY 234.3 Statistical Methods in Behavioural Sciences
- PSY 235.3 Research Methods and Design

# Psychology Group 2 (Science) Courses (21 credit units)

# Choose 6 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

## **Group 2A**

# Choose 6 3 credit units from the following:

- PSY 347.3 Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

## **Group 2B**

## Choose 3 credit units from the following:

- PSY 348.3 Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

# **Group 2 400-level courses**

## Choose 6 credit units from the following:

- PSY 448.3 Advanced Seminar in Neuroscience
- PSY 456.3 Advanced Seminar in Cognitive Science

# Group 2 at the 200 level or higher

# Choose 6 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology

- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language
- PSY 347.3 Advanced Human Neuropsychology
- PSY 348.3 Research in Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science
- PSY 356.3 Advanced Cognitive Science II Research Projects
- PSY 448.3 Advanced Seminar in Neuroscience
- PSY 456.3 Advanced Seminar in Cognitive Science

## Choose 3 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

## **Honours Thesis (6 credit units)**

• PSY 473.6 BSc Honours Thesis

Psychology Group 1 (Social Science) courses (6 credit units)

## Choose 6 credit units from the following:

- PSY 207.3 Psychology of Death and Dying
- PSY 213.3 Child Development
- PSY 214.3 Adolescent Development
- PSY 216.3 Psychology of Aging
- PSY 222.3 Personality
- PSY 223.3 Abnormal Psychology
- PSY 224.3 Introduction to Culture and Psychology
- PSY 225.3 Group Dynamics and Intergroup Relations
- PSY 226.3 Social Psychology
- PSY 227.3 Human Sexuality
- PSY 230.3 Criminal Behaviour
- PSY 231.3 Psychology and Law
- PSY 236.3 Qualitative Research in Psychology
- PSY 257.3 Clinical and Counselling Psychology
- PSY 260.3 Health Psychology
- PSY 261.3 Community Psychology

## **Senior Psychology Courses**

# Choose 6 credit units from the following:

PSY — 200-Level, 300-Level, 400-Level

## Bachelor of Science Four-year (B.Sc. Four-year) - Psychology

C4 Major Requirement (48 credit units)

- PSY 120.3 Biological and Cognitive Bases of Psychology
- PSY 121.3 Social Clinical Cultural and Developmental Bases of Psychology (PSY 120 and 121 were formerly PSY 110)

# **Psychology Statistics/Research Methods Courses**

- PSY 233.3 Statistical Methods in Behavioural Sciences
- PSY 234.3 Statistical Methods in Behavioural Sciences
- PSY 235.3 Research Methods and Design

## Psychology Group 2 (Science) Courses (21 credit units)

# Choose 6 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

### **Group 2A**

# Choose **6 3 credit units** from the following:

- PSY 347.3 Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

### **Group 2B**

# Choose 3 credit units from the following:

- <u>PSY 348.3</u> Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

# Group 2 at the 200 level or higher

## Choose 6 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

- PSY 347.3 Advanced Human Neuropsychology
- PSY 348.3 Research in Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science
- PSY 356.3 Advanced Cognitive Science II Research Projects
- PSY 448.3 Advanced Seminar in Neuroscience
- PSY 456.3 Advanced Seminar in Cognitive Science

### Choose **3 credit units** from the following:

- PSY 242.3 Physiological Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

## Psychology Group 1 (Social Science) courses (6 credit units)

## Choose 6 credit units from the following:

- PSY 207.3 Psychology of Death and Dying
- PSY 213.3 Child Development
- PSY 214.3 Adolescent Development
- PSY 216.3 Psychology of Aging
- PSY 222.3 Personality
- PSY 223.3 Abnormal Psychology
- PSY 224.3 Introduction to Culture and Psychology
- PSY 225.3 Group Dynamics and Intergroup Relations
- PSY 226.3 Social Psychology
- PSY 227.3 Human Sexuality
- PSY 230.3 Criminal Behaviour
- PSY 231.3 Psychology and Law
- PSY 236.3 Qualitative Research in Psychology
- PSY 257.3 Clinical and Counselling Psychology
- PSY 260.3 Health Psychology
- PSY 261.3 Community Psychology

## **Senior Psychology Courses**

# Choose 6 credit units from the following:

PSY — 200-Level, 300-Level, 400-Level

## Bachelor of Science Double Honours - Psychology - Major 1

C4 Major Requirement (42 credit units)

- PSY 120.3 Biological and Cognitive Bases of Psychology
- PSY 121.3 Social Clinical Cultural and Developmental Bases of Psychology
- PSY 233.3 Statistical Methods in Behavioural Sciences
- PSY 234.3 Statistical Methods in Behavioural Sciences
- PSY 235.3 Research Methods and Design
- PSY 473.6 BSc Honours Thesis

## Group 1

Courses related to the cultural, social, and environmental influences on behavior.

## Choose 3 credit units from the following:

- PSY 207.3 Psychology of Death and Dying
- PSY 213.3 Child Development
- PSY 214.3 Adolescent Development
- PSY 216.3 Psychology of Aging
- PSY 222.3 Personality
- PSY 223.3 Abnormal Psychology
- PSY 224.3 Introduction to Culture and Psychology
- PSY 225.3 Group Dynamics and Intergroup Relations
- PSY 226.3 Social Psychology
- PSY 227.3 Human Sexuality
- PSY 230.3 Criminal Behaviour
- PSY 231.3 Psychology and Law
- PSY 236.3 Qualitative Research in Psychology
- PSY 257.3 Clinical and Counselling Psychology
- PSY 260.3 Health Psychology
- PSY 261.3 Community Psychology

## **Group 1A**

Courses related to the cultural, social, and environmental influences on behavior.

# Choose 3 credit units from the following:

- PSY 315.3 Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- <u>PSY 323.3</u> Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I

## Group 2

Courses related to the cognitive, neuropsychological, and biological influences on behavior.

# Choose 3 6 credit units from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

## **Group 2A**

# Choose 3 credit units from the following:

- PSY 347.3 Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

#### **Group 2B**

# Choose 3 credit units from the following:

- PSY 348.3 Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

# Choose 6 credit units from the following:

- PSY 448.3 Advanced Seminar in Neuroscience
- PSY 456.3 Advanced Seminar in Cognitive Science

## **Double Honours - Psychology - Major 2 (Science option)**

Requirements (42 credit units)

- <u>PSY 120.3</u> Biological and Cognitive Bases of Psychology and <u>PSY 121.3</u> Social Clinical Cultural and Developmental Bases of Psychology (formerly PSY 110)
- PSY 233.3 Statistical Methods in Behavioural Sciences
- PSY 234.3 Statistical Methods in Behavioural Sciences
- PSY 235.3 Research Methods and Design
- PSY 473.6 BSc Honours Thesis

# Group 1

Courses related to the cultural, social, and environmental influences on behaviour

# Choose 3 credit units from the following:

- PSY 207.3 Psychology of Death and Dying
- PSY 213.3 Child Development
- **PSY 214.3** Adolescent Development

- PSY 216.3 Psychology of Aging
- PSY 222.3 Personality
- PSY 223.3 Abnormal Psychology
- PSY 224.3 Introduction to Culture and Psychology
- PSY 225.3 Group Dynamics and Intergroup Relations
- PSY 226.3 Social Psychology
- PSY 227.3 Human Sexuality
- PSY 230.3 Criminal Behaviour
- PSY 231.3 Psychology and Law
- PSY 236.3 Qualitative Research in Psychology
- PSY 257.3 Clinical and Counselling Psychology
- PSY 260.3 Health Psychology
- PSY 261.3 Community Psychology

## **Group 1A**

Courses related to the cultural, social, and environmental influences on behaviour

## Choose 3 credit units from the following:

- PSY 315.3 Advanced Development I Social and Emotional
- PSY 317.3 Cognitive Development I
- PSY 323.3 Qualitative Study of Lives and Social Practices
- PSY 325.3 Investigating Social Psychological Phenomena I

# Group 2

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

# Choose **3 6 credit units** from the following:

- PSY 242.3 Physiological Psychology
- PSY 243.3 Evolutionary Psychology
- PSY 246.3 Introduction to Human Neuropsychology
- PSY 252.3 Perceptual Processes
- PSY 253.3 Introduction to Cognitive Psychology
- PSY 255.3 Human Memory
- PSY 256.3 Psychology of Language

# **Group 2A**

Courses related to the cognitive, neuropsychological, and biological influences on behaviour

# Choose 3 credit units from the following:

- PSY 347.3 Advanced Human Neuropsychology
- PSY 355.3 Research in Advanced Cognitive Science

## **Group 2B**

Choose 3 credit units from the following:

- PSY 348.3 Research in Human Neuropsychology
- PSY 356.3 Advanced Cognitive Science II Research Projects

Choose 6 credit units from the following:

- PSY 448.3 Advanced Seminar in Neuroscience
- PSY 456.3 Advanced Seminar in Cognitive Science

If you require further assistance, please contact the Arts and Science Undergraduate Student Office.

Rationale: Rationale: The Department of Psychology and Health Studies engaged in an extensive discussion regarding the need for students to take the current number of 300-level lab courses, and the department's ability to deliver the number of classes needed for students to meet these requirements. In comparison to other institutions, our program will still require more of these courses, even after the changes. Given this, and decreasing faculty resources, we must decrease our reliance on these courses. We are confident that students will still receive excellent experiential research training with the remaining 300-level lab requirements.

## Classical, Medieval and Renaissance Studies

# Minor program revisions – Correction from October 2022 UCC:

- DRAM 303 and 401 have been deleted, and therefore should no longer appear as course options in this program
- LATN 110.4 and 111.5 do not exist, and should not appear as courses options in this program

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 information.

# **Archaeology and Anthropology**

Course split (effective May 2023) ARCH 458.6 Zooarchaeology into

# ANTH 457.3 Zooarchaeology I

Term 1; 1.5 Lecture hours and 1.5 Lab/practicum hours

This course is designed to expose you to the basic elements of zooarchaeology, which is the study of faunal remains from archaeological sites. It will focus on specimen identification, quantification, taphonomy, modification, age and sex estimations, seasonality, and other contemporary techniques in this discipline. You will be exposed to a wide variety of animal taxa from large and small-bodied ungulates, to carnivores, fishes, and birds. The presentation of course material is based on lectures, laboratory activities, and discussions of methods, approaches, and case studies. A heavy emphasis is placed on learning through hands-on experience and developing practical skills in working with large

faunal assemblages. Please note that this is NOT a course in comparative vertebrate or invertebrate anatomy, nor this is a course in human or non-human mammalian anatomy.

Prerequisite(s): ARCH 250.3

Note: Students with credit for ARCH 458.6 may not take this course for credit.

Instructor(s): Tatiana Nomokonova

and

# ANTH 458.3 Zooarchaeology II

Term 2; 1.5 Lecture hours and 1.5 Lab/practicum hours

This course is designed to expose you to advanced issues and discourses in the field of zooarchaeology related to contemporary methods and theoretical approaches. It will address a range of topics that cover different aspects of human-animal studies including subsistence, foraging strategies, domestication, bone chemistry, use of biometrics, animal life histories, integration of Indigenous knowledge, and other contemporary techniques and approaches applied in the discipline. The presentation of course material is based on lectures, laboratory activities with a sample faunal assemblage, and discussions of methods, theoretical approaches, and case studies. A heavy emphasis is placed on learning through hands-on experience and developing practical skills in working with large faunal assemblages.

Prerequisite(s): ANTH 457.3

Note: Students with credit for ARCH 458.6 may not take this course for credit.

Instructor(s): Tatiana Nomokonova

Rationale: Eliminates a 6 credit unit course, and allows students to take only the first half of the old course. The prerequisites have been changed to no longer require a class in human anatomy, which gives students the opportunity to train in handling only animal remains if they are uncomfortable handling human remains. The Department has submitted proposals to the appropriate committees of Council to rename the Department, rename the department's programs, and relabel all undergraduate ARCH courses to ANTH courses. As this course split is effective 1 year earlier than the request for the other courses, it makes sense to apply the new label now.

