

**Meeting Date:** Thursday, June 14, 2018

**Location:** CK 185

**Time:** 1:30 p.m.

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## AGENDA

1. **Approval of the Agenda**
2. **Approval of the Minutes for April 5, 2018 meeting** – *circulated with the agenda*
3. **Business Arising from the Minutes**
4. **Reports from Faculties and other Academic Units**
  - 4.1 Arts, [Appendix I](#), pages 2-9
  - 4.2 Business Administration, [Appendix II](#), pages 9-14
  - 4.3 Education, [Appendix III](#), pages 15-18
  - 4.4 Engineering and Applied Science, [Appendix IV](#), pages 19-21
  - 4.5 Science, [Appendix V](#), pages 21-33
5. **Other Business**
  - 5.1 CCUAS meetings for 2018-19
6. **Adjournment**

### 3. Business Arising from the Minutes

### 4. Reports from Faculties and other Academic Units

Appendix I

#### 4.1 Report from the Faculty of Arts

#### ITEMS FOR APPROVAL

#### Motion 1: Program Deletion – Science and Technology Studies Minor

To delete the minor in Science and Technology Studies and all STS courses, **effective 201830**.

**Rationale:** The required STS courses have not been offered in some time and there is no plan to do so again; thus, making it impossible for students to complete this minor. Students registered in the minor have completed all the required STS courses.

(end of motion 1)

#### ~~Science and Technology Studies Minor~~

~~This program provides students with an appreciation of the historical, philosophical, social and ethical issues of science. The effects on changes in technology and the science form an important part of these courses. For students who are pursuing a degree in science, the minor should provide an important adjunct to their existing studies. For students outside the Faculty of Science, the program will provide an important degree of scientific literacy and appreciation. Courses in this program are open to students in any program within the University.~~

#### Minor in Science and Technology Studies

Credit-hours	Science and Technology Studies Minor Required Courses	Student's record of courses completed
3.0	STS 100	
3.0	STS 200	
3.0	STS 400	
3.0	One of PHIL 273, 275, 277	
3.0	Three additional courses from any of the following groups: The Historical Development of Science, The Environment, and Philosophical and Contemporary Issues. These include: ESCL 302, ENST 200, 201, HIST 372,	
3.0	MATH 108, 308, PHIL 241, PHYS 200, RLST 273, SOC 225, 230, 325, 330, STS 230, 231, 239AA-ZZ, 270, 271, 330,	
3.0	331, 332, 370, 371, 372, 373, WGST 201	
<b>21.0</b>	<b>STS Minor – 65% GPA required.</b>	

#### Motion 2: Admissions Standard Revision – School of Journalism

To revise the admission requirements for the Bachelor of Arts in Journalism and the Bachelor of Journalism to no longer require completion of an entrance examination and interview, **effective 201830**.

**Rationale:** The School of Journalism wishes to update its undergraduate entrance process to reflect current practice and to streamline and simplify the process for prospective students. The academic requirements will remain unchanged – these proposed changes are in reference to process for selection of students, as described in the university calendar. The first change, deleting the reference to the number of students, is an update to accommodate the impact of our newly established MJ and Bridging programs. The current practice is to fill the 26 seats from both

the graduate and undergraduate programs, not 26 undergraduates only. The mix is expected to fluctuate from year to year, depending on demand for the various programs, and we may expand the number of available seats in future. Therefore would like to drop the reference to precise numbers accepted, as it is no longer a valid description of our annual intake, and in any case is not highly relevant information for applicants. We would also like to delete reference to a two-year program, as the Bridging program is one year of undergraduate studies. Regarding the change to the portfolio submission, we would like to add 'web links' and delete reference to 'audio or video tapes' to reflect technological change. Finally, we propose to end the practice of an entrance exam and panel interview for the two-year undergraduate program. We feel that the current process overly discourages potential applicants from attempting to enter the School, and that it does not add much value to what we can learn through examining the student's academic record and written submissions. This change will also allow us to respond to students in a much more timely fashion. Currently it takes well into May to inform them if they have been accepted or not, which is far too long a time to be held waiting. Regarding Bridging students, we propose to retain the interview, as we feel it is an important opportunity to learn more about potential graduate students, including their needs and scholarly interests so that we can prepare groundwork for a successful transition to graduate studies. In this case, the interview is something that can be completed in a timely fashion in February and early March, when we do our other MJ interviews.

(end of motion 2)

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## **Page 7:**

### **School of Journalism**

~~The School currently accepts an annual total of 26 students to its two-year programs. Admission is for the Fall term (semester) only. Applicants complete an Application for Admission to the School of Journalism\* ([available at www.uregina.ca/arts/journalism](http://www.uregina.ca/arts/journalism)) and must include the following:~~

- a cover letter (maximum of 2 pages) indicating the reasons for application and summarizing any media experience;
- a resumé (maximum of 2 pages);
- supporting documents (maximum of 10 pages) which may include samples of published or unpublished writing, reference letters, web links, and any other relevant material; photocopies are acceptable. ~~(no audio or video tapes).~~

\* Current U of R students are to submit the Internal Application for Admission to the School of Journalism. Students not currently in the Faculty of Arts must also submit an Application for Re-Admission/Faculty Transfer.

~~The selection process includes an entrance examination (usually in February or March) and panel interviews (usually in April) for short listed applicants. Offers of admission are made in May, and must be accepted by the deadline stated in the letter, normally within 2 weeks.~~

The selection process for Bridging students includes a panel interview.

The School advises all applicants, in writing, of the outcome of their application.

## **Page 14 Admissions Chart (Arts, Column 3)**

Journalism: entrance examination, ~~and~~ interview required only for Bridging students

**Motion 3: New Program – Arts Pathway Program**

To approve a Pathways Program with the conditions indicated below as an alternative means of admission to the Faculty of Arts, **effective 201830**.

**Rationale:** Students who have applied for admission to a Faculty, but whose marks have fallen short of the high school admission requirements are currently directed to either Casual Studies, upgrading, or told to wait until they are 21 years of age when they qualify for Mature admission. Giving students an alternate entry point to University will provide an opportunity to those who may have been systemically disadvantaged or unable to access certain courses in high school. The Pathway Program provides a highly supported learning environment that allows students access to higher education and a way for them to earn their admission qualification in an alternate way. The Pathway Program also provides a mechanism for students to transition into University so they can be successful in their studies.

(end of motion 3)

*To be published in the Calendar, in an appropriate area of the Admissions section:*

**Admission Requirements to the Faculty of Arts Pathway Program:**

1. English Language Proficiency
2. Grade 12 Diploma
3. One of:
  - a. Five grade 12 subjects, or
  - b. Grade 11 or 12 English course plus five subjects at the grade 11 or 12 level
4. Minimum age of 17
5. Pathway Program Letter for Admission outlining the student’s academic goals and strategies for success
6. Fewer than 15 credit hours of attempted post-secondary courses

*To be published in an appropriate area of the Faculty of Arts section of the Calendar:*

**Arts Pathway Program**

The Arts Pathway Program is an alternative way by which students may qualify for admission to the Faculty of Arts. It can only be attempted on a full-time basis, and is structured as follows:

Term 1	Term 2
ARTS 099 (0 credit hours)	ENGL 100 (3 credit hours)
ACAD 100 or RDWT 120 (3 credit hours)	SSW AACRE (0 credit hours)**
SSW 010 (0 credit hours)	Faculty of Arts course (3 credit hours)*
SSW AACRE (0 credit hours)**	Faculty of Arts course (3 credit hours)*
Faculty of Arts course (3 credit hours)*	
Faculty of Arts course (3 credit hours)*	

\* Courses should make-up any missing admission requirements

\*\* Students are charged a fee to cover the costs of the program.

To proceed to Term 2, students must complete successfully each course taken, as well as pass all the zero credit hour requirements in Term 1. Failure to do so will result in the student being Required to Discontinue from studies in the Faculty of Arts for a minimum of 3 terms.

