Academic Programs Committee of Council

University Course Challenge

Scheduled posting: **September 2025**

Date of circulation: **September 16, 2025**

Date approval is effective if no challenge received: **September 30, 2025**

Curricular and program changes approved by University Course Challenge include additions and deletions of courses, lower levels of study and program options; straightforward program changes; and curricular changes which affect other colleges.

Included are submissions for information and approval from the following colleges and schools:

College of Arts and Science
College of Engineering
College of Graduate and Postdoctoral Studies
College of Nursing

The next scheduled posting will be **October 16, 2025** with a submission deadline of **October 30, 2025**. Urgent items can be posted on request.

Please direct challenges to both of the following: seanine.warrington@usask.ca in the Registrar's Office and danielle.rudulier@usask.ca in the Governance Office.

University Course Challenge – September 2025

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)

Hydrology

Minor course revisions:
GEOG 302.3 Quantitative Methods in Geography
Prerequisite change:
Current prerequisite: One of PLSC 214.3, STAT 242.3, STAT 245.3, or STAT 246.3
Proposed prerequisite: GEOG 222.3
Rationale: The introductory spatial data analysis content provided in GEOG 222.3 sufficiently prepares students for the more focused content of GEOG 302.3.

Music

Course deletion(s)
MUS 365.3 Music of Romantic Period
Material from this course was shifted to MUS 155 and MUS 255.

Minor course revisions:
MUS 133.3 Fundamentals of Music Theory I
Prerequisite change:
Current prerequisite: MUS 101 or a minimum grade of 65% on the Music Theory Entrance Examination
Proposed prerequisite: MUS 101 or a minimum grade of 65% on the Music Theory Entrance Examination or a minimum grade of 70% on the Royal Conservatory of Music Level 7 Theory Examination
Rationale: This change will allow us to recognise Royal Conservatory credentials and to avoid unnecessarily administering theory examinations.

Political Studies

Course deletion(s)
POLS 226.3 Canadian Public Policy
POLS 250.3 Understanding the State in a Global Era
POLS 343.3 Ukraine Processes and Problems of Nation and State Building
POLS 375.3 Canadian Foreign Policy in the Global Era
POLS 465.3 Nationalism
Rationale: The department is streamlining course offerings in response to changes/reduction in faculty complement.

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.

Music Education

Minor course revisions:
EMUS 438.3
Prerequisite change:
Current prerequisite: MUS 234 and MUS 325
Proposed prerequisite: MUS 234; and MUS 225 or MUS 325
Rationale: MUS 325 was renumbered to MUS 225.

College of Engineering - University Course Challenge Submission, SEPTEMBER 2025

The following changes have been approved through the College of Engineering and are being submitted here for approval through the University Course Challenge.

Contact: Temi Ojo (temitope.ojo@usask.ca)

Minor Course Revisions

Computer Engineering

1. **Motion:** To add the course CME 465.*3 (**Embedded Machine Learning)**,* to the list of core courses in the CME program, to establish it as a pre-requisite for CME 495.6.

Rationale: Machine learning plays an increasingly important role in Computer Engineering and is being used to address a wide range of practical problems. In recent years, many capstone design projects have incorporated machine learning techniques, a trend that is expected to grow.

To ensure students are well-prepared to apply and evaluate these techniques in their capstone projects, we propose adding CME 465.3 to the list of CME Program Core courses, thereby making it a prerequisite for CME 495.6.

As outlined in the university's program catalogue, the prerequisites for CME 495 are defined through the CME Program Core course list

Prerequisite & Corequisite Legend

CME Program Core

- CME 331.3 Microprocessor Based Embedded Systems
- CME 341.3 Logic Design Using FPGAs
- **CME 465.3** Embedded Machine Learning
- CMPT 214.3 Programming Principles and Practice
- CMPT 270.3 Developing Object-Oriented Systems
- CMPT 280.3 Intermediate Data Structures and Algorithms
- EE 205.1 Safety and Stewardship in Electrical and Computer Engineering
- EE 216.3 Probability Statistics and Numerical Methods
- EE 221.3 Analog Electronics
- EE 232.3 Digital Electronics
- EE 265.3 Discrete Time Signals and Systems
- EE 271.3 Materials and Heat Transport in Electrical Engineering
- EP 214.3 Analog Signals and Systems
- GE 348.3 Engineering Economics
- RCM 200.3 Effective Professional Communication

