

Academic Programs Committee of Council

University Course Challenge

Scheduled posting: August 2021

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 Education College of Graduate and Postdoctoral Studies College of Medicine School of Environment and Sustainability

Approval:Date of circulation: August 17, 2021Date of effective approval if no challenge received: August 31, 2021

Next scheduled posting:

The next scheduled posting will be September 15th, 2021, with a submission deadline of **September 13th, 2021.** Urgent items can be posted on request.

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

College of Agriculture and Bioresources, Submission to August 2021 Course Challenge

The following items have been approved by the College of Agriculture and Bioresources and are being submitted to University Course Challenge for approval:

New Course Proposal:

PLSC 427.3 Ecology and Management of Invasive Plants

Invasive plants are a growing problem in natural and managed ecosystems. This course explores why some plants are invasive and why certain ecosystems are more readily invaded. The course will review the biology and ecology of major invasive weed species in western Canada, and the methods for the control and management of those species.

Prerequisite: PLSC 213 or BIOL 228 or PLSC 340

Rationale: Invasive species are a large and growing problem both in Canada and across the globe with estimated annual economic costs nearing \$200 billion globally. In Canada, the estimated costs of invasive plants are in the billions primarily due to the cost of control and the impact on agriculture, especially livestock production. Further, invasive plants are a major driver of biodiversity loss and represent a significant conservation challenge. Prevention and control are critical to the mitigation of the ecological and economic impacts of invasion. Understanding the process of invasion and the management techniques used to control their spread is critical to this effort. Students taking this class will learn to recognize and control common invasive plants found in natural and semi-natural areas of western Canada, which is important for many careers in agriculture and conservation within the region. More importantly, they will learn the ecological principles that determine invasion success and impacts, and how management interventions manipulate these processes to control invasive plants, which will allow them to manage for invasive plants beyond the specific ones covered in this course.

Although we currently have a course on weed ecology in Plant Sciences, this course deals primarily with weeds of production agriculture systems except for a couple of lectures on invasive weeds. We lack a course that focuses on the ecology of invasive plants in natural and managed systems, such as those found in rangelands, tame pasture, and forests. Given the significant effect that these plants can have on the ecology and economic returns of these systems, this gap needs to be filled. This course aims to do so.

Course Deletion:

PLSC 423.3 Landscape Ecology and Vegetation Management

Rationale: This course was developed and offered by a now retired faculty member and has been occasionally offered since using sessional lecturers. Professor Bennett has developed a new course that will take the place of this course as required in the Applied Plant Ecology Major

Revisions to Course and Program Catalogue:

Applied Plant Ecology Bachelor of Science in Agriculture (B.S.A.)

Years 3 & 4 (60 credit units)

- BIOL 323.3
- BIOL 424.3
- EVSC 380.3
- PLSC 214.3 or STAT 245.3
- PLSC 317.3
- PLSC 413.3
- PLSC 418.3
- PLSC 422.3
- PLSC 423.3
- PLSC 425.3
- PLSC 427.3
- PLSC 492.3 or PLSC 494.6 (3 credit units count as restricted elective)

Rationale: This change is necessary to reflect the deletion of PLSC 423 and its replacement with PLSC 427.

Applied Plant Ecology

Minor

Requirements

- RRM 215.3 or BIOL 323.3 or EVSC 380.3
- PLSC 213.3 or BIOL 228.3 (PLSC 213.3 is preferred)
- Choose two of: PLSC 413.3, PLSC 422.3, PLSC 423.3 or PLSC 425.3 or PLSC 427.3

Choose 6 credit units from the following:

- BIOL 373.3
- BIOL 424.3
- PLSC 413.3
- PLSC 422.3
- PLSC 423.3
- PLSC 425.3
- PLSC 427.3
- RRM 215.3 or BIOL 323.3 or EVSC 380.3

Rationale: This change is necessary to reflect the deletion of PLSC 423 and its replacement with PLSC 427.

Agronomy

Bachelor of Science in Agriculture (B.S.A.)

Years 3 and 4 (60 credit units)

PLSC 317 or BIOL 331 and SLSC 312 must be taken in year 3; PLSC 401 and PLSC 417 must be taken in year 4.