To complete successfully the Arts Pathway Program, students must:

- Receive a 50% (pass) in ACAD 100 and ENGL 100
- Receive a 50% (pass) in all other courses taken in the program
- Receive a “P” (pass) in ARTS 099
- Receive a “P” (pass) in SSW 010
- Receive a “P” (pass) in SSW AACRE in both terms
- Have a minimum UGPA of 60.00% by the end of term 2
- Completion of university-level equivalents of missing admission requirements (if any)

Successful completion of the Arts Pathway Program will allow students to register in a major (pending satisfaction of any further requirements of the program/major) or general program in the Faculty of Arts. Upon successful completion of the program, the Faculty will update the students’ program.

Unsuccessful completion of the program will result in students being dropped from courses in future terms, an admissions hold being placed on their account, and the student being required to discontinue studies in the Faculty of Arts for a minimum of three terms. The admissions hold will remain on the student account to prevent future registration until a new and alternate basis of admission has been achieved.

## ITEMS FOR INFORMATION

The Faculty of Arts approved the creation, revision and deletion of the following courses and offers them for information. Each becomes **effective 201820**.

### Item 1: Course Created

#### Department of Politics and International Studies

**IS 290**                      **3:3-0**

#### **Selected Topics in International Studies – an AA-ZZ series**

Courses in selected topic in International Studies.

\*\*\* Prerequisite: IS 100 or permission of Department Head \*\*\*

**Rationale:** A series course at this level would allow the program to cross-list courses with other departments and allow them to be ‘tested out’ before being made permanent offerings of the program.

(end of item 1)

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### Item 2: Course Revisions

#### Department of Economics

**ECON 309**                      **3:3-0**

#### **Intermediate Microeconomics II: Game Theory**

This course introduces students to the tools and logic of game theory to broaden the range of situations and actions to be considered in the study of microeconomics. The strategic behaviour of firms and other agents will be explored in cases when the actions of one agent have an impact on the actions of others. Topics include Nash equilibrium, sub-game perfection, asymmetric information and risk.

\*\*\*Prerequisites: ECON 301 and MATH 103 or equivalent, or permission of Department Head\*\*\*

**Rationale:** The change in title is needed in light of changes in the intermediate level micro, where ECON 307, the previous Intermediate Micro II with a broader coverage of topics, is part of program core requirements. Once the change is effective ECON 309 will be offered as an elective course.

**ECON 361** **3:3-0**  
**Economics of Public Enterprise & Regulation**

A study of how strategic interactions of firms in various market structures affect economic performance. Topics may include: monopolies and public policy toward big business; advantages and disadvantages of crown corporations; competition policy of mergers and acquisitions in oligopolistic industries; causes and effects of government intervention in private economic activities such as, price discrimination, advertisement, and innovation. regulation of the pricing and investment activities of firms.

\*\*\* Prerequisite: ECON 201 45 credit hours or three ECON courses \*\*\*

**Rationale:** This course was always intended to be an Industrial Organization (IO) course. Please see the 2002-2003 Calendar description of ECON 361. The current title and description is a product of curriculum changes at a time of declining enrollments. By using a layman language, these changes aimed to appeal to and attract non-econ students that were not familiar with the term IO. However, the feedback from instructors and students indicate that the description does not properly reflect the content of the course and as a result it has often created more confusion rather than attracted more students. The change is needed to properly reflect the content of the course. The change in prerequisites aims to adequately prepare students.

**ECON 361**  
**Industrial Organization I - 2002-2003 Calendar description**

This course examines the interrelationships among market structure. Firm behavior and economic performance. Topics include, barriers to entry, oligopoly theory, and market contestability.  
Prerequisite: ECON 201 or permission of department head

**ECON 401** **3:3-0**  
**Advanced Microeconomic Theory**

Advanced microeconomic analysis using optimization techniques including multivariate calculus with public policy applications. Topics include consumer and production theory, general equilibrium and welfare analysis, public goods, externalities, asymmetric information and uncertainty.

\*\*\*Prerequisite: ECON 307 301, ECON 309 and ECON 322 or equivalent\*\*\*

**Rationale:** This updates the prerequisite to reflect other curriculum changes previously made to the departments' courses.

## **School of Journalism**

**JRN 302** **3:3-0**  
**Rights and Responsibilities of the Journalist**

A critical look at the social role and ethical responsibilities of the media. An introduction to journalistic responsibilities and legal parameters, including court reporting, image use, libel and slander, protecting sources, etc. A focus on understanding journalist rights, including freedom of expression, access to information, and the justice system.

\*\*\* Prerequisite: ~~Admission to the School of Journalism.~~ Completion of 30 credit hours.\*\*\*

**Rationale:** The School of Journalism would like to be more closely integrated with Arts course offerings. Our historical practice has been to require either 60 credit hours or admittance to the School as prerequisites for all journalism courses. This overly limits our contact with first and second-year Arts students, including our own cohort of pre-journalism students. We recently received approval for a 100-level course targeted at first-year students. The change to JRN 302 is primarily aimed at second-year pre-journalism students; however, it would also open the door for all U of R students to explore journalism rights and responsibilities. We specifically chose JRN 302 because the course delivers foundational knowledge for navigating our media-saturated world, and is therefore highly appropriate for earlier learning. A basic grasp of the laws

surrounding media, and what citizens should expect in terms of ethical professional conduct, is beneficial to a wide range of students, and should be more widely accessible. Those students who go on to enter the Journalism School, and have already taken JRN 302 before admittance, would choose an elective, likely outside journalism, to take its place. The total number of credit hours for graduation would remain the same.

### **Department of Geography and Environmental Studies**

**GEOG 411** 3:3-0

#### **Field Techniques in Physical Geography**

Techniques for the acquisition and analysis of field data used in physical geographical research.

\*\*\*Prerequisite: GEOG 121, ~~205~~ and one of GEOG 321, 323, 325, 327 or 333 or permission of the Department Head\*\*\*

**Rationale:** We replaced GEOG 205 in our course roster with **GEOG 203 “Introduction to Geographic Information Systems”**. GEOG 203 offers an introduction to basic concepts and techniques of geographic information systems (GIS) used for descriptive geostatistical analysis and visualization of spatial data; we no longer offer GEOG 205. Students in our Physical Geography (BSc) programs are now required to complete any three of the following four courses: GEOG 203 and/or **GEOG 207 “Basics of Map and Airphoto Interpretation”** and/or **ENST 200 “Introduction to Environmental Studies”** and/or **GEOG 297AA-ZZ “Selected Topics in Physical Geography”** as part of their degree program. As a result, we no longer need to have just one prerequisite course at the second-year level for GEOG 411.

### **Department of Politics and International Studies**

**IS 390** 3-6:3-6-0

#### **Selected Topics in International Studies - and AA-ZZ series**

Current interest and occasional offerings that are relevant to international studies.

\*\*\* Prerequisite: IS 100 (formerly INTL 100) and 30 credit hours\*\*\*

**Rationale:** This change affords the department greater flexibility to offer study abroad and other intensive courses that warrant six credit hours.

**IS 391** 3-945:945-0

#### **Internships in International Studies**

Internships that will contribute to students' learning and experience in the area of International Studies.

\*\*\* Prerequisite: Permission of the Coordinator of the International Studies Program \*\*\*

**Rationale:** There is only one case of an internship having been awarded 15 credit hours and all of the internships of late have been for six credit hours. 15 credit hours is a full term's worth of course work and it is felt that this is far too much weight being given to one element of a student's degree. It is also difficult to award those credit across a student's program without either eliminating a lot of electives or having it cover too many IS approved electives in particular concentrations. Internships worth three or six credit hours seem more reasonable in both length and content and the nine credit hour option can exist for particularly intensive or longer term arrangements at the discretion of the program director or head.

(end of item 2)

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## Item 3: Courses made Historical

### Science and Technology Studies

**STS 100** \_\_\_\_\_ **3:3-0**

#### **Science and Technology in Global Society**

This course will explore the key social, cultural, ethical and political issues associated with the development of science and technology. The course will focus on sociological features of science and technology, the influence of these forces on contemporary society, including discussion of the ethical challenges posed by technological development, and the social shaping of scientific and technological activities, products and systems used to serve the various interests within society.