ANTH 457.3 and 458.3 (together) will be equivalent to ARCH 458.6.



## **College of Education – November 2022 University Course Challenge**

The curricular revision listed below was approved by the College of Education Faculty Council on Friday, October 21, 2022 and is now submitted to the University Course Challenge for approval.

Contact: Arvelle Van Dyck (arvelle.vandyck@usask.ca)

## 1. Extended Practicum Academic Policy Revision

**Rationale:** Given the various B.Ed. program routes and their varying completion times (i.e., two to five years), the reference to "Years 1, 2, and 3" in the academic policy do not apply program routes. Similarly, the statement about credit for the required laboratory is not applicable to all program routes. As such, the Extended Practicum academic policy is being revised as noted in red below.

## **Extended Practicum**

There are certain requirements that must be completed by **June 30** prior to enrolling in the extended practicum in the final year of the program Year 4, including: all required external and Teaching Area I and II coursework; of the Year 1, 2, and 3 required courses; the required Education courses with a minimum 60% ED.W.A.; eredit for the required laboratory, teacher candidate teaching component/field experience component of the program; and, the external component of the program with a minimum 60% EX.W.A.

By June 30 prior to the extended practicum in the final year of the program, Year 4, teacher candidates in the Secondary option must complete all external courses in Teaching Areas I and II with a minimum average of 60% and teacher candidates in the Early/Middle Years option must complete all external courses in Teaching Areas I and II and courses in the Required Areas of Study.

Please contact the <u>College of Education</u> for further information.

# 2. <u>Prerequisite change for EADM/ECUR/EFDT/EPSE 411.3: Inquiry Project and</u> Community Learning Field Experience

**Change:** Removal of ECUR 307.3: Early Literacy Prekindergarten to Grade 3, ECUR 309.3: Introduction to Elementary English Language Arts and ECUR 320.3: Literacy Across the Secondary Curriculum as the pre- or co-requisites for EADM/ECUR/EFDT/EPSE 411.3: Inquiry Project and Community Learning Field Experience.

#### **Course Description:**

EADM/ECUR/EFDT/EPSE 411.3: Inquiry Project and Community Learning Field Experience

Students will develop an independent or interdependent inquiry project connected with their oncampus and field study experiences. Students will be facilitated in developing understanding approaches to inquiring appropriate to questions they wish to address and will be encouraged to organize an inter-professional community-learning field experience through which they will develop positive attitudes toward community partnerships in education and develop skills related to community engagement and community-based learning.

**Prerequisite(s):** Students pursuing the B.Ed. Direct Entry Program must complete EFDT 101.3; ECUR 163.3 or ECUR 164.3 or ECUR 165.3; EFDT 265.3 or ECUR 265.3; EPSE 202.3.

Prerequisite(s) or Corequisite(s): (ECUR 307.3 or ECUR 308.3) or (ECUR 309.3 or ECUR 310.3) or (ECUR 320.3 or ECUR 325.3).

**Note:** Students with credit for EDUC 411, EFDT 411, ECUR 411, or EPSE 411 will not receive credit for this course.

## 3. Change to External English Course Requirements

**Rationale:** All direct-entry Bachelor of Education program routes require English coursework to be completed as part of the external course requirements. The exception is if English Languages Arts is selected as one of the two teaching areas. Typically, at least 6 credit units are required. If one of the Teaching Areas is Cree, French or Languages (Early/Middle Years program route), only 3 credit units of junior level English are required.

There are some instances where newly admitted transfer students (internal or external) have completed 6 credit units of English coursework that transfer to USask as ENG JR.3 and ENG SR.3. Furthermore, there are students who have more than 6 credit units of English coursework completed and it would be most beneficial to the student to use the best 6 credit units of English coursework rather than only the 100-level (or junior-level equivalent). Thus, the proposed motion revises the external English course requirement from 100-level ENG to 100-, 200-, 300-or 400-level ENG.

**Change:** To allow the external English course requirement to be satisfied with English credit units completed at any level (i.e., ENG 100-, 200-, 300- or 400-level) for all B.Ed. program routes (Early/Middle Years, Secondary, B.Sc. Kinesiology/B. Education Combined Program, ITEP, SUNTEP, Technical Vocational).

## All B.Ed. Program Routes

### **English**

Choose 6 credit units of junior level English

Please Note: not required if English Language Arts is a Teaching Area.

• ENG — 100-Level, 200-Level, 300-Level, 400-Level

## **B.Ed. – Language Teacher Education Program (LTEP)**

## Choose 3 credit units of junior-level English

Please Note: not required for a Teaching Area 2 of English Language Arts.

• ENG — 100-Level, 200-Level, 300-Level, 400-Level

## 4. Changes to KIN Requirements in B.Ed. Program Routes

a) Rationale: All direct-entry Bachelor of Education program routes at the Early/Middle Years level require 3 credit units of Kinesiology (KIN) coursework to be completed as part of the external course requirements. The exception is if Physical Education is selected as one of the two teaching areas.

There are some instances where newly admitted transfer students (internal or external) have completed 3 credit units of Kinesiology coursework that transfer to USask as a 200-level Kinesiology course. Furthermore, there are students who have more than 6 credit units of Kinesiology coursework completed and it would be most beneficial to the student to use the best 3 credit units of KIN coursework rather than only one of KIN 121.3, KIN 122.3 or KIN 146.3. Thus, the proposed motion revises the external Kinesiology course requirement from specific 100-level KIN courses to 100-, 200-, 300- or 400-level KIN. Since KIN 146.3: Physical Activity and School Aged Children and Youth was designed for students specifically in the College of Education, this course will continue to be the recommended KIN course to meet this requirement.

Change: To allow the external Kinesiology course requirement to be satisfied with a Kinesiology course completed at any level (i.e., KIN 100-, 200-, 300- or 400-level) for all B.Ed. program routes at the Early/Middle Years level (Early/Middle Years, LTEP, ITEP, SUNTEP). KIN 146.3: Physical Activity and School Aged Children and Youth is the recommended course to meet this requirement.

b) Rationale: In the past, KINA (Kinesiology Activity) courses that were weighted as 2 credit units were not allowed to meet B.Ed. program requirements (with the exception of the specific requirements for the B.Sc. Kinesiology/B. Education Combined Program). In recent years, Kinesiology Activity courses were changed from KINA .2 (Kinesiology Activity 2 credit unit courses) to KIN .3 (Kinesiology 3 credit unit courses). Since the KIN requirements in the course and program catalogue are listed as KIN 100-, 200-, 300- or 400-level, the 3 credit unit Kinesiology Activity courses are now inadvertently included.

KIN courses are part of the external requirement of Kinesiology (Early/Middle Years level) and the Teaching Area 1 and 2 of Physical Education (Early/Middle Years level) and Secondary Teaching Area 1 for students with B.Sc. Kinesiology completed).

Note: Similarly, MUAP – Music Applied (or applied lesson courses in Music) are not allowed to meet the Fine Arts, Arts Education or elective requirements.

Change: Effective 2023-2024 for both the external Kinesiology requirement and the Physical Education Teaching Area, to exclude current and future offerings of KIN .3 classes that are considered "Kinesiology Activity" courses by the College of Kinesiology, in particular:

- KIN 310.3: Rhythm and Dance Movement Fundamentals
- **KIN 311.3: Aquatics**
- KIN 324.3: Athletics
- KIN 325.3: Combatives

## **Course Descriptions**

# Early/Middle Years External Requirement – Kinesiology

**Choose 3 credit units of Kinesiology** 

Please Note: not required if Physical Education is a Teaching Area.

- KIN 121.3 Functional Basis of Physical Activity
- KIN 122.3 Social Behavioral Foundations of Physical Activity
- KIN 146.3 Physical Activity and School Aged Children and Youth
- KIN 100-Level, 200-Level, 300-Level, 400-Level

Recommended Course: KIN 146.3 Physical Activity and School Aged Children and Youth

Kinesiology Activity courses may <u>not</u> be used to meet this requirement, including: KIN 310.3, KIN 311.3, KIN 324.3, and KIN 325.3.

# Early/Middle Years Teaching Area 1 (18 credit units)

Choose 3 credit units from the following junior level Kinesiology courses:

• KIN 146.3

**Choose 15 credit units from the following Kinesiology courses:** 

- KIN 150.3, KIN 240.3, KIN 281.3 and/or KIN 341.3 are recommended
- KIN 100-Level, 200-Level, 300-Level, 400-Level

Kinesiology Activity courses may <u>not</u> be used to meet this requirement, including: KIN 310.3, KIN 311.3, KIN 324.3, and KIN 325.3.

# Early/Middle Years Teaching Area 2 (12 credit units)

Choose 3 credit units from the following junior level Kinesiology courses:

o KIN 146.3

**Choose 9 credit units from the following Kinesiology courses:** 

- KIN 150.3, KIN 240.3, KIN 281.3, and/or KIN 341.3 are recommended.
- KIN 100-Level, 200-Level, 300-Level, 400-Level

Kinesiology Activity courses may <u>not</u> be used to meet this requirement, including: KIN 310.3, KIN 311.3, KIN 324.3, and KIN 325.3.

## Secondary Teaching Area 1

To become a secondary physical education teacher, see the <u>five-year combined</u> B.Sc.(Kin.)/B.Ed. program.

Graduates of the B.Sc. in Kinesiology may apply to the B.Ed. program using their best 24 credit units of 3 or 6 credit unit Kinesiology courses to comprise their first teaching area. In order to hold a teaching area of Physical Education at the Secondary level, students must have a B.Sc. Kinesiology degree.

• KIN — 100-Level, 200-Level, 300-Level, 400-Level

Kinesiology Activity courses may <u>not</u> be used to meet this requirement, including: KIN 310.3, KIN 311.3, KIN 324.3, and KIN 325.3.

- c) Rationale: In recent years, the College of Kinesiology has changed Kinesiology Activity courses from KINA .2 with a 2 credit unit weighting to KIN .3 with a 3 credit unit weighting. Since only certain KIN courses are Kinesiology Activity courses, it would be ideal to have the specific courses listed in the catalogue listing for the B.Sc. Kinesiology/B. Education Combined Program rather than the general "KIN 200-, 300-, 400-level" that currently appears. The Kinesiology Activity Courses currently offered by the College of Kinesiology are:
  - KIN 310.3: Rhythm and Dance Movement Fundamentals
  - KIN 311.3: Aquatics
  - KIN 324.3: Athletics
  - KIN 325.3: Combatives

Listing the specific Kinesiology Activity courses will also allow the DegreeWorks audit tool to function more accurately.

Change: To list KIN 310.3: Rhythm and Dance Movement Fundamentals, KIN 311.3 Aquatics, KIN 324.3: Athletics, and KIN 325.3: Combatives as the particular course options for the 3 credit unit Kinesiology Activity requirements in the B.Sc. Kinesiology/B. Education Combined Program.