2. **Motion:** To change the pre/corequisites for CME 495.6 ***(Capstone Design Course)***

From:

Prerequisites: *CME Program Core and 6 credit units from the CME Program Focus Areas.*
Prerequisite(s) or Corequisite(s): *9 additional credit units from the CME Program Focus Areas.*

To:
Prerequisites: *CME Program Core plus 9 additional credit units from the following group of courses: (CME300-499 and the CME focus areas.)*
Prerequisite(s) or Corequisite(s): *a total of 9 additional credit units from the following group of courses: (CME300-499 and CME focus areas.)*

Rationale: To register in CME 495 (Capstone Design), students are expected to have completed most of their third-year CME program and be registered in the majority of their fourth-year courses. This was previously managed effectively through a set of specific pre- and co-requisites.

However, with the 2024–2025 program changes—specifically, the reclassification of Digital Systems from a focus area to part of the CME program core—unintended issues have arisen. While this change was semantic and did not alter course requirements, it affected CME 495 registration eligibility: Digital Systems courses no longer count toward focus area credit units, creating barriers for students following the standard program sequence.

To resolve this, we propose updating the CME 495 prerequisites to better reflect the current program structure.

University Course Challenge – September 2025

The curricular revisions listed below were approved through the Graduate Programs Committee of the College of Graduate and Postdoctoral Studies and are now submitted to the University Course Challenge for approval.

Contact: Chelsea Smith, CGPS Academic Affairs Specialist (chelsea.smith@usask.ca or gradprograms.academicaffairs@usask.ca)

ANATOMY, PHYSIOLOGY AND PHARMACOLOGY
New courses:

APPY 810.3 Advances in Integrative Physiology, Metabolism, and Metabolic Diseases
Catalogue description: This course provides a detailed review of integrative physiology, metabolism, and metabolic diseases and prepares students for more advanced courses or a research thesis in physiology, metabolism, and pharmacology. Lectures and scientific literatures will be used to advance understanding of metabolic regulation in health, pathophysiology of metabolic diseases, and therapeutics.
Terms offered: T1
Prerequisite(s): 3rd or 4th year physiology and/or metabolism courses
Permission(s): Instructor permission required
Notes: Students with credit for CPPS 498 Integrative Physiology, Metabolism, and Metabolic Diseases will not receive credit for this course
Rationale: The prevalence of chronic metabolic diseases (e.g. obesity, diabetes) has dramatically increased during the past few decades globally, in Canada and in the province of Saskatchewan. However, there is a lack of courses, at both undergrad level and grad level, at USask to support the study of these conditions. USask has seen increases in faculties with research focus on metabolic diseases in the past few years, such as in the Department of Anatomy, Physiology and Pharmacology, which is accompanied with the increase in grad students in these research areas. This course will bridge basic undergrad courses (300- & 400-level in general physiology and metabolism) and more advanced grad courses (in cellular and molecular mechanisms of metabolism control), and prepare grad students with fundamental and advanced knowledge for their thesis projects.

BIOLOGY
New courses:

BIOL 801.3 Graduate Research Skills in Biology
Catalogue Description: This course prepares students for advanced research and graduate studies in Biology. The focus will be on the theory and practice of research in the biological sciences, science communication for different audiences, and professional and practical skills that contribute to success as a graduate student. The course will support students initiating their individual research projects to develop strong research questions, to conduct a literature review, to increase their skill in proposal writing, and to thereby equip them with skills to succeed in their graduate program and beyond.
Terms offered: T1
Permissions Required: Departmental approval required