**STS 200** \_\_\_\_\_ **3:3-0**

#### **The Development of Modern Science**

This class is a survey of the rise of science. The course will focus on the precursors of the Scientific Revolution, the Scientific Revolution of the seventeenth century, the breakthroughs in chemistry and biology of the nineteenth century and revolutionary theories of the twentieth century that have radically changed our understanding of reality.

\*\*\* Prerequisite: Completion of 15 credit hours. \*\*\*

\* Note: Formerly numbered HPS 220. Students may not receive credit for both STS 200 and HPS 220. \*

**STS 230** \_\_\_\_\_ **3:3-0**

#### **Science and Technology in the Ancient World**

This class surveys the origins of science in China, India, the Ancient Near East, and Europe to the fifth century CE.

\*\*\* Prerequisite: Completion of 15 credit hours \*\*\*

**STS 232** \_\_\_\_\_ **3:3-0**

#### **History of Astronomy**

A survey of the development of astronomy, from its origins in the ancient civilizations of Babylon, Egypt, and Greece, to modern times.

\*\*\* Prerequisite: ASTR 101 or completion of 15 credit hours \*\*\*

**STS 270** \_\_\_\_\_ **3:3-0**

#### **Theories and Methods in Science and Technology Studies**

STS is an interdisciplinary field of study. This class introduces students to the major theories, methods, and approaches used in STS.

\*\*\* Prerequisite: Any STS course or completion of 15 credit hours \*\*\*

**STS 271** \_\_\_\_\_ **3:3-0**

#### **Science, Technology, and Gender**

This class examines the role of gender in the practice of science and technology. Issues include the history of women in, and exclusion from, science and technology, the feminist critique of science, and the gendering of technology.

\*\*\* Prerequisite: Any STS course or WGST 100 or completion of 15 credit hours. \*\*\*

**STS 330** \_\_\_\_\_ **3:3-0**

#### **The Darwin Controversies**

This class will examine the scientific, political, and religious controversies surrounding the theory of evolution from the nineteenth century to the present.

\*\*\* Prerequisite: STS 200 or completion of 30 credit hours \*\*\*

**STS 331** \_\_\_\_\_ **3:3-0**

#### **Concepts of Matter, Time, Space, and Motion**

Study of selected writings from antiquity to the present on the concepts of Geometry, Space, Time, Space-Time, Matter, and Motion.

\*\*\* Prerequisite: PHIL 241 or completion of 60 credit hours \*\*\*

\* Note: Formerly numbered HPS 350. Students may not receive credit for both STS 331 and HPS 350. \*

**STS 370** \_\_\_\_\_ **3:3-0**

#### **The Rationality of Science**

Controversy between rationalists (e.g., Popper, Lakatos) and non-rationalists (e.g., Kuhn, Feyerabend) regarding scientific methods, progress, objectivity, truth, knowledge and interest, ideologies and research traditions, and realism and antirealism.

\*\*\* Prerequisite: PHIL 241 or completion of 60 credit hours \*\*\*

\* Formerly numbered HPS 341. Students may not receive credit for both STS 370 and HPS 341. \*



**STS 371 3:3-0**

**Philosophy of Biology**

An examination of a range of philosophical questions concerning the theory of evolution; the debate between evolutionism and creationism; questions concerning fitness, adaptationism, the units of selection, systematics, sociology, and evolutionary ethics; questions such as: are there laws in biology? Is biology reducible to physics?

\*\*\* Prerequisite: STS 330 or one 200-level philosophy course (PHIL 241 is recommended) or completion of 30 credit hours. \*\*\*

**STS 372 3:3-0**

**Issues in Cognitive Science**

An examination of the various theories that have influenced psychological and computational theorizing, leading to an appreciation of the interdisciplinary connections uniting different areas of cognitive science.

\*\*\* Prerequisite: PSYC 270 or PHIL 231 or completion of 30 credit hours \*\*\*

**STS 373 3:3-0**

**Technology in the Non-Western World**

This class will examine the nature and role of technology in both traditional cultures and developing societies. This will be done in context of the alternative values and social institutions that exist in those societies. Issues involving globalization and technology transfer will also be addressed.

\*\*\* Prerequisite: One 200-level STS course or permission of the STS coordinator \*\*\*

**STS 400 3:3-0**

**Theoretical Perspectives on Science and Technology**

This senior seminar is a class in which students analyze and reflect upon the major theoretical issues in STS.

\*\*\* Prerequisite: STS 200 and one other 200- or 300-level STS course, or permission of the STS Coordinator \*\*\*

(end of item 3)

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**Appendix II**

**4.2 Report from Business Administration**

**ITEMS FOR APPROVAL**

The Faculty of Business Administration has approved and recommends approval of the following motions.

**Motion 1: Program Revision - Bachelor of Administration (BAdmin), International Business (IB) Major**

To change the requirements for the International Business (IB) Major as follows: Total 15 credit hours (5 courses), **effective 201830.**

**Rationale:** The current International Business Major requires 6 courses:

- BUS 308
- Four of BUS 309, BUS 364, BUS 415, BUS 491\*\*, ECON 341, up to one of BUS 408AA-ZZ or BUS 474AA (most of these study trip courses are no longer offered)
- One of ECON 211, ECON 235 (course is no longer offered), ECON 342\*\*, PSCI 240, SOC 201, an approved language (not student's first language)
- \*\*Students currently cannot count both of ECON 342 and BUS 491 in the major.

Reducing the number of courses from 6 to 5 brings the IB major in line with some of the other majors (Marketing, HR, Entrepreneurship, Management) and it makes it more accessible, consequently increasing the number of students engaging in international opportunities: study trips, exchange programs, etc.

(end of motion 1)

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**International Business Major (5 courses):**

**Required:**

- BUS 308 International Business

**Must include at least two of:**

- BUS 309 International Trade Management
- BUS 364 Managing a Diverse Workforce
- BUS 415 International Marketing
- Only one of BUS 491 International Financial Management or ECON 342 Global Financial Markets

**Other International Business Courses:**

- Only one of: ECON 211 Development Economics; PSCI 240 World Politics; SOC 201 Globalization and Development; an approved Language course (not the student's first language). A language course is encouraged.
- ECON 311 Economics of Developing Countries
- ECON 341 International Trade
- IS course numbered IS 300 or higher
- PSCI 340 International Law
- PSCI 343 International Political Economy
- PSCI 344 Political Economy of Development and Underdevelopment
- One course completed as part of an International Study Abroad Trip, or an approved International Student Exchange Program. This includes but is not limited to BUS 408AA-ZZ and BUS 474AA. Other international trips such as SEP xxx and ISEP xxx are included. Students should consult with the Program Coordinator to confirm that the trip is approved and ensure that transfer credits taken as part of the study trip have been evaluated.
- One approved International course (must be approved by Associate Dean, Undergraduate) (See note 1)

**Motion 2: Program Revision – Bachelor of Administration (BAdmin), Entrepreneurship Major**

To change the Entrepreneurship Major requirements to the following, **effective 201830.**

**Rationale:** To add the new courses, BUS 403 and BUS 376AA-ZZ, to the major requirements.

(end of motion 2)

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**Entrepreneurship Major (5 courses):**

**Required:**

- BUS 302
- BUS 304
- One of BUS 402 or BUS 403

**Two of:**

- BUS 301
- BUS 303
- BUS 314
- BUS 394
- BUS 376 AA-ZZ
- BUS476 AA-ZZ
- BUS 402 or BUS 403 (if not used as a required)
- One approved Entrepreneurship-related course (must be approved by the Associate Dean – Undergraduate)

**Motion 3:**

To approve the Institutional Honours: International, with the following requirements, **effective 201830**.

**Rationale:** Our Faculty does not currently have such a mention for the Undergraduate students. This mention will potentially increase the number of students that will engage in international opportunities (giving them recognition for the experience). This is in line with other Faculties' mentions (Arts, Education).