# Catalogue Entry - Bachelor of Science Kinesiology/Bachelor of Education Combined Program

## Year 1 (30 credit units)

## **Education Learning Communities:**

- EDLC 101.0 Education Learning Community On Campus
- EDLC 102.0 Education Learning Community in Our City

## **Required Courses:**

- <u>BIOL 120.3</u> The Nature of Life
- BIOL 224.3 Animal Body Systems
- EFDT 101.3 Introduction to Education
- ECUR 165.3 Introduction to Teaching in Secondary Schools
- KIN 121.3 Functional Basis of Physical Activity
- KIN 122.3 Social Behavioral Foundations of Physical Activity
- KIN 150.3 How Body Moves I
- KIN 250.3 How the Body Moves II
- MATH 104.3 Elementary Calculus or MATH 110.3 Calculus I

## Choose 3 English (junior level) credit units from the following:

• ENG — 100-Level

## Spring Term (after Year 1) (6 credit units)

## **Choose 6 credit units from the following:**

- <u>KIN 225.3</u> Introduction to Exercise Physiology Neuromuscular and Metabolic Aspects
- <u>KIN 226.3</u> Introduction to Exercise Physiology Cardiorespiratory Obesity Thermoregulation
- KIN 231.3 Social Psychological Foundations of Physical Activity
- KIN 232.3 Physical Activity in Society

## Year 2 (33 credit units)

## **Education Learning Communities:**

- EDLC 201.0 Education Learning Community Discovering Saskatchewan
- EDLC 202.0 Education Learning Community Global Community

### **Required Courses:**

- ACB 221.3 Gross Anatomy
- <u>EPSE 202.3</u> Psychological Foundations of Teaching and Learning
- <u>KIN 225.3</u> Introduction to Exercise Physiology Neuromuscular and Metabolic Aspects or <u>KIN 232.3</u> Physical Activity in Society
- <u>KIN 226.3</u> Introduction to Exercise Physiology Cardiorespiratory Obesity Thermoregulation or <u>KIN 231.3</u> Social Psychological Foundations of Physical Activity
- KIN 222.3 Biomechanics I
- KIN 240.3 Pedagogy in Physical Activity Setting I Theory

## Choose 3 English (junior level) credit units from the following:

• ENG — 100-Level

## **Choose 3 Kinesiology Activity credit units from the following:**

- KIN 200-Level, 300-Level, 400-Level
- KIN 310.3: Rhythm and Dance Movement Fundamentals
- <u>KIN 311.3: Aquatics</u>
- KIN 324.3: Athletics
- KIN 325.3: Combatives

## **Choose 3 credit units from the following:**

- STAT 245.3 Introduction to Statistical Methods
- PLSC 214.3 Statistical Methods
- PSY 233.3 Statistical Methods in Behavioural Sciences

## **Choose 6 Teaching Area 2 credit units:**

For information about what classes may count towards Teaching Area 2, please see the Bachelor of

Education (B.Ed.) Secondary - Teaching Area 2 list.

## Spring Term (after Year 2) (3 credit units)

- EDST 213.0 Student Teaching in Rural and First Nations Schools
- KIN 320.3 Physical Growth and Development of Children

<sup>\*</sup>It is recommended that students contact an academic advisor in the College of Education for assistance with choosing courses for this teaching area.

## Year 3 (30 credit units)

- <u>EFDT 265.3</u> Foundations for First Nations Metis and Inuit Teaching and Learning or ECUR 265.3 Teaching for Reconciliation in the K to 12 Curricula
- <u>KIN 306.3</u> Introduction to Indigenous Wellness
- KIN 321.3 Acute Sport Injury Care and Prevention
- KIN 322.3 Motor Learning and Control
- <u>KIN 341.3</u> Pedagogy in Physical Activity Setting II Practice
- KIN 380.3 Research Methods in Kinesiology

## **Choose 3 Kinesiology Activity credit units from the following:**

- KIN 200-Level, 300-Level, 400-Level
- KIN 310.3: Rhythm and Dance Movement Fundamentals
- <u>KIN 311.3: Aquatics</u>
- KIN 324.3: Athletics
- KIN 325.3: Combatives

## **Choose 9 Teaching Area 2 credit units:**

For information about what classes may count towards Teaching Area 2, please see the Bachelor of

Education (B.Ed.) Secondary - Teaching Area 2 list.

## Spring Term (after Year 3) (3 credit units)

• <u>KIN 451.3</u> Community Service Learning in a School Setting

## Year 4 (27 credit units)

- EFDT 301.3 Educator Identity in Contexts Anti Oppressive and Ethical Beginnings
- EFDT 313.3 Pedagogies of Place Context Based Learning
- ECUR 320.3 Literacy Across the Secondary Curriculum
- ECUR 325.3 Relational Curriculum Making in the Secondary Context
- ECUR 357.3 Methods in Secondary Physical Education
- EPSE 348.3 Essentials of Assessing Student Learning
- EPSE 390.3 Exceptional Learners

## **Choose 3 Education methods credit units (Teaching Area 2) from the following:**

- EART 331.3 Methods in Secondary Visual Art
- ECUR 318.3 Methods in Secondary Mathematics
- ECUR 326.3 Methods for Teaching Science in Secondary School

<sup>\*</sup>It is recommended that students contact an academic advisor in the College of Education for assistance with choosing courses for this teaching area.

- ECUR 349.3 Methods in Middle Years and Secondary Drama
- ECUR 362.3 Introduction to Principles and Practices of Second Language Teaching
- ECUR 379.3 Introductory Methods in Secondary English Language Arts
- ECUR 386.3 Methods in Secondary Social Studies

## **Choose 3 Kinesiology Activity credit units from the following:**

- KIN 200-Level, 300-Level, 400-Level
- KIN 310.3: Rhythm and Dance Movement Fundamentals
- <u>KIN 311.3: Aquatics</u>
- KIN 324.3: Athletics
- KIN 325.3: Combatives

## Spring Term (after Year 4) (3 credit units)

• EDST 322.3 Field Experience Relational Curriculum Making in Practice Planning Adapting and Assessing

# Year 5 (30 credit units)

### Term 1

## **Choose an Extended Practicum option from the following:**

- EXPR 422.15 Professional Extended Practicum
- <u>EXPR 423.3</u> Alternative Field Experiences Practicum I Adult Learning and Community Based Educational Settings and <u>EXPR 425.12</u> Alternative Field Experiences Practicum II Saskatchewan Schools
- EXPR 424.3 Alternative Field Experiences Practicum I International Opportunities and EXPR 425.12 Alternative Field Experiences Practicum II Saskatchewan Schools

#### Term 2

- EADM 303.3 Education in Society Structures Systems and Stakeholders
- KIN 423.3 Adapted Physical Activity
- KIN 432.3 Ethics and Values in Sport and Physical Activity

#### Complete one of the following:

- EADM 411.3 Inquiry Project and Community Learning Field Experience
- ECUR 411.3 Inquiry Project and Community Learning Field Experience
- EFDT 411.3 Inquiry Project and Community Learning Field Experience
- EPSE 411.3 Inquiry Project and Community Learning Field Experience

If your Teaching Area 2 is Cree or French, <u>ECUR 412.3</u> Examining Place, Purpose, Program Design, and Proficiency Levels for Language Learners must be taken instead of

# EADM/ECUR/EFDT/<u>EPSE 411.3</u> Inquiry Project and Community Learning Field Experience.

## **Choose 3 Kinesiology Activity credit units from the following:**

- <u>KIN 200-Level, 300-Level, 400-Level</u>
- KIN 310.3: Rhythm and Dance Movement Fundamentals
- KIN 311.3: Aquatics
- KIN 324.3: Athletics
- KIN 325.3: Combatives

## College of Engineering - University Course Challenge - November 2022

The following curricular changes were approved through the College of Engineering's Undergraduate Academic Programs Committee (UAPC) and are being proposed to University Course Challenge for approval:

Contact: Ashley Dolovich (ashley.dolovich@usask.ca)

#### Minor Course Revisions - Ron and Jane Graham School of Professional Development (SoPD)

MOTION: To change prerequisites for all RCM 400 Level courses (i.e.: RCM 400, 401, 402, 404, 406, 407, 408, 409, and 410) from "Prerequisite(s): RCM 200 or 24 credit units of university-level courses (including 6 credit units of RCM Non-EN Elective)" to "Prerequisite(s): RCM 200 or 60 credit units of university level courses"

The following course prerequisites will be changed, as follows (in red):

#### RCM 400.3: Rhetorical Theory and Practice of Persuasion

A survey of the aims and scope of rhetoric, the art of persuasion, as it is currently understood and practiced. Develops skill in the use and detection of rhetorical devices and methods, including understanding how rhetors adapt to the demands of various audiences; what makes messages effective, engaging and convincing; how situation influences the positioning of a message; and how credibility is established.

Weekly hours: 3 Lecture hours

Prerequisite(s): RCM 200 or 24 credit units of university level courses (including 6 credit units of RCM Non-EN Electives). RCM 200 or 60 credit units of university level courses

Note: Students with credit for GE 400 will not receive credit for this course.

#### RCM 401.3: Oral Rhetoric

Focuses on application of the fundamentals of rhetoric to oral presentations. This is not primarily a course in performance; thus, in addition to developing skills in delivery, it will concentrate on applying theoretical understanding in four other areas; understanding and adapting to audience; using rhetorical strategies to develop a well-structured, engaging, and convincing message; accommodating to situational constraints; and establishing speaker credibility.

Weekly hours: 3 Lecture hours

Prerequisite(s): RCM 200 or 24 credit units of university level courses (including 6 credit units of RCM Non-EN Electives). RCM 200 or 60 credit units of university level courses.

Note: Students with credit for GE 401 will not receive credit for this course.

#### **RCM 402.3: Interpersonal Communication and Rhetoric**

A survey of foundational concepts in interpersonal communication. Topics include the nature of communication, self-concept, face and politeness, ethics, listening, context and situation, human motivation, identity formation, and persuasion. The course will incorporate rhetorical as well as social-scientific theories, and its goal will be to encourage students to think about the dynamic and shifting nature of human interaction, and to develop strategies for managing their own interactions particularly in their professional relationships.

Prerequisite(s): RCM 200 or 24 credit units of university level courses (including 6 credit units of RCM Non-EN Electives). RCM 200 or 60 credit units of university level courses.

Note: Students with credit for GE 402 or RCM 802 will not receive credit for this course.

#### RCM 404.3: Leadership as Communication

Examines leadership as communication, and in particular as a form of rhetorical activity. Drawing on both traditional and contemporary scholarship, it will combine theoretical understanding with practical strategies for improving skill across several dimensions of the leadership dynamic: interpersonal, rhetorical, social, ethical, and political. Through reading, discussion, and a variety of practical case studies and exercises, students will be challenged to develop their ability to guide, motivate, and support others toward common goals. Topics include leadership as rhetoric; the ethics of leadership; face-saving, conflict resolution, and listening; community and team-building; group loyalty and identity formation; and persuasion.

Weekly hours: 3 Lecture hours

Prerequisite(s): RCM 200 or 24 credit units of university level courses (including 6 credit units of RCM Non-EN Electives). RCM 200 or 60 credit units of university level courses

Note(s): Students with credit for RCM 804 cannot receive credit for this course.

#### **RCM 406.3: Studies in Communication Series**

The series will comprise a collection of specialized courses in specific branches or areas of communication, which will vary with each offering. Some possible topics include: Communication Theory, Nonverbal Communication, Propaganda Analysis, Advanced Grammar, Persuasion in Popular Culture, Public Address, Media Critique, Communication and Identity. A unique course description will be created for each course offering.

Weekly hours: 3 Lecture hours

Prerequisite(s): RCM 200 or 24 credit units of university level courses (including 6 credit units of RCM Non-EN Electives). RCM 200 or 60 credit units of university level courses

Note(s): Students with credit for RCM 806 cannot receive credit for this course.

#### RCM 407.3: Rhetorical Editing

Is an exploration of the structure of present-day English as spoken and written in contemporary Canada, with an emphasis on the idea of "standard" English in a professional context. Students will acquire the

necessary technical vocabulary to discuss and critique issues of acceptable style and usage in their speech and writing, particularly with respect to word formation, sentence structure, and the often difficult relationship between sound and spelling. The course will provide students with an awareness of the linguistic options available to them in the practice of clear and effective communication.

Weekly hours: 3 Lecture hours

Prerequisite(s): RCM 200 or 24 credit units of university level courses (including 6 credit units of RCM Non-EN Electives). RCM 200 or 60 credit units of university level courses

Note(s): Students with credit for RCM 807 cannot receive credit for this course.

#### RCM 408.3: Rhetorical Composition Writing for the Public

The written word is the basic currency of both the academic and industrial economies. Not only must professionals write reports and proposals for communities of their peers, but they must also communicate often with non-specialist audiences. This course equips students with classical and contemporary rhetorical principles in order to help them appreciate the purpose, audience, and constraints of the rhetorical situation. It then provides them with various contexts for practicing descriptive, expository, narrative, and persuasive elements of academic, professional, and technical writing, all of which types they may expect to encounter during the course of their careers as students and professionals.