Restriction(s): Restricted to MSc and PhD students in BIOL (or permission from instructor if in related discipline (eg. Paleobiology, Toxicology)
Rationale: Graduate students in Biology require a strong foundation in professional and academic skills to excel in their research, but also to assist them once they leave graduate studies for a wide variety of career opportunities. This is similar to many other disciplines, and similar graduate skills courses exist in other departments. In aiming this course at MSc and PhD students in Biology, we are aiming to develop some of these essential competencies using a biological context, emphasizing the breadth of the subdisciplines within biology and ensuring that all learning outcomes are directly relevant to their field. By embedding scientific communication, critical thinking, and professional development within a framework of biology and neighboring fields, students will engage with discipline-specific challenges and strategies, making the skills more applicable to their future work. Activities such as peer reviews, class discussions, and panel engagements will provide a basic skillset useful beyond their graduate work, but will emphasize research methodologies and challenges, ethics, and career pathways commonly encountered in the life sciences. In addition, with annual offerings, we aim to use this course to build successive cohorts of incoming graduate students, fostering a sense of belonging within the department. By encouraging collaboration and connection among peers, students will develop academic support networks that enhance their research experience and promote the value of developing long-term professional relationships. Through this approach, the course should not only equip graduate students with practical skills but also strengthens their ties to the department, creating an inclusive and engaged graduate community in Biology.

NURSING
NURS 830.3 Advanced Statistical Methodology in Nursing and Healthcare

Catalogue description: Welcome to Advanced Statistical Methodology in Nursing & Healthcare. This course is designed to equip students of nursing with statistical techniques essential for nursing research. Emphasizing practical application, the course will cover power analysis, sample size estimation, regression models, data cleaning, and advanced methods such as survival analysis and longitudinal data analysis. Students will develop skills to analyze healthcare data, interpret complex results, and critically evaluate statistical approaches within nursing research. Practical sessions using SPSS will reinforce these concepts through hands-on experience.
Prerequisite(s): NURS 818.3 or equivalent
Permissions: For students not enrolled in College of Nursing PhD program.
Restriction(s): Restricted to College of Nursing PhD students
Rationale: The PhD program in the College of Nursing has a degree requirement of 3 credit units in advanced statistics. The students enrolled in the PhD program are located across Canada. It has become difficult to find an online advanced statistics course that meets the needs of the students.

Course Deletion:

MATH 992.0: Research – Project
Students undertaking the project Master's degree (M.Math.) must register for this course.
Rationale: The M.Math. program was approved for termination by University Council in June 2025; this course is no longer

FOR INFORMATION

EDWARDS SCHOOL OF BUSINESS

MPAC 992.3 Research - Project
Proposed Restriction(s): Open to Master of Professional Accounting students only.

MATHEMATICS

Course changes:

MATH 990.0 Seminar
Current Description: Each graduate student in the Mathematics MSc, MMath, or PhD program must enroll in this course in every Fall and Winter term during their time in their program. Mandatory activities of the course may include, but are not limited to: Department Colloquium attendance; Mathematics Graduate Seminar attendance; delivery of a short expository or research-based presentation in the Graduate Seminar (or another appropriate venue, with permission) at least once during the program; and participation in broader skills-building activities.
Proposed Description: Each graduate student in the Mathematics MSc, or PhD program must enroll in this course in every Fall and Winter term during their time in their program. Mandatory activities of the course may include, but are not limited to: Department Colloquium attendance; Mathematics Graduate Seminar attendance; delivery of a short expository or research-based presentation in the Graduate Seminar (or another appropriate venue, with permission) at least once during the program; and participation in broader skills-building activities.

TOXICOLOGY

TOX 870.3 Introduction to Chemical Risk Assessment and Problem Formulation
Current Terms offered: Either Term 1 or Term 2
Proposed Terms Offered: Term 1
Current Prerequisite(s): Permission of the instructor; Students need a bachelor's degree in a science-related discipline (e.g., environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs.

TOX 871.3 Historical Lessons in Chemical Risk Assessment
Current Prerequisite(s): Permission of the instructor; Students need a bachelor's degree in a science-related discipline (e.g., environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs.

Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed TOX 870.3 (or equivalent) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 872.3 Environmental Exposure Characterization
Current Terms offered: Either Term 1 or Term 2
Proposed Terms Offered: Term 1

Current Prerequisite(s): Permission of the instructor; Students must have one graduate level course in ecology or environmental biology and one course in general or environmental chemistry.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed TOX 870.3 and TOX 871.3 (or equivalent) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 873.3 Principles of Ecotoxicological Hazard Characterization
Current Prerequisite(s): Permission of the instructor;~~-~~Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, or a related discipline, or they must have equivalent scientific and technical experience from work or other educational and training programs.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed TOX 870.3, 871.3, and 872.3 (or equivalent) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 874.3 Principles of Human Exposure Characterization
Current Prerequisite(s): Permission of the instructor; Students need a bachelor's degree in a science-related discipline (e.g., environmental science, toxicology, biology, chemistry, health sciences, or a related discipline), or they must have equivalent scientific and technical experience from work or other educational and training programs.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed TOX 870.3, 871.3, 872.3, and 873.3 (or equivalent) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 875.3 Principles of Human Hazard Characterization
Current Terms offered: Either Term 1 or Term 2
Proposed Terms Offered: Term 1

Current Prerequisite(s): Permission of the instructor; Students need a bachelor's degree in a science-related discipline (e.g., environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed TOX 870.3, 871.3, 872.3, 873.3, and 874.3 (or equivalent) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 876.3 Approaches Models and Tools for Characterizing Exposure and Hazard
Current Prerequisite(s): Permission of the instructor; Students need a bachelor's degree in a science-related discipline (e.g., environmental science, toxicology, biology, chemistry, health sciences, or a related discipline), or they must have equivalent scientific and technical experience from work or other educational and training programs. They must also have completed TOX 872 and TOX 873, or equivalent.
Proposed Prerequisite(s): ~~-~~Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed six previous courses of the MRA program (TOX 870 - TOX 875) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 877.3 Practical Skills for Characterizing the Exposome
Current Prerequisite(s): Permission of the instructor; Students need a bachelor's degree in a science-related discipline (e.g., environmental science, toxicology, biology, chemistry, health sciences, or a related discipline), or they must have equivalent scientific and technical experience from work or other educational and training programs. They must also have completed TOX 872 and TOX 873, or equivalent. Completion of TOX 876 is strongly recommended.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed seven previous courses of the MRA program (TOX 870 - TOX 876) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 878.3 Practical Skills for Characterizing Hazard
Current Prerequisite(s): Permission of the instructor; Students need a bachelor's degree in a science-related discipline (e.g., environmental science, toxicology, biology, chemistry, health sciences, or a related discipline), or they must have equivalent scientific and technical experience from work or other educational and training programs. They must also have completed TOX 872 and TOX 873, or equivalent. Completion of TOX 876 is strongly recommended.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed eight previous courses of the MRA program (TOX

870 - TOX 877) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 879.3 Risk Assessment and Regulatory Systems
Current Prerequisite(s): Permission of the instructor; Students need a bachelor's degree in a science-related discipline (e.g., environmental science, toxicology, biology, chemistry, health sciences, or a related discipline), or they must have equivalent scientific and technical experience from work or other educational and training programs. They must also have completed TOX 872 and TOX 873, or equivalent.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline~~)~~, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed nine previous courses of the MRA program (TOX 870 - TOX 878) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 880.3 Sustainable Chemical Risk Characterization for Decision Making
Current Prerequisite(s): Permission of the instructor; Students need a bachelor's degree in a science-related discipline (e.g., environmental science, toxicology, biology, chemistry, health sciences, or a related discipline), or they must have equivalent scientific and technical experience from work or other educational and training programs. They must also have completed TOX 870 and TOX 876 and at least 2 other courses (6 CU) from the MRA program, or equivalent.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline), or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed ten previous courses of the MRA program (TOX 870 - TOX 879) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

TOX 881.3 Chemical Risk Assessment Project
Current Prerequisite(s): TOX 880.3 and at least 18 credit units of other course work in the MRA program.
Proposed Prerequisite(s): Students need a bachelor's degree in environmental science, toxicology, biology, chemistry, health sciences, or a related discipline, or they must have equivalent scientific and technical experience from work or other educational and training programs. Students must also have completed eleven previous courses of the MRA program (TOX 870 - TOX 880) if they are enrolled in the entire MRA program or must obtain permission from the lead instructor if they have obtained comparable knowledge through employment or other training.

VETERINARY MICROBIOLOGY

VTMC 830.3: Critically Evaluating and Communicating Microbiology
Add BIOL 801 to the list of courses that are mutually exclusive with VTMC 830
Current Note: Students may have credit for only one of the following courses: BMIS 800, FDSC 808, VTMC 830, or VBMS 879. These courses have overlapping content.