(end of motion 3)

Students may apply to have Institutional Honours: International, added to their Bachelor of Business Administration OR Bachelor of Administration degree if they successfully complete BUS 308 and at least one of the following international experiences:

- a minimum of three credit hours of pre-approved coursework taken at an out-of-country post-secondary institution as part of an approved International Exchange Program
- a minimum of three credit hours of pre-approved coursework taken at an out-of-country post-secondary institution as part of an approved Study Abroad Trip
- a minimum of three credit hours of pre-approved coursework taken at an out-of-country post-secondary via a Letter of Permission from the University of Regina
- a minimum three credit hour course offered by the U of R that includes a required minimum one-week out-of-country experience

Other international experiences may be considered on a case-by-case basis. Students should meet with the Undergraduate Program Coordinator to determine if an international experience meets the criteria for Institutional Honours: International.

## ITEMS FOR INFORMATION

The Faculty of Business Administration Council approved the following course changes and creation, and presents the changes to CCUAS for information.

### Item 1: Courses Created

#### **BUS 462 Judgment and Decision-Making, effective 201910**

##### **BUS 462 Judgment and Decision-Making 3:3-0**

This course addresses fundamentals of the psychology of judgment and decision-making. Students will learn about systematic decision-making tendencies in various social and situational contexts, and how to effectively manage these behaviors in organizational settings.

\*\*\*Prerequisites: BUS 260 and a minimum of 75 credit hours\*\*\*

**Rationale:** The proposed BUS 462 has been offered as BUS 473AD on a trial basis for the last three years. Enrollments have ranged from 19 to 40 and student course evaluations have been very positive. This course also fills a need in the Human Resources Management major, in that there are only two fourth-year courses in the Human Resources Management (HRM) major outside of the required capstone BUS 453 (Strategic Human Resource Management). The HRM major requires at least one 4th year course outside of the capstone. Furthermore, the proposed BUS 462 offering strengthens the organizational behavior (OB) area of the HRM major (which presently has a relatively heavier emphasis on Industrial Relations and functional/technical HR). Finally, the course presents a synthesis of critical thinking in the broad context of decision-making in organizations and will be of interest as a final year course for several majors in the BBA program, likely ensuring stable enrolments moving forward.

The proposed BUS 462 course code reflects the fact that: (a) the HR/OB area group has agreed that 300-level courses represent “building block” courses, and 400-level courses are “integration” courses that facilitate greater “big picture” thinking; and (b) BUS 45X codes are industrial relations/functional HR courses, and BUS 46X codes are more OB-oriented courses (e.g., BUS 461, Organizational Change and Development). This course would fit within the requirements of Major in Human Resource Management.

#### **BUS 403 SME Consulting Experience, effective 201910**

##### **BUS 403 SME Consulting Experience**

This course introduces the practice of management consulting, through applying undergraduate program knowledge to critical issues in the small business sector. Students will understand the consulting process, develop problem-solving skills, apply new tools and techniques, and learn to work and communicate effectively in consultant-client relationships, and gain consulting experience through a consulting assignment.

\*\*\*Prerequisite: Two of BUS 302 (or ADMN 302), BUS 303, or BUS 304\*\*\*

\*Note: Concurrent enrolment is allowed with BUS 304\*

**Rationale:** A business plan is a required component of BUS 402 and some students use the plans to launch their business ideas. However, other students take entrepreneurship classes to gain a better understanding of small business (98% of business sector is small and medium-sized businesses - SMEs; small business employ 70.% of all private labour force, Industry Canada, 2016) but will not be setting up a business. A consulting class would be an attractive option to undergraduate students and 10 Canadian universities offer an undergraduate consulting class. A limited number of students are already consulting through the CMD, Prince's Operation Entrepreneur, and parts of existing classes. For example, BUS 410 has a consulting project in the marketing class but the BUS 403 course would be applicable to students from all majors. In discussions with Dwight Heinrich, there was significant distinction between the proposed BUS

403 course and the existing BUS 410 content. GBUS/MBA 867 is offered as a consulting 'live project' course and BUS 403 would be an adaptation at the undergraduate level, with a focus on new and existing small businesses, who need independent perspectives on basic HR, marketing, finance and other disciplines.

### **BUS 376AA-ZZ Selected Topics in Entrepreneurship, effective 201830**

#### **BUS 376AA-ZZ Selected Topics in Entrepreneurship**

Courses in Selected Topics in Entrepreneurship are designed at the 300-level.

\*\*\*Prerequisites: Dependent on each course offering. (Please see Faculty of Business Administration General Office)\*\*\*

\*Note: Students may not receive credit for both BUS 376AA-ZZ and an equivalent BUS 476AA-ZZ course covering the same topics\*

**Rationale:** This course, which is similar to BUS 374AA-ZZ Selected Topics in Marketing, would increase the flexibility of offerings within the Entrepreneurship Major. It would provide opportunities to pilot courses as well as offer one time courses.

(end of item 1)

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### **Item 2: Course Revisions**

The course description and title of **BUS 362** be changed to the following, **effective 201910:**

#### **BUS 362 Management Skill Development Leadership**

**3:3-0**

~~This course concerns the development of managerial skills such as: managing stress, organizing work, creating motivating work environments, interacting with others, leading others, building a high performance team, and making effective decisions. The course involves self assessment, analysis, practice, and application directed at improving students' personal effectiveness as managers. is designed to introduce students to popular leadership theories and enable students to self-assess and develop their own leadership skills. Topics include leadership styles, gender and leadership, communication skills for leading productive teams, personal leadership development, mentorship, leadership ethics, and influence tactics. The course will emphasize practical application of leadership in organizational settings.~~

\*\*\* Prerequisite: BUS 250 or ADMN 250 \*\*\*

\*Note: Students may only receive credit for one of BUS 362, ADMN 362, and ADMN 462.\*

**Rationale:** The course content needed to be revised to make it more relevant to the changing student needs. The last survey of HR Major Alumni revealed a desire for a leadership-focused course in the undergraduate program. To meet this interest the area group proposed to change *update* the current course description for BUS 362 and to align existing course elements with a specific focus on leadership. Many of the components of the existing course remain relevant and with our increased experience teaching leadership at the graduate level, we can now incorporate this into an undergraduate-relevant offering that meets the management skills development needs of our student population. The change from management skills to leadership captures the evolution in practice and language (generally), and if you will, represents a hybrid of the two but with a more explicit emphasis on leadership. That is why we propose revising the course rather than adding a new course. Going forward, students enrolled in BUS 362 will gain insight into the theory and practice of leadership and managerial skills (transactional leadership) relevant to entry-level supervisory and managerial positions.

To change the prerequisites for **BUS 308** as follows (course description from the course catalogue is also provided), **effective 201910.**

**BUS 308 International Business 3:3-0**

The rapid growth of international business and competition requires business executives to view business management from a global perspective. This course focuses upon the nature of international business and the distinctive opportunities and problems that arise in a global business environment. Topics include international trade, the international monetary system, multinational business operations, economic integration, and business relations with host countries.

~~\*\*\* Prerequisite: BUS 210 (or ADMIN 210), BUS 250 (or ADMIN 250), BUS 275 (or ADMIN 275), BUS 288 (or ADMIN 288). And BUS 290 (or ADMIN 290), and BUS 260; or 60 credit hours (including at least one business class) \*\*\*~~

**Rationale:** Previous prerequisite of the course included: BUS 210 (or ADMN 210), BUS 250 (or ADMN 250), BUS 275 (or ADMN 275), BUS 288 (or ADMN 288), and BUS 290 (or ADMN 290). Instructors that taught this course or have an international business research interest have been consulted and during the meetings it was generally agreed that BUS 308 course content can be covered without most of the prerequisites.

Also, discussions with the Student Advisors suggest that more students are potentially interested in the IB Major (and implicitly in International Study Opportunities) but because they delay taking some core classes, they can only take BUS 308 very late in their program. Because of this they do not have enough time to fulfil the requirements for the IB Major. This reduces the number of students that are able to graduate with an IB Major. Currently the number of students graduating with an IB Major is very low.

To change the **prerequisite for BUS 304** from BUS 210 and BUS 250 to BUS 210 or a minimum of 60 university credits if from outside the faculty and to allow that **BUS 304 may be taken concurrently** with BUS 402, **effective 201910**.