Weekly hours: 3 Lecture hours

Prerequisite(s): RCM 200 or 24 credit units of university level courses (including 6 credit units of RCM Non-EN Electives). RCM 200 or 60 credit units of university level courses

Note: Students cannot receive credit for RCM 408 and RCM 808; those courses have overlapping content.

#### **RCM 409.3: Negotiation as Rhetorical Practice**

Using rhetorical theories and methodologies, as well as organizational models, this course introduces students to effective negotiation as rhetorical practice. Designed to foster a rhetorical understanding of the most fundamental elements of the negotiation process, the course teaches theories of identification and common ground as well as persuasion, power, and ethics. It focuses on the tools necessary to examine communication processes and motivations that underpin the principles of negotiation, and it teaches how to do a rhetorical analysis of the negotiation context and audience as well as how to do strategic planning. The course also recognizes the interrelationship between language theories and the ability to frame negotiation communication.

Weekly hours: 3 Lecture hours

Prerequisite(s): RCM 200 or 24 credit units of university level courses (including 6 credit units of RCM Non-EN Electives). RCM 200 or 60 credit units of university level courses

#### RCM 410.3: Rhetoric of Science and Technology

Rhetoric of science is a discipline that explores the persuasive elements of scientific discourse. Initially inspired by Thomas Kuhn's The Structure of Scientific Revolutions, rhetoricians of science investigate the

communicative processes through which scientific facts are determined and disseminated among scientists, government agencies, and the general public. In this course, students not only explore the genres and conventions that are used to communicate scientific knowledge among various audiences, but they also have the opportunity to reflect on and enhance their own ability to communicate science. Readings will include selections from foundational theorists and rhetoricians of science, as well as journalists and science fiction authors. Case studies drawn from contemporary, and possibly historical, scientific discussions and controversies will complement more theoretical readings.

Prerequisite(s): RCM 200 or 24 credit units of university level courses (including 6 credit units of RCM Non-EN Electives). RCM 200 or 60 credit units of university level courses

Note: Students with credit for RCM 810 or Special Topics RCM 498: Rhetoric of Science and Technology cannot receive credit for this course.

**RATIONALE**: Changes to admission criteria prompted changes to RCM 400 level pre-requisites so that CPC students could take RCM 400 level courses without RCM 200, which will not limit professionals, alumni, or undergraduate students from other colleges where RCM 200 is not a mandatory course, from applying and taking the CPC certificates. Engineering students will continue to be able to take RCM 400 level courses after completion of RCM 200 regardless of their year of the program.

## <u>Minor Program Revisions – Ron and Jane Graham School of Professional Development (SoPD) -</u> Certificates in Professional Communication

Please note the proposed changes (in red) to the Certificates in Professional Communication as follows:

#### Certificate in Professional Communication - Technical and Professional Writing (CPC-TPW)

**Certificate Requirements (9 credit units)** 

**Required Courses (6 credit units)** 

Please choose **6 credit units** from the following:

- RCM 407.3 Rhetorical Editing
- RCM 408.3 Rhetorical Composition Writing for the Public
- RCM 410.3 Rhetoric of Science and Technology

#### Elective courses (3 credit units)

Please choose 3 credit units from the following:

- RCM 400.3 Rhetorical Theory and Practice of Persuasion
- RCM 408.3 Rhetorical Composition Writing for the Public
- RCM 410.3 Rhetoric of Science and Technology

Note: On a case-by-case basis, RCM 406.3 Studies in Communication Series or RCM 498.3 Special Topics may replace one-course requirement or elective with departmental approval.

**RATIONALE**: These new prerequisites will offer students more flexibility and will align more closely with the frequency of departmental course offerings.

#### The Certificate in Professional Communication- Persuasive Communication (CPC-PC)

## **Certificate Requirements (9 credit units)**

Required Courses (6 credit units)

- RCM 400.3 Rhetorical Theory and Practice of Persuasion
- RCM 401.3 Oral Rhetoric

Elective courses (3 credit units)

- RCM 402.3 Interpersonal Communication and Rhetoric
- RCM 404.3 Leadership as Communication
- RCM 495.3 Rhetorical Peer Mentorship

Note: On a case-by-case basis, RCM 406.3 Studies in Communication Series or RCM 498.3 Special Topics may replace one-course requirement or elective with departmental approval.

### The Certificate in Professional Communication- Leadership and Negotiation (CPC-LN)

#### **Certificate Requirements (9 credit units)**

Required Courses (6 credit units)

- RCM 404.3 Leadership as Communication
- RCM 409.3 Negotiation as Rhetorical Practice

Elective courses (3 credit units)

- RCM 402.3 Interpersonal Communication and Rhetoric
- RCM 495.3 Rhetorical Peer Mentorship

Note: On a case-by-case basis, RCM 406.3 Studies in Communication Series or RCM 498.3 Special Topics may replace one-course requirement or elective with departmental approval.

RATIONALE: This addition to the requirements of the certificates will allow students more flexibility and allow them to take reading courses and special topics courses as a part of the certificate programs.

# <u>Minor Program Revision – Ron and Jane Graham School of Professional Development (SoPD) - Certificate in Technological Innovation (TIC)</u>

MOTION: To change GE 450.3 as a required course for the Technical Innovation Certificate and remove GE 450.3 as an elective course for the Tech Innovation Certificate.

#### **Certificate Requirements (26 credit units)**

### **Required Courses (17 credit units)**

- COMM 201.3 Introduction to Financial Accounting
- COMM 447.3 Entrepreneurship & Venture Development
- GE 431.3 Engineering Entrepreneurship Capstone
- GE 450.3 Technology Innovation Management
- GE 451.1 Intellectual Property Fundamentals
- GE 490.1 Guest Seminar Series
- GE 495.6 Technological Innovation Capstone Design Project

#### **Elective Courses (9 credit units)**

Students must select 9 credit units from the following, at least 3 credit units of which must be COMM courses:

- COMM 204.3 Introduction to Marketing
- COMM 205.3 Introduction to Operations Management
- COMM 211.3 Human Resource Management
- COMM 341.3 Entrepreneurial Thinking and Innovation
- GE 450.3 Technology Innovation Management
- RCM 402.3 Interpersonal Communication and Rhetoric
- RCM 404.3 Leadership as Communication
- RCM 409.3 Negotiation as Rhetorical Practice

**Note:** Students who are registered in the Bachelor of Science in Engineering and have completed an alternative capstone design course may substitute the "GE 495.6 Technological Innovation Capstone Design Project" requirement in this program with their existing capstone course, provided they also complete GE 496.3 Technological Innovation Design Project. The capstone design courses are as follows:

- CE 495.6 Capstone Design Project
- CHE 495.6 Process Engineering and Design II
- CME 495.6 Capstone Design Project
- EE 495.6 Senior Design Project
- ENVE 495.6 Capstone Design Project
- EP 495.6 Capstone Design Project
- GEOE 495.6 Capstone Design Project
- ME 495.6 Industrial Design Project

**RATIONALE**: GE 450 will replace COMM 447 as a required course for the TIC. Students will no longer be able to take GE 450 as an elective course.

# <u>Minor Program Revision and New Course Creation – Ron and Jane Graham School of Professional</u> <u>Development (SoPD) First-Year Engineering</u>

MOTION: To create GE 172.1 Engineering Programming, a new course that will cover the existing MATLAB module of GE 152.1.

#### **New Course**

#### **GE 172.1 Engineering Programming**

This course introduces students to computation and programming using Matlab. Students will learn the Matlab interface and how to conduct I/O, plot data in 2 dimensions and solve simple linear systems using matrix data types. Students will learn how to develop algorithms and apply basic programming skills to create programs that solve simple computational problems. This includes good structuring, documenting and formatting of programs. Students will also be introduced to advanced features available in Matlab.

**Restriction(s)**: Open to students in the College of Engineering only

**Prerequisite(s) or Corequisite(s)**: GE 102 – Introduction to Engineering I and MATH 133 - Engineering Math I

Note: Students with credit for GE 152 will not receive credit for this course.

GE 172.1 will be incorporated into Year 1 of the B.E. as follows:

#### **Bachelor of Science in Engineering (B.E.)**

## Year 1 (41-44 credit units)

Year 1 will range from a total of 41 to 44 credit units, depending upon which major field of study is chosen

#### **Fall Term**

\*The start and end dates of the courses vary, as the duration of the courses varies from 4 to 12 weeks.

- GE 102.2 Introduction to Engineering I
- <u>GE 112.1</u> Engineering Discipline Experience
- GE 122.2 Engineering Mechanics I
- GE 132.1 Engineering Communications I
- GE 142.2 Design | GE 140.1 Design |
- GE 172.1 Engineering Programming
- GE 152.1 Electrical Circuits I
- CMPT 142.3 Introduction to Computer Science for Engineers
- MATH 133.4 Engineering Mathematics I
- Natural Science Series:

Students must complete all of the following courses:

- PHYS 152.1 Introduction to Atoms and Nuclei for Engineering
- CHEM 142.1 Global Impact of Chemistry for Engineering

- GEOL 102.1 Introduction to Geology for Engineering
- o BIOL 102.1 Nature for Engineering

RATIONALE: This course will be the new administrative home for one of two modules currently contained in the GE 152.1 Electrical Circuits I. The electrical circuits module and the MATLAB module in GE 152 were always tenuously linked and were only originally grouped into one course to avoid the assignment of fractional credit unit units to courses in the RE-ENGINEERED first year program. The creation of their course sees those two modules separated, for reasons described below, into two separate 1 credit unit courses. Dividing one 1 credit unit course into two 1 credit unit courses will not affect the overall credit unit count, nor tuition, in first year engineering as GE 142.2 will be reduced to a 1 credit unit course to better reflect the contact hours.

In response to student difficulties in CMPT 142 in the first offering of the RE-ENGINEERED first year program in 2021-22, additional contact hours were added to the MATLAB module in 2022-23 offering to allow engineering instructors to introduce programming before students begin CMPT 142 later in the term. To facilitate this, the class time in the module was shifted to early in the fall term, while the circuits module remains later in the term by necessity. This loss of concurrency in the modules further separates the two pieces of GE 152 and makes administrative oversight of the course difficult. Furthermore, splitting GE 152 into two separate courses will allow for easier application of transfer credit, as many students come into first year engineering with a completed course in electrical circuits, but are missing the MATLAB component of GE 152 and therefore must take the entire course. Dividing GE 152 into two courses would allow such students to just take the MATLAB portion in GE 172. Further information can be found in the attached course creation form and draft syllabus.

#### **Minor Course Revision**

MOTION: To remove the MATLAB module from GE 152.1 Electrical Circuits I, add GE 172.1 Engineering Programming as a Prerequisite or Corequisite to GE 152.1, remove CMPT 142.3 as a Prerequisite or Corequisite to GE 152.1, and change the course catalogue description to the following:

#### GE 152.1 Electrical Circuits I:

Students will be introduced to the basic properties of direct-current electrical circuits: voltage, current, resistance, and power. Students will learn to analyze series and parallel resistive direct-current circuits by applying: Kirchhoff's laws, Ohm's laws, mesh and node analysis, superposition, and Thevenin's and Norton's Theorems.

**Weekly hours:** 1.5 Lecture hours

**Restriction(s):** Restricted to students in the College of Engineering.

Prerequisite(s) or Corequisite(s): GE 102.2, MATH 133.4 and GE 172.1

#### GE 152.1 Electrical Circuits I

**Subject:** General Engineering

Credit units: 1

Offered: Either Term 1 or Term 2

Weekly hours: 1.5 Lecture hours and 1.5 Practicum/Lab hours

College: Engineering

**Department:** Engineering (Dean's Office)

#### Description

This course includes two concurrent modules. Module 1 introduces students Students will be introduced to the basic properties of direct-current electrical circuits: voltage, current, resistance and power. Students will learn to analyze series and parallel resistive direct-current circuits by applying: Kirchoff's laws, Ohm's law, mesh and node analysis, superposition and Thevenin's and Norton's Theorems. Module 2 introduces students to computation and programming using Matlab. Students will learn the Matlab interface and how to conduct I/O, plot data in 2 and 3 dimensions and solve linear systems using matrix data types. Students will apply programming skills to create programs and user-defined functions. Students will be introduced to advanced features available in Matlab.