- AREC 222.3
- AREC 343.3
- PLSC 317.3 or BIOL 331.3
- PLSC 401.3
- PLSC 417.3
- PLSC 492.3 or PLSC 494.6 (3 credit units count as restricted electives)

• SLSC 312.3

Choose 9 credit units from the following Crop Protection courses:

- BIOL 345.3
- PLSC 234.3
- PLSC 335.3
- PLSC 340.3
- PLSC 345.3
- PLSC 350.3
- PLSC 427.3
- PLSC 450.3

Rationale: The inclusion of PLSC 427.3 adds an additional crop protection option for students and will reduce pressure on currently oversubscribed courses

Crop Science

Bachelor of Science in Agriculture (B.S.A.)

Years 3 & 4 (60 credit units)

- BIOL 331.3
- PLSC 405.3
- PLSC 411.3
- PLSC 417.3
- PLSC 492.3 or PLSC 494.6 (3 credit units count as restricted elective)

Choose 18 credit units from the following:

- BIOL 345.3
- PLSC 333.3
- PLSC 335.3
- PLSC 401.3
- PLSC 408.3
- PLSC 416.3
- PLSC 418.3
- PLSC 420.3
- PLSC 427.3
- PLSC 441.3
- PLSC 451.3
- PLSC 470.3

Rationale: The addition of PLSC 427.3 will assist Crop Science majors in programming by adding another relevant class to this list.

College of Education – Item for Information

Please note the following editorial changes in red to align the B.Ed. Secondary program with approved curricular changes in Mathematics.

Bachelor of Education (B.Ed.) - Secondary Program Requirements (120 credit units)

Years 1 and 2 (60 credit units)

Teaching Areas

Teacher candidates are required to complete a specific number of credit units in at least two teaching areas (disciplinary fields) that are tightly aligned with Saskatchewan Prekindergarten to Grade 12 curriculum areas.

Teaching areas must be chosen from a defined set of subjects and courses, approved by both the College of Education and the Saskatchewan Professional Teachers Regulatory Board (SPTRB).

All secondary option students must complete 24 credit units in Teaching Area 1 and 15 credit units in Teaching Area 2.

Secondary - Teaching Area 1

Students must complete 24 credit units of Teaching Area 1.

Biology Chemistry Cree Drama English Language Arts French Indigenous Studies Mathematics Please Note: Students must complete the following as prerequisites for this Teaching Area: Mathematics B30 and C30 and a 60% score in the Math Placement Test; or Pre-Calculus 30 and a 60% score in the Math Placement Test; or MATH 102.3 or MATH 104. Physical Education Physics Social Sciences/Social Studies Visual Arts Secondary - Teaching Area 2

Students must complete 15 credit units of Teaching Area 2.

Biology Chemistry Cree Drama English Language Arts French Indigenous Studies Mathematics Please Note: Students must complete the following as prerequisites for this Teaching Area: Mathematics B30 and C30 and a 60% score in the Math Placement Test; or Pre-Calculus 30 and a 60% score in the Math Placement Test; or MATH 102.3 or MATH 104. Physics Social Sciences/Social Studies Visual Arts

Year 3 (27 credit units)

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

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Year 4 (30 credit units)

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<u>Rationale</u>: The above changes were necessary to reflect the following changes approved for the 2020-2021 academic year: Students may have credit for only one of MATH 104, MATH 110, MATH 121, MATH 123, MATH 125 or MATH 176; the pre-requisite(s) for MATH 110.3 are now Pre-Calculus 30 or MATH 102.3; MATH B30 and C30 do not reflect the current SK curriculum; and the Math Placement Test is no longer required.

College of Graduate and Postdoctoral Studies, University Course Challenge – August 2021

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:

New Course Proposals

FDSC 808.3: Professional Skills in Scientific Communication

When communicating scientific concepts, data, ideas and proposals, it is vital to know your target audience and to clearly and concisely present information at an appropriate level. The purpose of this course is to give students the tools to gauge the knowledge base of their audience and to be able to present information in oral and written formats to efficiently and precisely communicate ideas. Instructor: Chris Eskiw, PhD

<u>Rationale:</u> For graduate students to be successful, it is vital for them to be able to communicate clearly, concisely and with confidence. Often these 'soft' skills are ignored, deemphasized or deprioritized during training. This course offers students an opportunity to develop essential communication skills. Using their own style and knowledge, students will learn how to appropriately gauge their audience and 'pitch' ideas/data at the appropriate level, whether this be audiences with specialist knowledge, granting/government agencies, or the general public. This course also introduces different platforms, such as written documents, oral presentation, and social media in which to communicate their ideas. This course is highly interactive with students from different backgrounds working together and actively developing these skills in a group environment, giving the students 'real world/ examples of working in productive teams. This course will also have guest lecturers who are successful communicators from scientific fields as well as other areas (such as media), to bring new concepts of successful communicators.