**BUS 304 3:3-0  
Innovation and Entrepreneurship**

This course explores the concept and practice of innovation and entrepreneurship. Concepts covered will include sources of, and barriers to creativity and innovation; opportunity recognition; transforming invention to innovation; sharing and protecting intellectual property; globalization and development.

~~\*\*\*Prerequisites: Business Administration students: BUS 210 (or ADMN 210) and BUS 250 (or ADMN 250); Science, Engineering, and Education students: Completion of a minimum of 60 credit hours of university studies or a minimum of 60 university credits if from outside the faculty.\*\*\*~~

~~\*Note: Concurrent enrolment is allowed with BUS 402\*~~

**Rationale:** This improves the accessibility to BUS 304 for non-business students, but reflects the desire to continue to have an introductory marketing class be a prerequisite. The Innovation and Entrepreneurship class (BUS 304) does not have content seen to be prerequisite to the BUS 402 – New Venture Creation or BUS 403 – Small Business Consulting. By eliminating the prerequisite, more students would be able to access either BUS 402 or BUS 403. The Innovation and Entrepreneurship class could be attractive to students who would work inside organizations in an intrapreneurship role.

(end of item 2)

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### 4.3 Report from Education

#### ITEMS FOR APPROVAL

The Faculty of Education has approved and recommends approval of the following motions.

#### **Motion 1: Program Revision - PGPA Requirements for the Elementary Program**

That the PGPA required for Elementary students be 65.00%, **effective 201830**.

**Rationale:** Currently, the average required to progress from one term to the next is 70.00% PGPA. The requirement has proved to be an obstacle for many 1st year students. The proposed motion provides students the opportunity to meet required the academic standard.

(end of motion 1)

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#### **Faculty Action**

At the end of each term, students with poor academic records and/or unsatisfactory professional development will be subject to faculty action; students may be required to discontinue or be placed on faculty probation. Students must have a PGPA of at least 65.00%, ~~or 70.00%~~ for the Elementary Teacher Education Program (with the exclusion of SUNTEP, YNTEP, NTEP, FNUniv and Community-based programs. In other words, the Elementary Education program in Regina is the only program with this requirement), and satisfactory professional development at the end of each term of the program. Students who have a PGPA less than 65.00%, ~~or 70.00%~~ (Elementary), and/or unsatisfactory professional development will be placed on faculty probation or required to discontinue (RTD) from the Faculty of Education for at least two terms including spring and summer sessions. Those students who are required to discontinue must re-apply for admission to the University and the Faculty of Education. Their application will be given a low place on the priority list for acceptance. Students who have been required to discontinue and who upon return maintain a poor academic record may be required to discontinue indefinitely from the Faculty of Education. Students may also be required to discontinue from one faculty but remain eligible for others. For information on applying for re-admission, refer to the Admission-Applicants in Unsatisfactory Standing section of this calendar. Students who fail more than 15 credit hours during their Education program will be required to discontinue from the faculty indefinitely. Students may be required to discontinue from the faculty for a specified period or indefinitely for unsatisfactory professional development.

#### **Motion 2: Program Revision – PGPA Requirments for the Elementary Program**

That the PGPA required for Elementary students to move to internship be 70.00%, **effective 201830**.

**Rationale:** The proposed change to this academic requirement is consistent with the Secondary Program.

(end of motion 2)

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#### **Overview of the Four-Year Elementary BEd Program**

The 4-Year (8-term) BEd Elementary Program requires 120 credit hours. The program consists of both academic courses taken outside the Faculty of Education as well as professional courses taken within. Course requirements for the 4-Year BEd Program are listed below by term. While some flexibility exists in the placement of courses by term, in certain terms there is little or no flexibility. Students expecting to take the program on a part-time basis will need to plan their program carefully in consultation with an advisor. Elementary Program students (with the exclusion of SUNTEP, YNTEP, NTEP, FNUniv and Community-

based programs) are required to have a minimum average of 70.00% to proceed to internship.

The Elementary Education Program includes extensive field experiences. Classroom-based field experiences occur with ECS 100 in year one, as components in the pre-internship terms (terms five and six), and the sixteen-week internship in the final year. In addition, students will engage in professional learning as community experience (PLACE) which is scheduled in the first pre-internship term. Most classroom-based field experiences occur in schools in or near Regina. Placements for internship may be at various locations in southern Saskatchewan.

**Motion 3: Program Revision – Secondary English Education**

That ELNG 450 Issues in Secondary English Education be replaced by ELNG 200 in the Secondary English Education template, **effective 201830.**

**Rationale:** To support Continuous Evaluation of Applications to the Faculty of Education, this change will permit students admitted to Secondary English Education to complete the program in four years by eliminating the post-internship requirement.

(end of motion 3)

SECONDARY BED PROGRAM ENGLISH MAJOR (EENG) (120 credit hours)	
<b>Term 1 (Fall)</b> ECS 100 (3) ENGL 100 (3) INDG 100, Cree or other Indigenous Language (3) PHIL 100 or 150 (3) Second language (3)	<b>Term 2 (Winter)</b> ECS 110 (3) ENGL 110 (3) One of THEA, FILM, ART or ARTH (3) Minor (3) Elective (3)
<b>Term 3</b> ECS 200 (3) ENGL 211, 212 or 213 (Lit. survey) (3) ENGL 251 or 252 (3) Minor (3) Minor (3)	<b>Term 4</b> ECS 300 (3) ENGL 301 or 302 (Shakespeare)(3) ENGL 214, 312-315 (Canadian), ENGL 310 AA-ZZ, or HUM 260 (3) Minor (3) Minor (3)
<b>Term 5</b> ECS 210 (3) ELNG 300 (major curr. course) (3) ENGL elective (3) ENGL elective (3) E__(minor curr. course) (3)	<b>Term 6</b> ECS 310 (3) ECS 350 (3) ECS 410 (3) ELNG 350 (3) ELNG 351 (3)
<b>Term 7</b> EFLD 400 (internship) (15)	<b>Term 8</b> <del>ELNG 450 (major post-internship course)</del> <u>ELNG 200</u> (3) EPSY 400 (3) ENGL elective (3) ENGL elective (3) Education elective (3)

**Motion 4: Program Revision – Secondary Social Studies**

That ESST 369 Critical Literacy in Social Studies: Issues for Pedagogical Practice be replaced by a major approved elective in the Secondary Social Studies template, **effective 201830.**

**Rationale:** The proposed change provides more flexibility in the template, particularly for after-degree students, and allows for students in the four-year program to accelerate program completion.

(end of motion 4)



SECONDARY BEd PROGRAM SOCIAL STUDIES MAJOR (ESST) (120 credit hours)	
<b>Term 1 (Fall)</b> ECS 100 (3) ENGL 100 (3) HIST 100-level (3) INDG 100 (3) Minor (3)	<b>Term 2 (Winter)</b> ECS 110 (3) GEOG 100 (3) INDG 200-level (3) PSCI 100 (3) Minor (3)
<b>Term 3</b> ECS 200 (3) INDG 200-level or 300-level (3) Can Geog 200-level (3) Can Hist 200, 201 or 202 (3) Minor (3)	<b>Term 4</b> ECS 300 (3) GEOG 120 (3) (note 1) Eur Hist 200-level (3) Minor (3) Elective (3)
<b>Term 5</b> ECS 210 (3) ESST 300 (major curr. course) (3) E___ (300 minor curr. course) (3) Can Hist 300-level (3) Minor (3)	<b>Term 6</b> ECS 310 (3) ECS 350 (3) ECS 410 (3) ESST 350 (3) ESST 360 (3)
<b>Term 7</b> EFLD 400 (internship) (15)	<b>Term 8</b> (note 2) EPSY 400 (3) <del>ESST 369 (major post-internship course)</del> <u>Major approved elective</u> (3) Major approved elective (3) Major approved elective (3) Senior Education elective (3)
<b>NOTE:</b> 1. GEOG 316 (Geography of the Third World) is also an option with the Geography Department's approval. 2. Major approved electives include 200-level or higher courses in Anthropology, Economics, Geography, History, Indigenous Studies, Political Science, or Sociology.	