Restriction(s): Restricted to students in the College of Engineering.

Prerequisite(s) or Corequisite(s): GE 102.2 and MATH 133.4 and GE 172.1 CMPT 142.3

**Note:** There will be costs in addition to tuition fees. Students with credit for EE 204 will not receive credit for this course.

receive credit for this course.

RATIONALE: The MATLAB module is to become its own 1 credit unit course, GE 172.1. Even with the MATLAB module becoming its own course, it is important that students take GE 172.1 if they are taking GE 152.1, because GE 152.1 has students apply MATLAB to solve systems of linear equations arising from circuit analysis problems. The practicum/lab hours per week are removed from the catalogue description for GE 152.1 because the MATLAB sessions made up the "lab" hours of the course.

#### **Course Relabel**

MOTION: To renumber GE 142.2 Design I to GE 140.1 Design I and reduce the credit unit count of GE 142.2 from 2 credit units to 1 credit unit.

#### GE 142.2 GE 140.1 Design I

**Subject:** General Engineering

Credit units: 1

Offered: Either Term 1 or Term 2

Weekly hours: 1.5 Lecture hours and 1.5 Practicum/Lab hours

College: Engineering

**Department:** Engineering (Dean's Office)

#### Description

This course introduces students to Engineering Design. The Design I course focuses on the early stages of design characterized by problem identification, acceptance, definition, and characterization. This will include the determination of design functions, criteria/objectives and constraints/requirements. Students will engage in a group project to identify and characterize an engineering design problem of their own choosing.

**Restriction(s):** Restricted to students in the College of Engineering.

Prerequisite(s) or Corequisite(s): GE 102.2 and GE 132.1

**Note:** There will be costs in addition to tuition fees. Students with credit for GE 121 will not receive credit for this course.

RATIONALE: As GE 152.1 is to be split into two 1-credit unit courses: GE 152.1 and GE 172.1, another first-year course will need to see a reduction in credit units to keep the overall credit unit count and tuition from increasing in the first year. In the first offering of GE 142 in 2021, it was assigned 13.5 hours of lecture and 12 hours of lab time. It was determined during that first delivery that 3 lecture hours of that time were not needed for full delivery. In the SECOND offering of GE 142, the contact hours were reduced to 10.5 hours of lecture and 12 hours of lab. This makes it a good candidate to see its credit unit count reduced and brings the ratio of credit units and contact hours into better alignment with other first-year courses. Ideally, we would assign fractional credit unit weights to GE 142, 152, and 172, but since that is not possible this is the next best approach. The change of course number is required by the university to facilitate a change in the credit units. The only other concern that could arise with this change is the reduction in "design accreditation units" for our college's engineering students. However, we have verified that this will not be an issue for any program.

#### **Minor Course Revision**

MOTION: To add GE 140.1 Design I as a Prerequisite for GE 143.2 Design II.

#### GE 143.2 Design II

**Subject:** General Engineering

Credit units: 2

**Offered:** Either Term 1 or Term 2

Weekly hours: 1.5 Lecture hours and 1.5 Practicum/Lab hours

College: Engineering

**Department:** Engineering (Dean's Office)

### Description

This course introduces students to Engineering Design, building on the Design I course. Design II focuses on the later stages of conceptual design characterized by ideation, concept evaluation, and concept selection. In groups, students will undertake one of a set of design problems from a variety of engineering disciplines, including multidisciplinary problems. Ultimately, students will implement a proof of concept of their solution, and they will present their progress in a Design Recommendation Report.

**Restriction(s):** Restricted to students in the College of Engineering.

Prerequisite(s): GE 142.2 or GE 140.1 and Prerequisite(s) or Corequisite(s): GE 103.1 and GE

133.2. **Note:** There will be costs in addition to tuition fees.

RATIONALE: Design I (Term 1) will remain a prerequisite for Design II (Term 2); this change in the catalogue entry for Design II just reflects the change in the course number and credit units of Design I.

#### **New Course Creation – Department of Mechanical Engineering**

MOTION: The Department of Mechanical Engineering would like to offer ME 488 Research Project Course as a permanent technical elective in 2023-24.

#### **New Course**

#### ME 488.3 Mechanical Engineering Research Project 1(3L)

This project-based course introduces senior undergraduate students to research methods in mechanical engineering. Students engage in research project formulation, a literature review, experimental and/or simulation planning and execution, data analysis, and written and oral reporting of research results.

Prerequisite(s): 81 credit units from (EN Four Year Common Core and ME Program Core)

#### **Mechanical Engineering**

Bachelor of Science in Engineering (B.E.) - Mechanical Engineering (152 credit units)

## Year 1 (41-44 credit units)

All Engineering programs have a common first year.

### Year 2 (36 credit units)

### Fall Term

- GE 210.3 Probability and Statistics
- GE 213.3 Mechanics of Materials
- MATH 223.3 Calculus III for Engineers
- ME 214.3 Introduction to Materials and Manufacturing

• ME 227.3 Thermodynamics I

#### Winter Term

- MATH 224.3 Calculus IV for Engineers
- ME 215.3 Fluid Mechanics I
- ME 226.3 Mechanics III
- ME 229.3 Introduction to Mechanical Engineering Design
- RCM 200.3 Effective Professional Communication

#### Fall or Winter Term

- 3 credit units Junior Humanities or Social Science Elective
- 3 credit units Science Elective

## Year 3 (36 credit units)

#### Fall Term

- ME 313.3 Mechanics of Materials I
- ME 321.3 Engineering Analysis II
- ME 324.3 Engineering Materials
- ME 327.3 Heat Transfer
- ME 330.3 Manufacturing Processes

#### Winter Term

- ME 314.3 Machine Design I
- ME 323.3 Mechanics of Materials II
- ME 328.3 Mechanical Engineering Laboratory I
- ME 329.3 Collaborative Design and Manufacturing
- ME 335.3 Fluid Mechanics II
- ME 352.3 Engineering Analysis III

#### Fall Term or Winter Term

• <u>GE 348.3</u> Engineering Economics

## Year 4 (36 credit units)

## Fall Term

- ME 417.3 Thermodynamics II
- ME 418.3 Mechanical Engineering Laboratory II
- ME 431.3 Control Systems

#### Winter Term

• GE 449.3 Engineering in Society

#### Fall Term and Winter Term

### Choose 6 credit units from the following:

- <u>GE 495.6</u> Technological Innovation Capstone Design Project (Department permission required)
- ME 495.6 Industrial Design Project

#### Fall Term or Winter Term

- 12 credit units Technical and Design Electives (of which 6 credit units must be from the Design Elective list)
- 3 credit units Complementary Studies Elective
- 3 credit units Senior Humanities or Social Science Elective

#### **Electives**

#### Science Elective

#### List 1

- BIOL 120.3 The Nature of Life
- CHEM 115.3 General Chemistry II Chemical Processes
- GEOL 121.3 Earth Processes
- PHYS 125.3 Physics and Technology

#### List 2

- ASTR 213.3 Astronomical Photometry
- ASTR 214.3 Astronomical Spectroscopy
- CHEM 221.3 Analytical Chemistry I
- CHEM 231.3 Inorganic Chemistry I
- CHEM 242.3 Thermodynamics and Kinetics
- CHEM 250.3 Introduction to Organic Chemistry
- EVSC 203.3 Sampling and Laboratory Analysis
- EVSC 210.3 Environmental Physics
- GEOG 120.3 Introduction to Global Environmental Systems
- GEOL 224.3 Mineralogy
- GEOL 245.3 Introduction to Sedimentary Rocks
- GEOL 258.3 Structural Geology

#### **Technical Electives**

Department Technical Electives are offered in alternating calendar years, subject to minimum enrolment limits and staffing considerations. Consult the current Course Offerings to determine the availability of specific electives.

#### Term 1

- GEOE 377.3 Fundamentals of Mining and Mineral Processing
- GEOE 466.3 Petroleum Geomechanics

#### Term 2

- BLE 313.3 Instrumentation
- CHE 464.3 Petroleum Production Engineering
- <u>EE 471.3</u> Introduction to Micro and Nanotechnology
- GEOE 380.3 Mine Ventilation
- ME 460.3 Automation and Robotics in Manufacturing
- ME 461.3
- ME 463.3
- ME 472.3
- ME 475.3 Introduction to Mechatronics
- ME 477.3 Engineering Materials II
- ME 478.3 Introduction to Fire Protection Engineering

#### Term 1 or Term 2

- CHE 453.3 Corrosion Engineering
- ME 450.3 Finite Element Analysis
- ME 462.3 Structure and Properties of Polycrystalline Materials
- ME 471.3 Introduction to Aerodynamics
- ME 473.3 Introduction to Computational Fluid Dynamics
- ME 476.3 Multiphase Flow and Heat Transfer
- ME 488.3 Research Project Course
- approved senior course(s) from science or engineering

#### **Design Electives**

Design Electives are offered subject to minimum enrolment limits and staffing considerations. Consult the current Course Offerings to determine the availability of specific electives. Students must take a minimum of 6 credit units from the list of Design Electives.

#### Term 1

ME 496.3 Machine Design II

#### Term 2

- ME 490.3 Design of Fluid Power Circuits
- ME 492.3 Materials in Engineering Design

#### Term 1 and Term 2

- <u>GE 496.3</u> Technological Innovation Design Project
- ME 494.3 Off Highway Equipment Design

#### Term 1 or Term 2

- ME 491.3 Thermal Systems Design
- ME 493.3 Advanced Mechanical Design
- ME 497.3 Acoustics and Vibrations in Design

#### Junior Humanities or Social Science Elective

- ANTH 111.3 One World Many Peoples Introduction to Cultural Anthropology
- ARCH 112.3 The Human Journey Introduction to Archaeology and Biological Anthropology
- ARCH 116.3 Introduction to Near Eastern and Classical Archaeology
- CLAS 104.3 Classical Myths
- CLAS 110.3 Greek Civilization
- CLAS 111.3 Roman Civilization
- CMRS 110.3 The Graeco Roman Tradition Evolution and Reception
- CMRS 111.3 Medieval and Renaissance Civilization
- <u>ECON 111.3</u> Introductory Microeconomics
- ECON 114.3 Introductory Macroeconomics
- GEOG 130.3 Environment Health and Planning
- HIST 110.3
- HIST 111.3
- HIST 115.3 History Matters Ideas and Culture
- HIST 121.3
- HIST 122.3
- HIST 125.3 History Matters Indigenous Colonial and Post Colonial Histories
- HIST 135.3 History Matters Gender Sex and Society
- HIST 145.3 History Matters War Violence and Politics
- HIST 155.3 History Matters Science and Environment
- HIST 165.3 History Matters Health and Society
- HIST 175.3 History Matters Identities and Communities in Transition
- INDG 107.3 Introduction to Canadian Indigenous Studies
- <u>LING 111.3</u> Structure of Language
- LING 112.3 Dynamics of Language

- PHIL 120.3 Knowledge Mind and Existence
- PHIL 133.3 Introduction to Ethics and Values
- PHIL 140.3 Critical Thinking
- POLS 111.3 Democratic Citizenship in Canada
- POLS 112.3 Justice and Injustice in Politics and Law
- PSY 120.3 Biological and Cognitive Bases of Psychology
- PSY 121.3 Social Clinical Cultural and Developmental Bases of Psychology
- SOC 111.3 Foundations in Sociology Society Structure Process
- SOC 112.3 Foundations in Sociology Social Construction of Everyday Life
- WGST 112.3 Introduction to Womens and Gender Studies

#### Senior Humanities or Social Science Elective

- ANTH 200-Level, 300-Level, 400-Level
- ARCH 200-Level, 300-Level, 400-Level
- <u>CLAS 200-Level, 300-Level, 400-Level</u>
- ECON 200-Level, 300-Level, 400-Level
- ENG 200-Level, 300-Level, 400-Level
- <u>GEOG 202.3</u> Regional Geography of Canada
- GEOG 204.3 Geography of the Prairie Region
- GEOG 208.3 World Regional Development
- GEOG 240.3 Sustainable Cities and Regions
- GEOG 280.3 Environmental Geography
- HIST 200-Level, 300-Level, 400-Level
- INDG 200-Level, 300-Level, 400-Level
- IS 200-Level, 300-Level, 400-Level
- PHIL 200-Level, 300-Level, 400-Level
- POLS 200-Level, 300-Level, 400-Level
- PSY 200-Level, 300-Level, 400-Level
- RLST 200-Level, 300-Level, 400-Level
- SOC 200-Level, 300-Level, 400-Level
- WGST 200-Level, 300-Level, 400-Level
- **Exception**: ECON 204 cannot be used to meet the Complementary Studies, Senior Humanities or Social Science elective requirements of the program.
- **Exception**: PSY 233 and PSY 236 cannot be used to meet the Complementary Studies, Senior Humanities or Social Science elective requirements of the program.
- **Exception**: PHIL 241 cannot be used to meet the Senior Humanities or Social Science elective requirements of the program.
- **Exception**: SOC 225 cannot be used to meet the Complementary Studies, Senior Humanities or Social Science elective requirements of the program.
- Note: The following Engineering courses will also satisfy the Humanities/Social Science elective requirement: RCM 400, RCM 401, RCM 402, RCM 403, RCM 404, RCM 405, RCM 406, RCM 407, RCM 408, RCM 409, RCM 410, and RCM 495.