VSAC 833.3: Advanced Veterinary Anesthesia

This course covers the physics of veterinary anesthesia including pressure, flow, solubility, gas laws, electricity, thermodynamics, operating theatre safety and equipment function. It also covers all aspects of large animal anesthesia including the pathophysiology, individual species variations and clinical application. The course is offered once every 3 years.

<u>Prerequisite:</u> DVM, enrolled in a clinical veterinary anesthesia residency program <u>Instructors:</u> Dr Tanya Duke, BVetMed MSc DVA Diplomate of the European College of Veterinary Anaesthesia/Analgesia (DECVAA) and Diplomate of the American College of Veterinary Anesthesia/Analgesia (DACVAA)

Dr Barbara Ambros, DVM MVetSc DECVAA DACVAA

Dr. Shannon Beazley, DVM DACVAA

Dr Christine Egger, DVM MVetSc DACVAA

<u>Rationale:</u> There is currently no course offering instruction on aspects of physics required to specialize in veterinary anesthesia. Veterinary anesthesia requires a sound knowledge of molecular interaction, pressure, flow, gas laws, solubility, thermodynamics and electricity to be able to explain the function of anesthesia and monitoring equipment. This enables the student to make informed decisions on safe operating procedures, patient management, repair and trouble-shoot equipment.

Half of this course will also be dedicated to instruction on large animal veterinary anesthesia. This includes pathophysiology and unique concerns important to the different large animal species. This material is not covered in the Small Animal Anesthesia course (VSAC 878.3). The anesthesia resident is also expected to take VSAC 878.3 as an adjunct to this course. With both courses, the veterinary

anesthesia graduate student will become knowledgeable in all aspects of the subject and become more successful in passing the specialty Board certification in veterinary anesthesia.

VSAC 834.3: Radiographic and Cross-Sectional Anatomy

This course will allow resident graduate students to build upon their knowledge of anatomy, particularly as it pertains to diagnostic imaging. The course serves to prepare residents both for American College of Veterinary Radiology (ACVR) qualifying and certifying examinations, as well as for clinical practice. Restriction: Permission of the instructor required.

Instructor: Dr. Sally Sukut, DVM, Diplomate ACVR

<u>Rationale</u>: This course is intended to prepare graduate students in Medical Imaging for the American College of Veterinary Radiology preliminary and certifying board examinations which are required to become a specialist.

RCM 802.3: Advanced Interpersonal Communication and Rhetoric

Advanced Interpersonal Communication and Rhetoric invites students to apply rhetorical theories to professional interpersonal communication situations. This course explores how our language and symbol use encodes strategies of identification. When we recognize how identifications are built rhetorically, we can more effectively manage conflict, defuse tensions, and build effective professional interpersonal relationships.

Instructor: Jeannie Wills, PhD

<u>Prerequisites:</u> 6 credit units of undergraduate RCM courses or equivalent; or RCM 800; or 24 credit units of university level courses

<u>Note:</u> Students cannot receive credit for RCM 402 and RCM 802; those courses are mutually-exclusive <u>Rationale:</u> Graduate-level rhetorical communication courses will serve a variety of graduate students in interdisciplinary, engineering and professional graduate programs.

RCM 808.3: Advanced Writing for the Public

This course applies classical and contemporary rhetorical theory to written communication. The readings and assignments, which include examples of and exercises in descriptive, expository, narrative, and persuasive writing, will improve the capacity of students and practicing professionals to write clearly and effectively for both specialist and non-specialist audiences.

Instructor: Corey Owen, PhD

<u>Note:</u> Students cannot receive credit for RCM 408 and RCM 808; those courses are mutually exclusive. <u>Rationale:</u> For graduate students wishing to advance their professional communication skills.

RCM 810.3: Advanced Studies in the Rhetoric of Science and Technology

This course explores the dissemination of scientific and technological information among scientists and engineers, government agencies, and the public. Graduate students and professionals will advance their ability to communicate with such audiences through readings in the rhetoric of science and technology and the analysis of case studies.