Proposed Note: Students may have credit for only one of the following courses: BIOL 801, BMIS 800, FDSC 808, VTMC 830, or VBMS 879. These courses have overlapping content.

College of Nursing – September 2025 University Course Challenge

BSN and PDBSN

Motion: To add EPSE 441.3 Introductory Statistics in Education to the list of allowable statistics courses for the BSN Pre-professional year.

Motion: To add EPSE 441.3 Introductory Statistics in Education to the list of allowable statistics courses for the PDBSN prerequisite equivalents.

Bachelor of Science in Nursing (B.S.N.)

Pre-Professional Year 1 (30 credit units)

……

Register for the following courses (or their equivalents) (30 credit units):

- **BIOL 120.3** The Nature of Life
- **NUTR 120.3** Basic Nutrition**
- **PSY 120.3** Biological and Cognitive Bases of Psychology or **PSY 121.3** Social Clinical Cultural and Developmental Bases of Psychology
- **SOC 112.3** Foundations in Sociology Social Construction of Everyday Life
- **INDG 107.3** Introduction to Canadian Indigenous Studies or **HIST 195.3** History Matters Indigenous Perspectives on Canadian History
- **NURS 120.3** Human Anatomy for Nursing
- **3 credit units from the following:**
    - **ENG 110.6** Literature and Composition
    - **ENG 111.3** Literature and Composition Reading Poetry
    - **ENG 112.3** Literature and Composition Reading Drama
    - **ENG 113.3** Literature and Composition Reading Narrative
    - **ENG 114.3** Literature and Composition Reading Culture
    - **ENG 120.3** Introduction to Creative Writing
    - **PHIL 133.3** Introduction to Ethics and Values

**Pre-existing credits must have been obtained within the past 10 years.
*Courses that exceed the number of required subject credits may be used to fulfill the restricted humanities elective.

- **3 credit units of Statistics**:
    - **STAT 244.3** Elementary Statistical Concepts, or equivalent, as follows:
    - **STAT 242.3** Statistical Theory and Methodology
    - **STAT 245.3** Introduction to Statistical Methods
    - **STAT 246.3** Introduction to Biostatistics
    - **PLSC 214.3** Statistical Methods
    - **COMM 104.3** Foundations of Business Statistics
    - **PSY 233.3** Statistical Methods in Behavioural Sciences A
    - **SOC 225.3** An Introduction to Survey Research and Data Analysis in Sociology
    - **GE 210.3** Probability and Statistics
    - EPSE 441.3 Introductory Statistics in Education
- **Choose 6 credit units** of unrestricted electives from the following Humanities and Social Sciences lists (3 cu from Humanities and 3 cu from Social Sciences), as defined by the College of Arts & Science:
- **……**

Post-Degree Bachelor of Science in Nursing Program (PDBSN)

Admission Qualifications

- A complete baccalaureate degree or 90 credit units towards a degree
- At least 36 credit units at the senior level
- Minimum weighted average of at least 70% on the last 60 credit units toward the degree
- Prerequisite courses:
    - Statistics: 3 credit units (this includes EPSE 441.3 Introductory Statistics in Education)
    - Nutrition: 3 credit units*
    - Indigenous Studies: 3 credit units
    - Microbiology: 3 credit units*
    - Anatomy and Physiology: 6 credit units*
    - Humanities: 3 credit units
    - Social Sciences: 6 credit units
- Situational Judgement test score
- Proof of English proficiency

**Nutrition, anatomy and physiology, and microbiology prerequisites must have been completed no more than 10 years prior to admission.*

One deficiency is permitted in the following areas (Applicants must successfully complete the deficient pre-requisite by April 30 of the year they are admitted. Proof of completion is required by May 31):

- *Social Science: 3 credit units*
- *Nutrition: 3 credit units*
- *Indigenous Studies: 3 credit units*

Rationale: The college has approved the addition of **EPSE 441.3 Introductory Statistics in Education** to the list of statistics courses in the Pre-Professional Year 1 of the BSN and to the list of prerequisite equivalents in the PDBSN. Both require students to complete 3 credit units of statistics courses and EPSE 441 satisfies the required content.