



Academic Programs Committee of Council

University Course Challenge

Scheduled posting: June 2014

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 changes to courses which affect another college.

Contents:

Arts and Science

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Minor course modification in Engineering Physics; items for information in Physiology and Pharmacology.

College of Engineering

Page 2

Minor program change in Environmental Engineering, **Geological Engineering**; additions to the list of Junior Humanities/ Social Science, and Complementary Studies; **new courses in Mechanical Engineering, Chemical and Biological Engineering.**

College of Graduate Studies and Research

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New courses in Biomedical Engineering, Educational Psychology, Public Policy; Minor course modifications in Nursing; Minor program revisions in Nursing, Psychology.

College of Medicine

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Item for information in Pharmacology.

College of Veterinary Medicine

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New course, minor program revisions to the Doctor of Veterinary Medicine.

Approval:

Date of circulation: June 16, 2014

Date of effective approval if no Challenge received: June 30, 2014

Next scheduled posting:

The next scheduled Challenge document posting will be in August, 2014, with a submission deadline of **August 13, 2014**. Urgent items can be posted on request.

College of Arts and Science

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

DIVISION OF SCIENCE

Engineering Physics

Minor Course Revisions

EP 413.3 Instrumentation and Design

Add a laboratory requirement to the course; change from (3L) to (3L-3P).

Rationale: In the recent revisions to the Engineering Physics program, EP 413 was revised to include the lab which was formerly offered separately as EP 414, but this change was never formally added to the Course Catalogue.

Items for Information

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.

DIVISION OF SCIENCE

Physiology & Pharmacology

Correction to Minor Course Revision posted to the May 2014 University Course Challenge PHPY 306.3

Corrected old prerequisite: BMSC 224.3 (or BIOL 224.3) and BMSC 240.3 or permission of the instructor.

Corrected new prerequisite: BMSC 240.3; and BMSC 224.3 (or BIOL 224.3) or PHSI 208.6; or permission of the instructor.

BMSC 240.3 was previously omitted from the old and new prerequisites in error.

College of Engineering

1.Environmental Engineering – Program Changes

a)Remove BLE 312 from ENVE program requirements, and replace it with EE 204 (Year 3 of the program)

RATIONALE: BLE 312 will no longer be offered due to the lack of BLE students. EE 204 has been used as a replacement course before, and either course is recognized as the prerequisite course for BLE 313.

b)Remove BLE 311 from ENVE program requirements, and replace it with CE 318 (Year 3 of the program)

RATIONALE: BLE 311 will no longer be offered. Of available engineering mathematics courses, CE 318 fits the schedule and program learning objectives.

Date Effective: 201409

Course and Program Catalogue: 2015-16

2. Add to the lists of Junior Humanities/Social Science, and Complementary Studies:

HIST 115.3 History Matters: Ideas and Culture

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

For Information:

Course Revision

BLE 212.3 – Physical Principles of Plant Biosystems

Change Course Label to:

ENVE 212.3 – Physical Principles of Plant Biosystems

3. Geological Engineering – Program Change

Add GEOE 466 to the program requirements for Geological Engineering (Year 4)

Pursuant to this change, remove GEOE 466 from the Group C Elective list in Geological Engineering.

Remove GEOL 463 from the program requirements for Geological Engineering.

Pursuant to this change, add GEOL 463 to the Group A Elective list in Geological Engineering.

Year 3 (39 credit units):

Term 1	Term 2
CE 318.3	CE 319.3
CE 328.3	CE 330.3
GEOL 224.3	GEOE 315.3
GEOL 245.3	GEOL 226.3
GEOL 258.3	3 c.u. Group B Elective or GEOL
Term 1 or Term 2	
GE 348.3	
3 c.u. Group A Elective	
Term 3	
GEOE 378.3	

Year 4 (36 credit units):

Term 1	Term 2
CE 420.3	GEOE 475.3
GE 449.3	GEOE 466.3
GEOE 412.3	3 c.u. Group B Elective or GEOL
GEOE 414.3	
Term 1 and Term 2	
GEOE 495.6	
Term 1 or Term 2	
3 c.u. Group A or C Elective	
9 c.u. Group C Elective	

Mechanical Engineering**New Course****ME 461.3 – Industrial Engineering Management Methods****Prerequisite:** ME 251.3 or GE 210.3

Catalogue Description: This course introduces Industrial Engineering methods with a particular focus on operations research and management science. This will include an introduction to Industrial Engineering tools and techniques for quantitative decision making including forecasting methods, linear programming, queuing theory and resource capacity management, network models, inventory management and economic order quantity analysis. This course will apply statistical and mathematical methods to address challenges and complex decisions faced by many engineers in management situations and will equip engineers who pursue leadership roles in engineering with analytical and quantitative methods that enable them to make sound, justifiable decisions based on evidence and data.