Instructor: Corey Owen, PhD

<u>Note:</u> Students cannot receive credit for RCM 410 and RCM 810; those courses are mutually exclusive. <u>Rationale:</u> For graduate students wishing to advance their professional communication skills in science and technology.

College of Medicine, University Course Challenge Submission, August 2021

The College of Medicine Undergraduate Committee has approved the following program changes. They are now being submitted to University Course Challenge for final approval:

<u>Course Deletion</u>: MEDC 101.0 Basic Life Support for Healthcare Workers

Provides a basic level of knowledge and skill in first aid and basic cardiac life support.

Restriction(s): Restricted to students enrolled in the College of Medicine. **Prerequisite(s):** Admission to M.D. program (Year 1, Term 1)

Rationale: The content in MEDC 101 has been incorporated into the existing MEDC 111; therefore, MEDC 101 is no longer in use. The Doctor of Medicine (M.D.) will be adjusted as follows:

Doctor of Medicine (248 credit units)

Students entering the College of Medicine will take a four-year medical program consisting of two years pre-clerkship and two years clerkship. Admission requirements are detailed on the **College of Medicine website**.

A unique opportunity exists for students to complete the M.B.A. and M.D. degrees concurrently. This opportunity is available to students accepted into the College of Medicine, allowing them to apply to and if accepted, complete an M.B.A. degree in addition to the M.D. degree. For further information on the M.B.A. admission and program requirements, please visit the **M.B.A. program page**.

For further information on the College of Medicine admission and program requirements please see the information below and the <u>College of Medicine website</u>.

First Year Pre-Clerkship (33 weeks)

- MEDC 100.0 (optional)
- <u>MEDC 101.0</u> Basic Life Support for Health Care Providers
- MEDC 111.0 Success in Medical School I
- MEDC 112.3 Medicine and Society I

- MEDC 113.8 Clinical Skills I
- MEDC 114.4 Clinical Integration I
- MEDC 115.18 Principles of Medical Science
- MEDC 122.3 Medicine and Society II
- MEDC 123.8 Clinical Skills II
- MEDC 124.4 Clinical Integration II
- MEDC 126.18 Foundations of Clinical Medicine myself

Third Year Clerkship (Core Rotations) (45 weeks)

- MEDC 307.50 Core Clinical Rotations or MEDC 306.50 Saskatchewan Longitudinal Integrated Clerkship SLIC
- MEDC 308.16 Selected Topics in Medicine
- MEDC 311.0 Success in Medical School Clerkship III

Fourth Year Clerkship (Electives and Capstone Course) (35 weeks)

- MEDC 407.34 Elective Clinical Rotations
- MEDC 408.8 Selective Clinical Rotations
- MEDC 409.8 Preparation for Residency

Optional Fifth Year Clerkship (35 weeks)

The following is a clerkship extension course, offered both terms. It allows students the option of participating in an additional year of undergraduate medical training.

• MEDC 505.15 Clerkship Extension

School of Environment and Sustainability University Course Challenge Submission Changes to Certificate in Sustainability

Overview and Rationale Regarding Proposed Changes:

SENS is proposing to add two elective courses to the Communities and Sustainability Focus (SOC 309, 360), and one additional Tools and Techniques course option (PSY 235) to the Certificate in Sustainability. As this is a certificate that is open to any U of S student, our goal is to make it as accessible as possible and to allow any interested student to learn more about sustainability. These additions will provide more flexibility for Arts and Science students pursuing the certificate, particularly those students majoring in psychology or sociology, who at present are expressing difficulty finding course options that satisfy both their degree requirements and the certificate requirements. Addition of these courses to the certificate will be useful in continuing to attract a diverse cohort of students to the certificate, which lends to the interdisciplinary teaching and learning that occurs within the core courses (ENVS 201 and 401). For these reasons we propose to add these three courses.

The proposed changes to the Certificate in Sustainability can be seen below in red.

Certificate in Sustainability

Would you like to apply to this program?

Admission requirements

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 the natural resources and sustainability focus, the community and sustainability focus or the food systems and sustainability focus. 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.