#### Complementary Studies Elective

- ANTH 100-Level, 200-Level, 300-Level, 400-Level
- ANTH 100-Level, 200-Level, 300-Level, 400-Level
- ARBC 100-Level, 200-Level, 300-Level, 400-Level
- ARCH 100-Level, 200-Level, 300-Level, 400-Level
- ARTH 100-Level, 200-Level, 300-Level, 400-Level
- CHIN 100-Level, 200-Level, 300-Level, 400-Level
- CLAS 100-Level, 200-Level, 300-Level, 400-Level
- CMRS 100-Level, 200-Level, 300-Level, 400-Level
- COMM 201.3 Introduction to Financial Accounting
- COMM 203.3 Introduction to Finance
- <u>COMM 204.3</u> Introduction to Marketing
- <u>COMM 205.3</u> Introduction to Operations Management
- COMM 210.3 Introduction to Management Accounting
- COMM 211.3 Human Resource Management
- COMM 229.3 Personal Financial Management
- COMM 304.3 Introduction to Business Law
- COMM 306.3 Ethics and Strategic Decision Making
- COMM 308.3 Cost Management Systems
- COMM 321.3 Corporate Financial Reporting I
- COMM 323.3 Corporate Financial Reporting II
- COMM 329.3
- COMM 337.3 Business Information and Accounting Systems
- <u>COMM 340.3</u> 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 Technology Commercialization
- COMM 347.3 Indigenous 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
- COMM 100-Level
- CREE 100-Level, 200-Level, 300-Level, 400-Level
- ECON 111.3 Introductory Microeconomics
- ECON 114.3 Introductory Macroeconomics
- ECON 211.3 Intermediate Microeconomics
- ECON 214.3 Intermediate Macroeconomics
- ECON 221.3 Women and the Economy
- ECON 223.3 Labour Economics
- ECON 227.3 Wage Determination
- ECON 231.3 Co operatives
- ECON 234.3 Economics of Health Care
- ECON 254.3 International Trading System
- ECON 256.3 International Monetary System

- ECON 270.3 Development in Non Industrialized Countries
- ECON 272.3
- ECON 275.3 Economics of Natural Resources
- ECON 277.3 Economics of the Environment
- ECON 280.3 Classical Economics
- ENG 100-Level, 200-Level, 300-Level, 400-Level
- FREN 100-Level, 200-Level, 300-Level, 400-Level
- GE 431.3 Engineering Entrepreneurship Capstone
- GE 450.3 Technology Innovation Management
- GEOG 130.3 Environment Health and Planning
- GEOG 202.3 Regional Geography of Canada
- GEOG 204.3 Geography of the Prairie Region
- GEOG 208.3 World Regional Development
- GEOG 240.3 Sustainable Cities and Regions
- GEOG 280.3 Environmental Geography
- GERM 100-Level, 200-Level, 300-Level, 400-Level
- GRK 100-Level, 200-Level, 300-Level, 400-Level
- HEB 100-Level, 200-Level, 300-Level, 400-Level
- HIST 100-Level, 200-Level, 300-Level, 400-Level
- HNDI 100-Level, 200-Level, 300-Level, 400-Level
- INDG 100-Level, 200-Level, 300-Level, 400-Level
- IS 100-Level, 200-Level, 300-Level, 400-Level
- JPNS 100-Level, 200-Level, 300-Level, 400-Level
- LATN 100-Level, 200-Level, 300-Level, 400-Level
- LING 100-Level, 200-Level, 300-Level, 400-Level
- LIT 100-Level, 200-Level, 300-Level, 400-Level
- MUS 101.3 Fundamentals of Music I Exploring Foundations
- PHIL 120.3 Knowledge Mind and Existence
- PHIL 121.3 Introduction to World Philosophies
- PHIL 133.3 Introduction to Ethics and Values
- PHIL 140.3 Critical Thinking
- PHIL 202.3 Philosophy of Religion
- 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 From Rome to Baghdad and Paris
- PHIL 211.3 Philosophy and Faith Medieval Philosophy II
- PHIL 215.3
- PHIL 218.3 Existentialism
- PHIL 219.3 Phenomenology
- PHIL 224.3 Philosophy of Sexuality
- PHIL 226.3 Environmental Philosophy
- PHIL 227.3 Feminist Philosophy
- PHIL 227.3 Feminist Philosophy
- PHIL 231.3 Moral Problems
- PHIL 233.3 Ethical Theory
- PHIL 234.3 Biomedical Ethics
- PHIL 235.3 Business and Professional Ethics

- PHIL 236.3 Ethics and Technology
- PHIL 237.3 Law and Morality
- PHIL 238.3 Ethical Issues in Scientific Research
- PHIL 251.3 Philosophy of Science
- PHIL 262.3 Social and Political Philosophy
- PHIL 265.3 Decision and Choice Theory
- PHIL 271.3 Aesthetics and Philosophy of Art
- PHIL 281.3 Theory of Knowledge
- PHIL 285.3 Persons Minds and Bodies
- PHIL 292.3 Metaphysics Reality Existence and Change
- PHIL 294.3 Philosophy of Human Nature
- PHIL 296.3
- POLS 100-Level, 200-Level, 300-Level, 400-Level
- <u>PSY 100-Leve</u>l, 200-Level, 300-Level, 400-Level
- RCM 400-Level
- RLST 100-Level, 200-Level, 300-Level, 400-Level
- RUSS 100-Level, 200-Level, 300-Level, 400-Level
- SNSK 100-Level, 200-Level, 300-Level, 400-Level
- SOC 100-Level, 200-Level, 300-Level, 400-Level
- SPAN 100-Level, 200-Level, 300-Level, 400-Level
- UKR 100-Level, 200-Level, 300-Level, 400-Level
- WGST 100-Level, 200-Level, 300-Level, 400-Level

**Exception**: COMM 121.3 Business Mathematics is restricted to Edwards School of Business students.

**Note**: Special Topics courses cannot be used to meet a Complementary Studies Elective Requirement (any course ending in 98 or 99).

RATIONALE: The Department of Mechanical Engineering has offered a research project course as a ME 498 (Special Topics) course the last two academic years. This course provides undergraduate students with an opportunity to gain research experience and consider graduate studies by working on a research project with a faculty member (or faculty members). Feedback from students and supervisors has been positive. As the department has not offered this course twice, we need to get approval to offer this as a permanent course, which would be added to our list of technical electives.

#### For Information - Department of Chemical Engineering

MOTION: To change the name of CHE 220 *from* 'Introduction to Process Engineering' **to** 'Introduction to Chemical Process Engineering'.

## CHE 220.3: Introduction to Process Engineering Introduction to Chemical Process Engineering

The lectures and problems will illustrate the use of energy and material balances in chemical and biochemical engineering processes.

Prerequisite(s) or Corequisite(s): GE 163.3; and one of CHEM 115.3 or CHEM 146.3.

#### **Chemical Engineering**

Bachelor of Science in Engineering (B.E.) - Chemical Engineering (137 credit units)

## Year 1 (41-44 credit units)

All Engineering programs have a common first year.

Note: Students in the Chemical Engineering Undergraduate Program cannot use ENVE 201 as a substitute for CHEM 242.

## Year 2 (27 credit units)

#### Fall Term

- <u>CHE 220.3</u> Introduction to Process Engineering Introduction to Chemical Process Engineering
- CHEM 242.3 Thermodynamics and Kinetics
- CHEM 250.3 Introduction to Organic Chemistry
- GE 213.3 Mechanics of Materials
- MATH 223.3 Calculus III for Engineers

RATIONALE: GE 163 has a name of "Process Engineering" which is offered in the new first year program. The current name of CHE 220, a core course in the chemical engineering program is, "Introduction to Process Engineering". This course is about chemical process engineering. To properly present the course in the Course and Program Catalogue, the name of CHE 220 was proposed to be changed to "Introduction to Chemical Process Engineering".

#### College of Graduate and Postdoctoral Studies, University Course Challenge – November 2022

The following new courses and curricular changes have been approved by the College of Graduate and Postdoctoral Studies and are now being submitted to University Course Challenge for approval.

Contact: Melissa Kyrejto (melissa.kyrejto@usask.ca)

#### **New Course Proposals:**

ECUR 833.3: Emancipatory Education Influences and Perspectives on Social Justice in Schools

This course will explore the perspectives offered by some of the curricular theorists who have advanced critical pedagogies that hold at their center student experience. In addition, the course will utilize these concepts and ideas to develop a theoretical analysis on a contemporary, school-based social justice program. How might the work of such an educational approach be strengthened by critical self-awareness? Or in what ways might the objective of teaching towards social justice be enhanced with a more democratized understanding of learning?

Instructor: Dr. Geraldine Balzer

Rationale: An increasingly complex world, in which many note an observable trend towards widening and entrenching differences in power and privilege, necessitates a vigorous response from educators. How might schools motivate and equip students to seek peace and pursue justice? A re-imagining of schools is required. A starting point for such a progressive and democratic approach to education is a grounding in critical self-awareness. Indeed, for a century prophetic voices have advocated for a fundamental reframing of the place of the student within the classroom. More recently, concepts like 'conscientization' or intersectional identities have informed this discourse. At their core, these ideas provide pathways to an emancipatory education in which schools become grounded in a social justice congruence; where what is taught, how it is taught, and why it is taught are essentially and integrally linked.

#### **ECUR 834.3: Reciprocity and Community Engaged Research**

This course examines the roots of community engaged research, the development of action and Indigenous research methods, and the responses of marginalized communities who have demanded a place in the design and implementation of research in their spaces. Community engaged research challenges the extractive nature of historical research models and seeks to develop relationships based on reciprocity and equity.

<u>Instructor:</u> Dr. Geraldine Balzer

Rationale: Notions of research – what it is and how to do it – have shifted over time. As qualitative research has grown in importance and recognition by scholars and now takes its place alongside quantitative research, additional shortcomings of the existing research paradigms have become visible. Of greatest concern is the role of the community in the research process. Historically, research is something that was done to a community rather than something that was done with a community. Communities have resisted being the subject of

research and have identified their own needs and goals in shaping research projects that work toward these ends. Educational research is often conducted in communities and as such community engaged research is an appropriate approach. Through this course, students will come to understand the complexity of community engaged research and the myriad ways in which these research projects evolve, preparing them to engage ethically with marginalized communities and differentiate between extractive and inclusive research projects.