Chemical and Biological Engineering**New Course****CHE 469.3 – Industrial Mineral Processing****Prerequisite:** CHE 369.3

Catalogue Description: This course presents industrial applications of the fundamentals of mineral processing and hydrometallurgy. Local and Canadian processing plants for a variety of products are described and analyzed. The commodities are all Canadian. They have been selected geographically, with the first emphasis on Saskatchewan commodities: potash, uranium, gold and rare earths. Moving east, the course deals with nickel and lead/zinc in Manitoba. Moving west brings in coal and oil sands in Alberta, then copper and molybdenum in British Columbia. Finally, moving far east brings in iron ore from Quebec or Labrador. Safety, control and environmental engineering is covered.

New Course**CHE 369.3 – Fundamentals of Mineral Processing and Hydrometallurgy****Prerequisite:** GEOL 224.3 and GEOE 377.3

Catalogue Description: Introduction to the fundamentals of mineral processing and hydrometallurgy. Topics include: process mineralogy, liberation and comminution,

classification, physical separation and concentration techniques, SOLid-liquid separation, drying and calcining, ion exchange of metals, electrowinning of metals, sampling and assaying, and process control in mineral processing.

College of Graduate Studies and Research

Biomedical Engineering

New Course

BIOE 820.3 – Tissue Engineering

Prerequisite: Permission from the course coordinator

Calendar Description: This course is to provide students with advanced knowledge to pursue research in the area of tissue engineering. The topics covered in this course include biomaterials, nerve tissue engineering, cartilage tissue engineering, biological stents, and endovascular neurosurgery devices.

Rationale: Tissue engineering is an emerging field with the aim of producing ‘artificial’ tissue/ organ substitutes that can grow with patients, ultimately providing a permanent solution to repair/ replace damaged tissues or organs. The course of tissue engineering will equip students with the knowledge and basic skills to pursue research in the area of tissue engineering. So-equipped students have been widely sought by industry and the research community in tissue engineering. Also, these students will greatly contribute to the UofS research program in tissue engineering, which is aligned with one UofS strategic research priorities, i.e., human and animal health. As such, this course will have significant benefits to both students and research at the UofS.

Educational Psychology

New Course

EPSE 870.3 – Professional Development Course Self-Study in Educational Psychology and Special Education

Prerequisite: Pre-approval must be obtained from the EPSE Department.

Catalogue Description: This web-based course provides students opportunities to expand their knowledge and/ or skills in the areas of educational psychology and/ or special education through attendance at pre-approved professional development conferences, course, or workshops. Preparation of a scholarly paper related to the professional development course content is a key course requirement.

Rationale: This web-based course is needed to give EPSE post-graduate and graduate students 1) an increased opportunity to access locally offered and web-based professional development opportunities on topics of special interest to the student; 2) an opportunity to attend, complete and receive university credit for professional development courses related to the area of educational psychology and special education; and 3) additional web-based elective opportunities in their post-graduate and/ or graduate programs through the University of Saskatchewan versus other online universities.

Nursing

Course Modification

NURS 997.0 — 1(1S) Doctoral Seminar.

Catalogue Description: This departmental seminar includes presentations and discussions of topics relevant to doctoral roles and functions. **Ph.D students are required to attend and**

~~participate throughout their program.~~ Ph. D students are required to attend until successful achievement of the Comprehensive Examination.

Program Revision

Doctor of Philosophy, Nursing

New Degree Requirements (changes in red):

Students must maintain continuous registration in the 996 course.

- GSR 960.0
- GSR 961.0 if research involves human subjects
- GSR 962.0 if research involves animal subjects
- A minimum of 18 credit units including:
 - NURS 895.3
 - NURS 896.3
 - NURS 897.3
 - NURS 990.0
 - NURS 996.0
 - NURS 997.0 (students are required to attend this course until successful completion of the Comprehensive Examination).
- 3 credit units in advanced statistics
- two course (6 credit units) minimum in cognate area – these 800-level courses should address student's area of specialization and research (must be approved by the Ph.D. Advisory Committee). NURS 816.3 can serve as a cognate course.
- comprehensive examination

Psychology

Program Revision: Change to Name of Stream

Master of Arts, Psychology – Culture and Human Development

Doctor of Philosophy, Psychology – Culture and Human Development

Transfer from Master's to PhD – Culture and Human Development

Change of Name to:

The *Culture and Human Development* stream is being changed to *Culture, Health and Human Development*

Master of Arts, Psychology – Culture, Health and Human Development

Doctor of Philosophy, Psychology – Culture, Health and Human Development

Transfer from Master's to PhD – Culture, Health and Human Development

Public Policy

New Course

JSGS 882.3 – Co-operatives in the New Economy: Institutions, Governance and Policy

Prerequisite: None.

Catalogue Description: This course examines how institutions and policy shape the role played by co-operatives in the economy, and how co-operative practices and innovations have in turn shaped these institutions and policy. Combining theoretical insights from the areas of institutions, economics, organizational behaviour, law and policy with case studies of co-operative organizations, the course allows students to develop their knowledge of the actions that both the state and co-operatives have undertaken, and provides students with a conceptual framework within which these actions can be viewed.