Program Requirements

Certificate in Sustainability - (Cert.) (21 credit units)

Required Courses (6 credit units):

- ENVS 201.3
- ENVS 401.3

Indigenous Learning for Sustainability (3 credit units):

Choose 3 credit units from the following elective courses:

- ANTH 202.3
- ANTH 480.3

- ARCH 350.3
- AREC 220.3
- DRAM 111.3
- ENG 242.3
- ENG 243.3
- ENG 335.3
- HIST 195.3
- HIST 266.3
- INDG 107.3
- LING 253.3
- PLAN 445.3*
- POLS 222.3
- INDG 200-Level, 300-Level, 400-level*

*These courses may not be used to count as credit for both Indigenous Learning, and Area of Focus electives

Techniques and Tools for Sustainability (3 credit units)

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

- ENVE 381.3
- EVSC 203.3
- GEOG 290.3
- GEOG 385.3
- GEOG 386.3
- NDG 210.3
- PSY 235.3
- RRM 323.2 and RRM 201.1
- SOC 225.3
- SOC 232.3

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

- BIOL 228.3
- ECON 275.3

- ECON 277.3
- ENVE 201.3
- ENVE 212.3
- EVSC 210.3
- EVSC 220.3
- GEOG 280.3
- PHIL 226.3
- PHIL 231.3
- PHIL 236.3
- PLSC 213.3
- TOX 200.3

Choose one of:

- ANBI 375.3
- AREC 330.3
- BIOL 373.3
- CHEM 375.3
- ECON 376.3
- EVSC 380.3
- GEOG 333.3
- GEOG 351.3
- PLAN 329.3
- RRM 312.3
- SLSC 350.3
- TOX 301.3

- AREC 430.3
- BIOL 410.3
- BIOL 412.3
- BIOL 470.3
- BIOL 475.3
- ENVE 432.3
- EVSC 421.3
- EVSC 430.3
- EVSC 492.3
- EVSC 494.3
- GEOG 490.3
- PLSC 413.3
- PLSC 422.3
- PLSC 423.3
- PLSC 425.3
- PLSC 492.3
- PLSC 494.6

- SLSC 492.3
- SLSC 494.6

Community and Sustainability Focus

Elective Courses (9 credit units):

Choose one of:

- ANTH 240.3
- ANTH 244.3
- ECON 275.3
- ECON 277.3
- GEOG 208.3
- GEOG 240.3
- GEOG 280.3
- HIST 257.3
- HIST 258.3
- HIST 263.3
- HIST 290.3
- INTS 203.3
- PHIL 226.3
- PHIL 231.3
- PHIL 236.3
- POLS 226.3
- RLST 210.3
- SOC 202.3
- SOC 204.3
- SOC 206.3
- SOC 227.6
- WGST 210.3

- ANTH 329.3
- ARCH 357.3
- AREC 330.3
- GEOG 340.3
- GEOG 352.3
- GEOG 364.3
- GEOG 380.3
- GEOG 381.3
- PLAN 341.3
- PLAN 342.3
- PLAN 346.3
- POLS 326.3
- POLS 328.3

- SOC 309.3
- SOC 344.3
- SOC 360.3

Choose one of:

- ANBI 475.3
- ANTH 401.3
- AREC 430.3
- AREC 432.3
- CHEP 402.3
- GEOG 464.3
- GEOG 491.3
- HIST 459.3
- INDG 451.6
- INTS 400.3
- PLAN 441.3
- PLAN 445.3
- PLAN 446.3
- POLS 403.3
- POLS 422.3
- SOC 409.3
- SOC 421.3
- WGST 411.3

Food Systems and Sustainability Focus

Elective Courses (9 credit units):

Choose one of:

- AREC 251.3
- AGRC 211.3
- PLSC 235.3

Choose one of:

- ANBI 375.3
- ANSC 301.3
- AREC 330.3
- EVSC 380.3
- FABS 371.3
- PLSC 345.3
- RRM 312.3
- SLSC 313.3

- AREC 432.3
- AREC 451.3
- EVSC 492.3
- EVSC 494.6
- FABS 401.3
- FABS 432.3
- FABS 436.3
- FABS 450.3
- FABS 492.3
- FABS 494.6
- GEOG 491.3
- PLSC 401.3
- PLSC 413.3
- PLSC 418.3
- PLSC 422.3
- PLSC 492.3
- PLSC 494.6
- SLSC 492.3
- SLSC 494.6
- SOC 402.3

Motions (both passed) from SENS Faculty Council Meeting on June 11, 2021 to approve the above changes:

Motion: That PSY 235 (Research Methods and Design in Psychology) be added as an elective to the Techniques and Tools for Sustainability requirement

Motion: That SOC 309 (Theories of Social Change) and SOC 360 (Globalization and Social Justice) be added as electives to the Communities focus area of the certificate.