#### **EFDT 825.3: Climate Change Education**

This course explores why climate change matters in education and how it can be further addressed in education policy and practice. Key principles for designing good climate change education will be identified, with opportunities for educators to develop their own approaches. Instructor: Dr. Marcia McKenzie

<u>Rationale:</u> Climate change has become a significant issue and addressing climate change through education is necessary. As the impacts of climate change are felt more broadly and threaten significant areas of the globe, educators need to be prepared to address the issue with knowledge and with action. This course meets those needs.

### **EE 803.3: Deep Learning Processor Architecture**

The introduction of deep learning basics and deep learning processor architecture. Includes: artificial intelligence, deep neural network, deep learning frameworks, hardware processing element design, memory system, and advanced topics for efficient deep learning processor architecture design.

<u>Prerequisite(s):</u> CME433, or equivalent

<u>Instructor:</u> Dr. Seokbum Ko

Rationale: Deep neural networks (DNNs) have become extraordinarily popular; however, they come at the cost of high computational complexity. As a result, there has been tremendous interest in enabling efficient processing of DNNs. The challenge of DNN processing/acceleration is threefold: 1) to achieve high performance and efficiency, 2) to provide sufficient flexibility to cater to a wide and rapidly changing range of workloads, and 3) to integrate well into existing software frameworks. In order to understand the current state of art in addressing these challenges, this course aims to provide an overview of DNNs, the various tools for understanding their behavior, and the techniques being explored to efficiently accelerate their computation.

## **GE 831.3: Advanced Engineering Entrepreneurship**

This course provides students with hands-on, project-based experience in building Innovation-driven Entrepreneurship. Teams will prepare high-level conceptual product/service designs, robust business models, and pitch decks ready for fundraising and recruitment. The course can also prepare students for incubator applications such as SIGMA Skill Accelerator, Co.Launch,

Cultivator, and Y Combinator.

<u>Note(s)</u>: This course is a hybrid course with GE 431, and this course cannot be taken for credit after previously taking GE 431.

Instructor: Dr. Tate N. Cao

<u>Rationale:</u> It is increasingly difficult for graduate students to move into academia upon graduation. Working in industry and pursuing entrepreneurship has become more and more important to ensure career progression for these HQP. Currently there are no courses providing skills training to allow graduate students to develop entrepreneurial skills. The course is intended to provide entrepreneurial skills for Engineering graduate students. It will also permit students to consider commercializing technology developed in USask labs, by starting their own companies, developing skills to increase their own career success, and contributing more meaningfully to generating new technologies.

The course is hybridized from undergraduate course GE 431. Besides the content shared with the senior undergraduates, the graduate students will work on presenting and assessing their own research as potential commercialization opportunities. They will also have additional sessions to work on a case study to develop strategic and technical solutions. Furthermore, the graduate students will interview entrepreneurs to build their own network.

## **GE 850.3: Advanced Technology Innovation Management**

This course will focus on the practices and processes driving the leading edges of innovation practice. It explores the processes for developing technological innovation, as well as the strategies for successful business outcomes.

<u>Note(s)</u>: This course is a hybrid course with GE 450, and this course cannot be taken for credit after previously taking GE 450.

<u>Instructor:</u> Dr. Tate N. Cao

<u>Rationale:</u> It is increasingly difficult for graduate students to move into academia upon graduation. Working in industry and pursuing entrepreneurship has become more and more important to ensure career progression for these HQP.

Currently there are no courses providing specific skill training for the technical graduate students to develop managerial skills. The course is intended to cultivate managerial skills for these graduate students.

It will also prepare students to consider commercializing technology developed in USask labs, by starting their own companies, developing skills to increase their own career success, and contributing more meaningfully in generating new technologies.

The course is hybridized from undergraduate course GE 450. In addition to covering the content shared by the undergraduate students, graduate students will engage in more focused efforts to assess their own research. These efforts include how to communicate their research in a concise lay format, how to assess the developmental stage of their technology, and how to build a strategy around their intellectual property.

### RCM 809.3: Advanced Negotiation as Rhetorical Practice

Using rhetorical theories and methodologies, this course introduces students to effective negotiation as advanced rhetorical practice. Designed to foster a sophisticated understanding of the elements of the negotiation process, the course teaches rhetorical theories of identification, persuasion, power, ethics, argument structure, and language. It focuses on the tools necessary to examine communication processes and motivations that underpin the principles of negotiation. The course emphasizes strategic negotiation planning through rhetorical invention. At the same time, students will learn how to analyse negotiation contexts and stakeholder relationships and respond effectively.

<u>Prerequisite(s):</u> 6 credit units of undergraduate RCM courses or equivalent, OR RCM 800.3, OR 24 credit units of undergraduate courses

Note(s): This course is a hybrid course with RCM 409, and this course cannot be taken for credit after previously taking RCM 409.

Instructor: Dr. Jeanie Wills

<u>Rationale:</u> This course is a hybridized version of RCM 409 (Negotiation as Rhetorical Practice). The SoPD expects that the graduate level Rhetorical Communication Courses will serve a variety of graduate students in various programs, from INTD and Special Case to Engineering and other professional streams of study. Additionally, we expect that Graham School of Professional Development's graduate course offerings will expand as our faculty complement grows.

#### Items For Information

The following new courses and curricular changes have been approved by the College of Graduate and Postdoctoral Studies and are now being submitted to University Course Challenge for information.

#### **Corrections to September UCC submission:**

The title of the new course was not correctly identified in the Course Challenge submission. The course title for **CHE 869.3** is **Advanced Mineral Processing**.

The title of the new course was not correctly identified in the Course Challenge submission. The course title for **PLSC 875.3** is **Insect Ecology**.

### Course modification(s):

#### NURS 884.3: Advanced Health Assessment & Diagnostic Reasoning I

<u>Current prerequisite:</u> Admission to the Master of Nursing Primary Health Care Nurse Practitioner or Post Graduate Nurse Practitioner Certificate program.

<u>Proposed Prerequisite:</u> Admission to the Master of Nursing Primary Health Care Nurse Practitioner or Post Graduate Nurse Practitioner Certificate program or the Foundations for RN Specialty Practice Certificate.

## MBA 813.3: Strategic Human Resources Management

**Current prerequisite:** MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

## MBA 819.3 Marketing for Organizational Decision Making

**Current prerequisite:** MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

## MBA 828.3 Tactical Strategy

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

#### **MBA 830.3 Operations Management**

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

## MBA 846.3 Introduction to Entrepreneurship and Venture Development

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

## **MBA 859.4 Financial Reporting**

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

## **MBA 862.4 Financial Management**

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

#### **MBA 863.2 International Business**

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

#### MBA 865.3 Accounting for Planning and Decision Making

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

#### **MBA 866.2 Innovation Management**

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

## **MBA 870.3 Corporate Finance**

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

## **MBA 877.3 Leadership and Organizational Dynamics**

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

## MBA 992.3 Research – Project

Current prerequisite: MBA 885.3

Proposed prerequisite or corequisite: MBA 885.3

## **MBA 866.2: Innovation Management**

<u>Current Note:</u> MBA 866 is to be taken in the final year of a student's program. Departmental

permission is required for each registration

**Proposed Note:** None

#### College of Kinesiology - November 2022 University Course Challenge

The following changes have been approved by the College of Kinesiology and are being proposed to University Course Challenge for approval.

Contact: Keeran Wagner

#### **Minor Course Revision**

### KIN 146.3: Physical Activity and School Aged Children and Youth

This course will offer prospective and current College of Education students opportunities to increase their understanding of the role physical activity plays in the health and wellbeing of school aged children and youth.

Weekly hours: 3 Lecture hours and 1 Practicum/Lab hours

**Restriction(s):** Students must be enrolled in the College of Education or the College of Arts & Science. This course will not be offered to students in any other college. **Note:** Not for credit in the College of Kinesiology or the College of Arts & Science. Intended for prospective students who wish to enter the College of Education in the <a href="mailto:early/middle\_stream years and current College of Education students">early/middle</a>, stream years and current College of Education students in the <a href="mailto:early/middle">early/middle</a> years stream.

Students with credit for KIN 146.3 cannot take KIN 121.3 and/or KIN 122.3 for credit.

#### KIN 121.3: Functional Basis of Physical Activity

In surveying the functional effects of physical activity the course will examine strength development and training, anaerobic training, aerobic training, flexibility, diet and other selected topics. Physical growth patterns of children and the effects of exercise on growing tissues will also be covered. Laboratory experiences will be provided to supplement the lectures.

Weekly hours: 3 Lecture hours

**Restriction(s):** Course only open to first and/or second year students.

Note: Students with credit for KIN 146.3 cannot take KIN 121.3 for credit.

#### KIN 122.3: Social Behavioral Foundations of Physical Activity

Introduction to the basic concepts and topics associated with the behavioral aspects of physical activity. The focus is basic principles of motor learning and the social psychology of sport. A brief introduction to cultural aspects of physical activity in Canada is also presented along with current issues.

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Weekly hours: 3 Lecture hours

Note: Students with credit for KIN 146.3 cannot take KIN 122.3 for credit.

Rationale: These edits reflect the correct terminology in the B.Ed. Early/Middle Years program and highlight some course content crossover.

## **University Course Challenge – November 2022**

The following curricular change was approved by the College of Pharmacy & Nutrition Division of Nutrition, and the Nutrition Program Advisory Committee and is being submitted to the November 2022 University Course Challenge for approval.

Contact: Charity Evans (charity.evans@usask.ca)

#### **Curriculum Change – Bachelor of Science in Nutrition Program**

Move: NUTR 210.3 from Year 3 to Year 2.

Move: 3 credit unit general elective from Year 2 to Year 3.

**Rationale:** The NUTR 210 course provides foundational skills and knowledge that are beneficial to introduce earlier in the academic program. NUTR 210 is the anchor course to introduce students to the topic areas of food knowledge, food skills and food literacy. Positioning this course earlier in the program provides more opportunities in subsequent years to build on and increase student proficiency of this content to a more advanced level. Additionally, it is beneficial to provide students with food related teaching earlier in the program as this perspective is important to understand and apply to all other dietetic courses.

The curriculum change will be in effect starting the 2023-24 academic year.

## Bachelor of Science in Nutrition [B.Sc (Nutr.)] (132 credit units)

#### Year 1

### 33 credit units

- BMSC 200.3 Biomolecules
- BMSC 207.3 Human Body Systems I and BMSC 208.3 Human Body Systems II (formerly PHSI 208.6)
- BMSC 230.3 Metabolism
- COMM 102.3 Introduction to Business Management
- FABS 110.3 The Science of Food
- NUTR 120.3 Basic Nutrition
- NUTR 221.3 Advanced Nutrition Micronutrients
- NUTR 230.3 Professional Practice I
- PLSC 214.3 Statistical Methods
- Basic food safety training certificate

#### **Unrestricted Electives**

Choose 3 credit units of unrestricted electives

#### 36 credit units

- BMSC 210.3 Microbiology
- NUTR 210.3 Food Fundamentals and Preparation
- NUTR 305.3 Research Methods
- NUTR 310.3 Food Culture and Human Nutrition
- NUTR 321.3 Advanced Nutrition Macronutrients and Energy
- NUTR 322.3 Nutrition Throughout the Lifespan
- NUTR 330.3 Professional Practice II
- NUTR 350.3 Introduction to Public Health and Community Nutrition
- NUTR 365.3 Quantity Food Production and Service
- NUTR 366.3 Food Service Management Practicum
- PATH 205.3 Survey of Pathology
- Successful completion of Speechcraft (Public Speaking Certificate)

#### **Unrestricted Electives**

• Choose 6 3 credit units of unrestricted electives

#### Year 3

#### 33 credit units

- COMM 201.3 Introduction to Financial Accounting
- <u>NUTR 210.3</u> Food Fundamentals and Preparation
- NUTR 420.3 Current Issues in Nutrition
- NUTR 425.3 Nutritional Assessment
- NUTR 430.3 Professional Practice III
- NUTR 441.3 Clinical Nutrition I
- NUTR 442.3 Clinical Nutrition II
- NUTR 450.3 Nutrition Program Planning and Evaluation
- NUTR 466.3 Organization and Management of Nutrition Services
- Advanced food safety training instruction

#### **Unrestricted Electives**

• Choose 6 9 credit units of unrestricted electives

#### Year 4

#### 30 credit units

- NUTR 531.30 Professional Practice IV
- Successful completion of the practicum

<sup>\*</sup>offered in Spring and Summer terms

# Submission for University Course Challenge SENS Undergraduate Certificate in Sustainability

The School of Environment and Sustainability Faculty Council approved the following changes to the undergraduate certificate. They are being submitted here for final approval.