**Motion 5: Program Revision – Secondary BEd: Mathematics Major (EMTH)**

That KIN 120 Rec – Person with Disabilities in the Secondary BEd Program – Mathematics Major (EMTH) be replaced by Elective (3), **effective 201830**.

**Rationale:** The removal of the named KIN 120 course provides the opportunity to increase mathematics content in the Major. By replacing the elective with specific mathematics curricular content courses, graduates will be better prepared to teach mathematics in grades K-12.

(end of motion 5)

SECONDARY BEd PROGRAM MATHEMATICS MAJOR (EMTH) (120 credit hours)	
<b>Term 1 (Fall)</b> INDG 100, Cree or other Indigenous Language (3) ECS 100 (3) ENGL 100 (3) MATH 110 (3) Minor (3)	<b>Term 2 (Winter)</b> ECS 110 (3) <del>KIN 120</del> <u>Elective</u> (3) MATH 111 (3) MATH 127 or STAT 160 (3) Minor (3)
<b>Term 3</b> ECS 200 (3) MATH 122 (3) MATH 221 (3) EDTC 300 (3) Minor (3)	<b>Term 4</b> ECS 300 (3) EMTH 200 (major educ. course) (3) MATH 223 (3) MATH 231 (winter only) (3) EDTC 400 (3)

<b>Term 5</b> ECS 210 (3) EMTH 300 (major curr. course) (3) E__ (minor curr. course) (3) Elective (3) Minor (3)	<b>Term 6</b> ECS 310 (3) ECS 350 (3) ECS 410 (3) EMTH 350 (3) EMTH 351 (3)
<b>Term 7</b> EFLD 400 (internship) (15)	<b>Term 8</b> EMTH 450 (major post-internship course) (3) EPSY 400 (3) MATH 300-level (3) Elective (3) Minor (3)

**Motion 6: Program Revision – Secondary BEd: Mathematics Major (EMTH)**

That the Elective in Term 8 be replaced by one of EMTH 325, 326, 327, 335, 425, or 426, **effective 201830.**

**Rationale:** By replacing the elective with specific mathematics curricular content courses, graduates will be better prepared to teach mathematics in grades K-12.

(end of motion 6)

<b>SECONDARY BEd PROGRAM  MATHEMATICS MAJOR (EMTH)  (120 credit hours)</b>	
<b>Term 1 (Fall)</b> INDG 100, Cree or other Indigenous Language (3) ECS 100 (3) ENGL 100 (3) MATH 110 (3) Minor (3)	<b>Term 2 (Winter)</b> ECS 110 (3) <del>KIN 120</del> Elective (3) MATH 111 (3) MATH 127 or STAT 160 (3) Minor (3)
<b>Term 3</b> ECS 200 (3) MATH 122 (3) MATH 221 (3) EDTC 300 (3) Minor (3)	<b>Term 4</b> ECS 300 (3) EMTH 200 (major educ. course) (3) MATH 223 (3) MATH 231 (winter only) (3) EDTC 400 (3)
<b>Term 5</b> ECS 210 (3) EMTH 300 (major curr. course) (3) E__ (minor curr. course) (3) Elective (3) Minor (3)	<b>Term 6</b> ECS 310 (3) ECS 350 (3) ECS 410 (3) EMTH 350 (3) EMTH 351 (3)
<b>Term 7</b> EFLD 400 (internship) (15)	<b>Term 8</b> EMTH 450 (major post-internship course) (3) EPSY 400 (3) MATH 300-level (3) <del>Elective</del> EMTH 325, 326, 327, 335, 425, or 426 (3) Minor (3)

**ITEMS FOR INFORMATION**

**Item 1: No items for information.**

(end of item 1)

4.4 Engineering and Applied Science

ITEM FOR APPROVAL

The Faculty of Engineering and Applied Science has approved and recommends approval of the following motion.

**Motion 1: Program Revision – ESE program**

To replace CS 215 Web and Data Base Programming in Term 6 with CS 335 Computer Networks and add CS 215 to the approved “Software Electives” list, **effective 201910.**

**Rationale:** CS 335 Computer Networks is being added as a required course and CS 215 Web and Database Programming is being moved to the approved ‘Software electives’ list. The ESE program has been deficient in computer networks from 2010-2016 when ENEL 492 was not being offered due to limited resources in the ESE program. ESE’s Industry Advisory Committee identified computer networks as being a deficiency in the ESE program. With the addition of a new Faculty member (Al-Anbagi), it was decided that the terminal course in the ‘communications’ stream would be ENEL 492 Design of Computer Networks (instead of ENEL 494). The need for an earlier course in computer networks was determined through the OBA process from data gathered in 201710.

(end of motion 1)

	<b>Term 6 (Spring/Summer)</b>
3.0	BUS Elective <del>Choose 1:</del> BUS 210, 250, 285
3.0	ECON 201
3.0	ENEL 380
3.0	ENEL 390
3.0	<del>CS 215</del> <u>CS 335</u>

Approved List (includes Technical, Software, and Risk and Industrial Safety):

Software Electives (choose at most one): CS 215, CS 330, CS 340, CS 350, CS 372, CS 375 or any ENSE class except ENSE 477

## ITEM FOR INFORMATION

The Faculty of Engineering and Applied Science approved the following course revisions and presents the changes to CCUAS for information.

### Item 1: Course Revisions

To renumber **ENIN 495AF** into regular course **ENIN 463, effective 201830.**

#### **ENIN 495AF 463 Heating, Ventilating, and Air Conditioning Systems**

An introduction of heating, ventilating, and air conditioning (HVAC) principles, technologies, and applications. Course topics include basic principles of HVAC in buildings, psychometric principle, indoor air quality, heat transmission for buildings, heating & cooling load analysis, space air diffusion, and design & application of HVAC equipment and systems.

\*\*\*Prerequisite: ENIN 453 (with a minimum of 60%)\*\*\*

**Rationale:** This course is an elective course for undergraduate students in Industrial Systems Engineering program. The course will provide students with skills and knowledge in the HVAC area much needed in the industry. Also, it will provide a great opportunity for students to interact with industrial partners by applying their knowledge into the actual design tasks.

To update the **prerequisite for ENEV 408** to include ENGG 141, **effective 201830**

#### **ENEV 408 Basic Structural Design**

Design concepts and practices for simple beams, columns, connectors and structures in wood, steel and reinforced concrete. Basic types and problems in design of foundations.

\*\*\*Prerequisite: ENIN 241, ENGG 240, ENGG 141 and ENEV 384\*\*\*

To update the **prerequisite for ENPE 400** at catalogue, **effective 201910**

#### **ENPE 400 PSE Project Start-up**

Definition of petroleum engineering design problems; identification of projects' topics, partners, and supervisors; proposal writing for engineering projects; approaches for carrying out the research and design; and, approaches for communicating research and design results.

\*\*\*Prerequisite: Completion of all the required 200 and 300 level ENPE courses\*\*\*

**Rationale:** ENPE 381 was renumbered into ENPE 481 and the 381 course needs to be removed from the catalogue's listing of "required courses". Without this being removed, every student registering for ENPE 400 would require an override as ENPE 381 no longer exists under that number.

To update the **prerequisite for ENPE 440, effective 201910**

#### **ENPE 440 Well Logging and Formation Evaluation**

Fundamentals of well logging for the determination of petrophysical properties in the near bore region, types of well logging devices, and applications of well logs for petroleum system management.

\*\*\*Prerequisite: ENPE 241 and ENPE 360 (may be taken concurrently)\*\*\*

~~\*\*\* Corequisite: ENPE 460 \*\*\*~~

**Rationale:** In catalogue, courses that are co-requisite must be taken in the same semester. Many students have already taken one of the required courses in a previous semester and are then unable to register without an override. Changing the wording to concurrent will remove that need for overrides allowing the students to register for themselves.

To update the **prerequisite for ENPE 450, effective 201910**

**ENPE 450 Well Testing**

Basic principles of well testing and interpretation for oil and gas production, pressure transient theory, principles of superposition, and application of well testing to homogeneous and heterogeneous reservoirs.