Rationale: The global economic downturn, concerns about income inequality, and limitations in the goods and services being provided by the market and government have led to a renewed interest in co-operatives and organizations operating in the social economy. Among those with an interest in co-operatives and the social economy are students already enrolled in university programs and individuals interested in returning to university to pick up specific information on these organizations. The interests range from understanding how co-operatives and social economy organizations form and operate, to understanding the role of the state in encouraging and supporting co-operative and social economy development, to understanding the larger social and economic context in which co-operatives and social economic organizations function.

New Course

JSGS 883.3 – Co-operative Governance and Leadership in Action

Prerequisite: JSGS 882.3

Catalogue Description: This course offers students the ability to work on a governance or policy issue relevant to co-operatives and the social economy and to critically reflect on this work. For some students their work may take the form of a project/ report directed at a specific issue that a co-operative, credit union or social economy organization is facing. For other students their work may take the form of written case study of a co-operative, credit union or social economy organization. In all cases, the result will be an experiential learning opportunity for students and new knowledge and expertise for co-operative and social economy organizations.

Rationale: Increasingly students are looking for courses and programs that will help them to develop the ability to link the theory they have gained in an academic setting with challenges that typically arise in the work-place. This course encourages learners to delve into the complex circumstances of these situations. In both writing and working with the co-operative or social economy organization students are required to grapple with the often-competing interests at play in real-life decision-making.

College of Medicine

For Information

Course Revision

PCOL 350.6 – General Pharmacology

Change: PCOL 350.6 – General Pharmacology is being opened up to allow students from the College of Dentistry to enroll in the course. Also, Dental students will be provided with their own tutorial.

College of Veterinary Medicine

New Courses

VINT 211.1 – Introduction to Veterinary Business

Prerequisite: None.

Catalogue Description: General overview of the business of veterinary medicine. Topics will include a basic introduction to the following topics: principles of practice management, finance,

accounting, human resource management, operations, marketing, business law, and regulations governing the practice of veterinary medicine.

Rationale: The AVMA accreditation body has asked for our changes based on outcomes assessment that consistently revealed limitations with respect to business management. As such, the WCVM Faculty has added decided to add a 1 credit business course in year 1 of the DVM program and a 2 credit Business course in year 3 of the DVM program.

VINT 411.2 – Business Topics in Professional Practice

Prerequisite: Successful completion of Year 2 of the DVM program.

Catalogue Description: Will cover a number of business topics that are important to students as they transition into their professional careers.

Rationale: The AVMA accreditation body has asked for our changes based on outcomes assessment that consistently revealed limitations with respect to business management. As such, the WCVM Faculty has added decided to add a 1 credit business course in year 1 of the DVM program and a 2 credit Business course in year 3 of the DVM program.

Program Revision: Change to Required Courses

Doctor of Veterinary Medicine

Program Requirements (changes marked in red):

[Doctor of Veterinary Medicine \(D.V.M.\) \(163166 credit units\)](#)

Year 1

40 credit units

- [VBMS 202.4](#)
- [VBMS 208.1](#)
- [VBMS 220.8](#)
- [VBMS 222.3](#)
- [VBMS 223.2](#)
- [VBMS 224.9](#)
- [VBMS 231.4](#)
- [VINT 210.1](#)
- [VLAC 211.3](#)
- [VSAC 205.1](#)
- [VTMC 230.2](#)
- [VTMC 238.2](#)
- [VINT 211.1](#)

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Year 3

47.50 credit units

- [VBMS 436.3](#)

- [VINT 415.1](#)
- [VLAC 462.5](#)
- [VLAC 470.4](#)
- [VLAC 482.5](#)
- [VSAC 410.1](#)
- [VSAC 458.1](#)
- [VSAC 460.1](#)
- [VSAC 462.1](#)
- [VSAC 463.5](#)
- [VSAC 465.4](#)
- [VINT 411.2](#)

Electives

Choose ~~16~~17 credit units from the following:

- [VBMS 422.1](#)
- [VBMS 431.1](#)
- [VBMS 433.1](#)
- [VBMS 435.1](#)
- [VBMS 437.2](#)
- [VBMS 439.2](#)
- [VINT 400.2](#)
- [VINT 410.1](#)
- [VINT 438.1](#)
- [VINT 439.2](#)
- [VINT 440.2](#)
- [VINT 442.2](#)
- [VLAC 429.1](#)
- [VLAC 433.2](#)
- [VLAC 437.2](#)
- [VLAC 439.2](#)
- [VLAC 441.2](#)
- [VLAC 443.2](#)
- [VLAC 445.2](#)
- [VLAC 447.2](#)
- [VLAC 449.2](#)
- [VLAC 451.1](#)
- [VLAC 453.2](#)
- [VLAC 455.1](#)
- [VSAC 435.2](#)
- [VSAC 437.2](#)
- [VSAC 439.2](#)
- [VSAC 441.1](#)
- [VSAC 443.1](#)
- [VSAC 445.2](#)
- [VSAC 449.2](#)
- [VSAC 454.1](#)
- [VSAC 455.1](#)
- [VSAC 456.1](#)

- [VSAC 457.1](#)
- [VSAC 475.1](#)
- [VSAC 477.1](#)
- [VTMC 441.1](#)
- [VTPA 421.1](#)
- [VTPA 431.2](#)
- [VTPA 434.1](#)