**Motion**: That the prerequisites for ENVS 201, currently listed as completion of 30 credit units at the University of Saskatchewan, be eliminated.

Rationale: Removal of the prerequisite will open this up to a broader group of students.

(Approved by faculty council Oct 7, 2022)

Motion: That AREC 348 and 428 be added as elective courses under the Food Systems focus area.

Motion: That GEOL 464 and SLSC 444 be added as elective courses under the Natural Resources focus area.

Motion: That PLAN 350 be added as an elective course under the Communities focus area.

**Rationale**: The content of the above courses align well with the focus areas. The addition of these courses will enrich student learning experience.

(Approved by faculty council Nov 4, 2022)

Contact person: Carolyn Pytlyk (carolyn.pytlyk@usask.ca)

The additions have been added to the program description below in red.

## **ENVS 201.3: Foundations of Sustainability**

The intention of this course is to provide foundational knowledge about sustainability science and concepts while also exposing students to the key foci areas they can pursue with the certificate. Students will be exposed to an interdisciplinary perspective, with materials from the social and natural sciences as well as humanist perspectives. This course is team-taught in an interactive environment with an emphasis on critical thinking exercises and class discussions.

Weekly hours: 3 Lecture hours

Prerequisite(s): None Completion of 30 credit units at the University of Saskatchewan.

# Sustainability

Certificate (Cert.)

The Certificate in Sustainability is intended to give students theoretical, methodological, strategic, and substantive exposure to sustainability-related concepts and practice. Students will choose either a natural resources, community, or food systems focus for their sustainability studies towards the certificate. The

certificate will allow students to engage in problem-based, experiential learning across a broad range of sustainability topics. The program will begin in the student's second year with ENVS 201.

# Certificate in Sustainability (21 credit units)

# Required Courses (6 credit units):

- ENVS 201.3 Foundations of Sustainability
- ENVS 401.3 Sustainability in Action

## Indigenous Learning for Sustainability (3 credit units):

Choose **3 credit units** from the following elective courses:

- ANTH 202.3 Anthropology and Indigenous Peoples in Canada
- ANTH 480.3 Indigenous Peoples and Mental Health Anthropological and Related Perspectives
- ARCH 350.3 Introduction to Boreal Forest Archaeology
- AREC 220.3 History of Indigenous Agriculture in Canada
- COMM 347.3 Indigenous Business in Canada
- DRAM 111.3 Practicum I Indigenous Performance Methods
- ENG 242.3 Indigenous Storytelling of the Prairies
- ENG 243.3 Introduction to Indigenous Literatures
- ENG 335.3 The Emergence of Indigenous Literatures in Canada
- HIST 195.3 History Matters Indigenous Perspectives on Canadian History
- HIST 266.3 History Wars Issues in Native Newcomer Relations
- INDG 107.3 Introduction to Canadian Indigenous Studies
- KIN 306.3 Introduction to Indigenous Wellness
- LING 253.3 Indigenous Languages of Canada
- PLAN 445.3 Planning with Indigenous Communities\*
- POLS 222.3 Indigenous Governance and Politics
- INDG 200-Level, 300-Level, 400-level\*

#### Techniques and Tools for Sustainability (3 credit units)

Choose **3 credit units** from the following elective courses:

- ENVE 381.3 Sustainability and Environmental Assessment
- EVSC 203.3 Sampling and Laboratory Analysis
- GEOG 290.3 Field Methods and Laboratory Analysis
- GEOG 385.3 Analysis of Environmental Management and Policy Making
- GEOG 386.3 Environmental Impact Assessment
- INDG 210.3 Indigenous Ways of Knowing

<sup>\*</sup>These courses may not be used to count as credit for both Indigenous Learning and Area of Focus electives

- POLS 256.3 Understanding Political Science Research
- PSY 235.3 Research Methods and Design
- RRM 323.2 Resource Data and Environmental Modeling and RRM 201.1 Geographical Information Systems
- SOC 225.3 An Introduction to Survey Research and Data Analysis in Sociology
- SOC 232.3 Methods of Social Research

# Areas of Focus (9 credit units)

Students must choose one of the following three areas of focus, in consultation with an advisor:

Please note in each area of focus there are thesis and/or research course options listed. If a student chooses to use one of these courses towards the completion of the certificate it must be demonstrated to the certificate coordinator that the thesis pursued has a focus on sustainability and the theme of the chosen area of focus.

# Natural Resources and Sustainability Focus

Elective Course (9 credit units):

#### Choose one of:

- **BIOL 228.3** An Introduction to Ecology and Ecosystems
- **ECON 275.3** Economics of Natural Resources
- ECON 277.3 Economics of the Environment
- ENVE 201.3 Principles of Environmental Engineering
- ENVE 212.2 Physical Principles of Plant Biosystems
- EVSC 210.3 Environmental Physics
- EVSC 220.3 Environmental Soil Science
- GEOG 280.3 Environmental Geography
- PHIL 226.3 Environmental Philosophy
- PHIL 231.3 Moral Problems
- PHIL 236.3 Ethics and Technology
- PLSC 213.3 Principles of Plant Ecology
- TOX 200.3 Poisons and Pollutants

- ANBI 375.3 Animals and the Environment
- AREC 330.3
- BIOL 373.3 Community Ecology
- CHEM 375.3 Environmental Chemistry
- ECON 376.3 Energy Economics
- <u>EVSC 380.3</u> Grassland Soils and Vegetation
- GEOG 333.3 Global Climate Change
- GEOG 351.3 Northern Environments
- PLAN 329.3 Integrated Water Resource Planning

- RRM 312.3 Natural Resource Management and Indigenous Peoples
- SLSC 342.3 Agronomic Soil Microbiology
- SLSC 350.3 Terrestrial Restoration
- TOX 301.3 Environmental Toxicology

#### Choose one of:

- AREC 430.3 Advanced Natural Resource Economics
- BIOL 410.3 Current Perspectives in Environmental Biology
- BIOL 412.3 Limnology
- BIOL 470.3 Conservation Biology
- BIOL 475.3 Ecological Toxicology
- ENVE 432.3 Land Management and Reclamation
- EVSC 421.3 Contaminated Site Management and Remediation
- EVSC 430.3
- EVSC 492.3 Research and Term Paper
- EVSC 494.3 Research and Thesis
- GEOG 490.3 Honours Thesis in Hydrology or Geomatics
- GEOL 464.3 Geoscience of Green Energy and the Digital Economy
- PLSC 413.3 Advanced Plant Ecology
- PLSC 422.3 Rangeland Ecology and Management
- PLSC 423.3
- PLSC 425.3 Forest Ecology
- PLSC 492.3 Project Thesis in Plant Sciences
- PLSC 494.6 Research Thesis in Plant Sciences
- PLSC 492.3 Project Thesis in Plant Sciences
- PLSC 494.3 Research Thesis in Plant Sciences
- SLSC 444.3 Soil Ecology

# Community and Sustainability Focus

### Elective Course (9 credit units):

- ANTH 240.3 Cultural Landscapes and Environments
- ANTH 244.3 Political Ecology Anthropology and Global Environmental Issues
- CPSJ 203.3 Cultivating Humanity
- **ECON 275.3** Economics of Natural Resources
- ECON 277.3 Economics of the Environment
- GEOG 208.3 World Regional Development
- GEOG 240.3 Sustainable Cities and Regions
- **GEOG 280.3** Environmental Geography
- HIST 257.3 The Canadian Prairie to 1905
- HIST 258.3 The Canadian Prairies since 1905
- HIST 263.3
- HIST 290.3 Topics in Environmental History
- PHIL 226.3 Environmental Philosophy

- PHIL 231.3 Moral Problems
- PHIL 236.3 Ethics and Technology
- POLS 226.3 Canadian Public Policy
- PLST 210.3
- SOC 202.3 Environmental Sociology
- SOC 204.3 Rural Sociology
- SOC 206.3 Sociology of Communities and Community Development
- SOC 227.3 Critical Issues in Canadian Society
- WGST 210.3 Gendered Perspectives on Current Events

#### Choose one of:

- ANTH 329.3 Environmental Anthropology
- ARCH 357.3 The Archaeology of Prairie Settlement
- AREC 330.3
- GEOG 340.3
- GEOG 352.3
- **GEOG 364.3** Geography of Environment and Health
- GEOG 380.3 Environmental Geography of the Circumpolar North
- GEOG 381.3 Development in the Canadian North Issues and Challenges
- PLAN 341.3 Urban Planning
- PLAN 342.3
- PLAN 346.3 Introduction to Urban Design
- PLAN 350.3 Transportation Planning and Geography
- POLS 326.3 Comparative Public Policy
- POLS 328.3 Public Policy Analysis
- SOC 309.3 Theories of Social Change
- SOC 344.3 Sociology of Women Gender and Development
- SOC 360.3 Globalization and Social Justice

- ANBI 475.3 Field Studies in Arctic Ecosystems and Aboriginal Peoples
- ANTH 401.3 Independent Research in Anthropology
- AREC 430.3 Advanced Natural Resource Economics
- AREC 432.3 Rural Development Theory and Applications
- CHEP 402.3 Global Health and Local Communities Issues and Approaches
- CPSJ 400.3 Critical Perspectives on Social Justice and the Common Good
- GEOG 464.3
- **GEOG 491.3** Honours Thesis in Environment and Planning
- HIST 459.3
- INDG 451.6
- LAW 444.3 Environmental Law
- PLAN 441.3 Challenges in Urban Development
- PLAN 445.3 Planning with Indigenous Communities
- PLAN 446.3 Advanced Urban Design Studio
- POLS 403.3 Advanced Topics in Public Law and Public Policy
- POLS 422.3 Indigenous Governance and Self Determined Sustainable Development
- SOC 409.3 Sociology of Development

- SOC 421.3
- WGST 411.3 Situated Transnational Feminisms

## Food Systems and Sustainability Focus

Elective Course (9 credit units):

#### Choose one of:

- AREC 251.3 Introduction to Agricultural Policy
- AGRC 211.3 Global Food Security
- PLSC 235.3 Urban Agriculture

#### Choose one of:

- ANBI 375.3 Animals and the Environment
- ANSC 301.3 Animal Production Tour
- AREC 330.3
- AREC 348.3 Food Economics and Consumer Behaviour
- EVSC 380.3 Grassland Soils and Vegetation
- FABS 371.3 Food Biotechnology
- PLSC 345.3 Pesticides and Crop Protection
- RRM 312.3 Natural Resource Management and Indigenous Peoples
- SLSC 313.3 Environmental Soil Chemistry

- AREC 428.3 Case Studies in Agribusiness Management
- AREC 432.3 Rural Development Theory and Applications
- AREC 451.3 Agricultural Problems and Policies
- EVSC 492.3 Research and Term Paper
- EVSC 494.6 Research and Thesis
- <u>FABS 401.3</u> Dairy Science and Technology
- FABS 436.3
- FABS 450.3
- FABS 492.3 Literature Thesis
- FABS 494.3 Research Thesis
- GEOG 491.3 Honours Thesis in Environment and Planning
- PLSC 401.3 Sustainable Crop Production
- PLSC 413.3 Advanced Plant Ecology
- PLSC 418.3 Management of Arable Grassland
- PLSC 422.3 Rangeland Ecology and Management
- PLSC 492.3 Project Thesis in Plant Sciences
- PLSC 494.6 Research Thesis in Plant Sciences
- SLSC 492.3 Research and Term Paper
- SLSC 494.6 Research and Thesis

• <u>SOC 402.3</u> Sociology of Agriculture and Food