**\*\*\*Prerequisite: ENPE 300 and ENPE 360 (may be taken concurrently) \*\*\***

~~**\*\*Corequisite: ENPE 360\*\***~~

**Rationale:** In catalogue, courses that are co-requisite must be taken in the same semester. Many students have already taken one of the required courses in a previous semester and are then unable to register without an override. Changing the wording to concurrent will remove that need for overrides allowing the students to register for themselves.

To update the **prerequisite for ENPE 448, effective 201910**

**ENPE 448 Reservoir Characterization**

Review petroleum reservoir geology, geological depositional environments, petrophysical and geostatistical analysis, and reserves estimation based on static and dynamic reservoir information. Emphasis on data analysis and integration for a model suitable for reservoir simulation.

**\*\*Corequisite: ENPE440 (may be taken concurrently) \*\*\***

**Rationale:** In catalogue, courses that are co-requisite must be taken in the same semester. Many students have already taken one of the required courses in a previous semester and are then unable to register without an override. Changing the wording to concurrent will remove that need for overrides allowing the students to register for themselves.

**(end of item 1)**

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**Appendix V**

**4.5 Science**

**ITEMS FOR APPROVAL**

The Faculty of Science has approved the following program revisions and offers it for approval.

**Motion 1: Program Revision – Department of Biology**

To remove BIOL 401 from List A and List B, **effective 201830**.

**Rationale:** BIOL 401 no longer exists and is, therefore, not a possible choice.

**(end of motion 1)**

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**List A: Cellular and Molecular Biology Concentration**

BIOL 302, 303, 310, 366, 390, 395, 404, 405, 406, 407, 410, up to two of BIOC 221, 300- or 400-level

**List B: Ecology and Environmental Biology Concentration**

BIOL 302, 316, 335, 341 (or STAT 342), 356, 365, 366, 367, 375, 376, 380, 385, 404, 425, 435, 456, 457, 463, 485

**Motion 2: Program Revision – Department of Biology**

To remove BIOL 435 from List B and List C, **effective 201830.**

**Rationale:** BIOL 435 is in the process of being archived, therefore it will not be offered in the foreseeable future.

(end of motion 2)

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**Motion 3: New Program – Department of Mathematics and Statistics**

To create a Certificate in Statistics, **effective 201910.**

**Rationale:** This certificate was previously submitted and approved, along with a second certificate with Co-op option (as one motion). However, the Co-op option did not meet the requirements of attaining the “Co-op” designation, and the motion was rejected at CCUAS. This is a re-submission of the certificate program without the Co-op option.

(end of motion 3)

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<b>Credit hours</b>	<b>Certificate in Statistics, required courses</b>
3.0	CS 110
3.0	MATH 110
3.0	MATH 111
3.0	MATH 122
3.0	STAT 160
3.0	STAT 251
3.0	STAT 252
3.0	STAT 354
3.0	STAT 300- or 400-level
3.0	STAT 300- or 400-level
<b>30.0</b>	<b>Total - 65.00% GPA required</b>
<b>Note:</b> Due to the prerequisite structure of the Certificate in Statistics, completion of the listed courses will require a minimum of four terms.	

## ITEMS FOR INFORMATION

The Faculty of Science has approved the following Course Changes and Creations, and offers them for information only. The Department of Biology has approved the following program update and offers it for information.

### Item 1: Course(s) Created

Department of Mathematics & Statistics  
Effective Date: 201910

#### **STAT 316 3:3-0**

##### **Mathematics of Finance III**

This course covers the theory and pricing of financial derivatives such as Puts and Calls, with particular emphasis on the Black-Scholes model.

\*\*\*Prerequisite: ACSC 216 or MATH 216, and STAT 251\*\*\*

\*Note: Students can receive credit for only one of MATH 316, STAT 316, and ACSC 316\*

**(end of item 1)**

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### Item 2: Course Revisions

Department of Mathematics and Statistics  
Effective Date: 201910

#### **MATH 316 3:3-0**

##### **Mathematics of Finance III**

This course covers the theory and pricing of financial derivatives such as Puts and Calls, with particular emphasis on the Black-Scholes model.

\*\*\*Prerequisite: ACSC 216 or MATH 216, and STAT 251\*\*\*

\*Note: Students can receive credit for only one of MATH 316, STAT 316, and ACSC 316\*

#### **ACSC 316 3:3-0**

##### **Mathematics of Finance III**

This course covers the theory and pricing of financial derivatives such as Puts and Calls, with particular emphasis on the Black-Scholes model.

\*\*\*Prerequisite: ACSC 216 or MATH 216, and STAT 251\*\*\*

\*Note: Students can receive credit for only one of MATH 316, STAT 316, and ACSC 316\*

Department of Chemistry and Biochemistry  
Effective Date: 201910

#### **BIOC 340 3:3-0**

##### **Biophysics**

This introductory biophysics course examines the theoretical concepts and instrumentation design for microscopic techniques used to probe biological systems. We will investigate the key biological questions that can be addressed with each method. We will mainly focus on light-, fluorescence-, transmission electron-, and scanning electron microscopies with a brief introduction to atomic force microscopy.

\*\* ~~Corequisite~~ Prerequisite: BIOC 321 (may be taken concurrently) \*\*

**(end of item 2)**

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### Item 3: Course(s) made Inactive

Department of Biology  
Effective Date: 201910

#### ~~BIOL 435 — 3:3-3~~

~~Regulation of plankton communities in freshwater and saline lakes. Experimental evidence for population control by predation, competition, and the physical environment. Experimental design. There will be individual field research projects. \*\*\* Prerequisite: BIOL 335 \*\*\*~~

(end of item 3)

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### Item 4: Course(s) made Historical

Department of Chemistry and Biochemistry  
Effective Date: 201910

#### ~~CHEM 390AA — 3:3-0~~ ~~Intermediate Organic Synthesis~~

~~This course deals with the fundamental concepts in organic synthesis: functional group interconversions, application of retrosynthetic analysis in planning the synthesis of molecules. \*\*\* Prerequisite: CHEM 241 with a 50% \*\*\*~~

#### ~~CHEM 490AE — 3:3-0~~ ~~Organic Stereoselectivity~~

~~This course examines and discusses the fundamental concepts in and approaches to achieving stereocontrol in organic reactions, and the applications of stereoselective reactions in the synthesis of select natural and/or non-natural products of biological and medicinal interests. \*\*\* Prerequisite: CHEM 341, concurrent enrolment allowed. \*\*\*~~

#### ~~CHEM 491AC — 3:3-0~~ ~~Photochemistry & Photophysics~~

~~This course will be an introduction to molecular photochemistry and photophysics of organic molecules. We will discuss basic theory behind electronically excited states and the transitions (radiative and nonradiative) between states. We will also cover various aspects of theoretical and mechanistic photochemistry. \*\*\* Prerequisite: CHEM 251, MATH 111, and PHYS 119 (or PHYS 112) \*\*\*~~

#### ~~CHEM 491AD — 3:3-0~~ ~~Organometallic Chemistry~~

~~A detailed discussion of organometallic chemistry of the transition metals will be presented. Principles including the 18-electron rule, bonding in organometallic complexes, and fluxionality will be discussed. Organometallic structures, reactions and reaction mechanisms will be presented along with practical applications of organometallic compounds, including catalysis and organic synthesis. \*\*\* Prerequisite: CHEM 330 and CHEM 241 \*\*\*~~

#### ~~BIOC 390AA — 3:3-0~~ ~~Introduction to Biophysics~~

~~This introductory biophysics course examines the theoretical concepts and instrumentation associated with the physical techniques used to investigate biochemical systems. We will investigate the key biological questions that can be addressed using each method. The course will mainly focus on spectroscopy (UV-Vis, fluorescence), but will extend to other physical techniques. \*\*\* Prerequisite: BIOC 220 and MATH 111 and (PHYS 109 or PHYS 111) \*\*\*~~

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**BIOC 390AB — 3:3-0**

**Cell Regulation**

The course will deal with the molecular mechanisms responsible for the regulation of the various aspects of cell behaviour. Regulatory mechanisms will be tracked starting from the extracellular stimulus and concluding the analysis with the functional response. Defects in the molecular mechanisms leading to human pathologies will be discussed. \*\*\* Prerequisite: BIOL 288 and BIOC 220 \*\*\*

**BIOC 390AC — 3:3-0**

**Molecular Biology**

This course is a study of nucleic acid structure and metabolism: Structure of DNA and RNA; recombination and repair; Recombinant DNA technology: plasmids, phages, cosmids, YACs, BACs, cloning, DNA sequencing, DNA fingerprinting, PCR, microarrays, expression and purification of recombinant proteins; Immunology: basic concept, antibody structure and function, molecular basis of antibody variability, polyclonal and monoclonal antibodies. \*\*\* Prerequisite: BIOC 220 \*\*\*

**BIOC 390AD — 3:3-0**

**The Biochemistry and Molecular Biology of the Immune System**

The course deals with the molecular mechanisms of immune system regulation. The mechanisms of host-pathogen interaction, antigen recognition and immune cell activation are analysed. Regulatory interactions are followed for different types of immune cells and immune responses. Defects in the molecular mechanisms leading to immunological pathologies are discussed. \*\*\* Prerequisite: BIOC 220 and BIOL 288 \*\*\*

**BIOC 428AB — 3:3-0**

**Eukaryotic Gene Expression**

This course is a study of chromosome organization, euchromatic and heterochromatic domains, telomeres, centromeres and rDNA; transcription in chromatin context, role of chromatin remodelers and histone modifiers, histone code hypothesis; coupling of transcription and mRNA processing in context of CTD phosphorylation; epigenetic regulation, DNA methylation and histone modifications; mRNA stability and degradation, RNAi; and post-translational regulation. \*\*\* Prerequisite: BIOC 320 \*\*\*

**BIOC 491AB — 3:3-0**

**Chemical Biology**

Chemical biology can be defined as an interdisciplinary science where chemistry (mostly organic) is applied to problems in biology. Many topics in this fast growing field will be covered including: abzyme, de novo enzyme synthesis, organic receptor, metabolic engineering, chemical genetics, and functional genomics. \*\*\* Prerequisite: BIOC 420 with a minimum grade of 65% \*\*\*

(end of item 4)

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**Item 5: Program Updates**

**Department of Biology**

Replacing course lists within “Three courses from”; “Four courses from”; “Five courses from”; and “Six courses from” with List A, List B, and List C within all applicable BSc and BSc Honours Biology programs.

<p><b>List A: Cellular and Molecular Biology Concentration</b> BIOL 302, 303, 310, 366, 390, 395, 401, 405, 406, 407, 410, up to two of BIOC 221, 300-level, or 400-level</p>
<p><b>List B: Ecology and Environmental Biology Concentration</b> BIOL 302, 316, 335, 341 (or STAT 342), 356, 365, 366, 367, 375, 376, 380, 385, 401, 425, 435, 456, 457, 463, 485</p>
<p><b>List C: Environmental Biology</b> BIOL 316, 335, 341 (or STAT 342), 356, 365, 367, 376, 380, 385, 402, 435, 456, 457, 463, 485</p>

**BSc in Biology, Cellular and Molecular Biology Area of Concentration**

<b>Credit hours</b>	<b>BSc in Biology, Cellular and Molecular Biology Required Courses</b>
3.0	BIOC 220
3.0	BIOL 100
3.0	BIOL 101
3.0	BIOL 205
3.0	BIOL 200-, 300-, or 400-level
3.0	BIOL 266
3.0	BIOL 275
3.0	BIOL 288
3.0	BIOL 305
3.0	BIOL 378
3.0	BIOL 402
0.0	BIOL 488 (term1)
0.0	BIOL 488 (term 2)
3.0	Four courses from <u>List A</u> : <del>BIOL 302, 303, 310, 366, 390, 395, 401, 405, 406, 407, 410</del> , up to two of <del>BIOC 221, 3xx or 4xx</del>
3.0	
3.0	
3.0	
3.0	CHEM 104
3.0	CHEM 105
3.0	CHEM 140
3.0	CS 110
3.0	MATH 103 and 112 or
3.0	MATH 110 and 111
3.0	PHYS 109 and 119 or
3.0	PHYS 111 and 112
3.0	STAT 100
3.0	STAT 200
<b>75.0</b>	<b>Subtotal: Major Requirements 65.00% Major GPA required</b>

**BSc Honours in Biology, Cellular and Molecular Biology Area of Concentration**

<b>Credit hours</b>	<b>BSc Honours in Biology, Cellular and Molecular Biology Required Courses</b>
3.0	BIOC 220
3.0	BIOL 100
3.0	BIOL 101
3.0	BIOL 205
3.0	BIOL 200-, 300-, or 400-level
3.0	BIOL 266
3.0	BIOL 275
3.0	BIOL 288
3.0	BIOL 305
3.0	BIOL 378
3.0	BIOL 402
0.0	BIOL 488 (term 1)
0.0	BIOL 488 (term 2)
3.0	Four courses from <u>List A</u> . <del>BIOL 302, 303, 310, 366, 390, 395, 401, 405, 406, 407, 410, up to two of BIOC 221, 3xx or 4xx</del>
3.0	
3.0	
3.0	
3.0	CHEM 104
3.0	CHEM 105
3.0	CHEM 140
3.0	CS 110
3.0	MATH 103 and 112 or MATH 110 and 111
3.0	
3.0	PHYS 109 and 119 or PHYS 111 and 112
3.0	
3.0	STAT 100
3.0	STAT 200
<b>75.0</b>	<b>Subtotal: Major Requirements 65.00% Major GPA required</b>

**BSc in Biology, Ecology and Environmental Biology Area of Concentration**

<b>Credit hours</b>	<b>BSc with Biology, Ecology and Environmental Biology Required Courses</b>
3.0	BIOL 100
3.0	BIOL 101
3.0	BIOL 205
3.0	BIOL 200-, 300-, or 400-level
3.0	BIOL 266
3.0	BIOL 275
3.0	BIOL 276
3.0	BIOL 288
3.0	BIOL 378
3.0	BIOL 402
0.0	BIOL 488 (term 1)
0.0	BIOL 488 (term 2)
3.0	Five courses from <u>List B.</u> : <del>BIOL 302, 316, 335, 341 (or STAT 342), 356, 365, 366, 367, 375, 376, 380, 385, 401, 402, 425, 435, 456, 457, 463, 485</del>
3.0	
3.0	
3.0	
3.0	
3.0	CHEM 104
3.0	CHEM 105
3.0	CHEM 140
3.0	CS 110
3.0	MATH 103 and 112 or MATH 110 and 111
3.0	
3.0	PHYS 109 and 119 or PHYS 111 and 112
3.0	
3.0	STAT 100
3.0	STAT 200
<b>75.0</b>	<b>Subtotal: Major Requirements 65.00% Major GPA required</b>

**BSc Honours in Biology, Ecology and Environmental Biology Area of Concentration**

<b>Credit hours</b>	<b>BSc Honours in Biology, Ecology and Environmental Biology Required Courses</b>
3.0	BIOL 100
3.0	BIOL 101
3.0	BIOL 205
3.0	BIOL 200-, 300-, or 400-level
3.0	BIOL 266
3.0	BIOL 275
3.0	BIOL 276
3.0	BIOL 288
3.0	BIOL 378
3.0	BIOL 402
0.0	BIOL 488 (term 1)
0.0	BIOL 488 (term 2)
3.0	BIOL 498
3.0	BIOL 499
3.0	Six courses from <u>List B</u> : <del>BIOL 302, 316, 335, 341 (or STAT 342), 356, 365, 366, 367, 375, 376, 380, 385, 401, 402, 425, 435, 456, 457, 463, 485</del>
3.0	
3.0	
3.0	
3.0	
3.0	
3.0	CHEM 104
3.0	CHEM 105
3.0	CHEM 140
3.0	CS 110
3.0	MATH 103 and 112 or MATH 110 and 111
3.0	
3.0	PHYS 109 and 119 or PHYS 111 and 112
3.0	
3.0	STAT 100
3.0	STAT 200
<b>84.0</b>	<b>Subtotal: Major Requirements 75.00% Major GPA required</b>

**BSc in Environmental Biology (Joint Program with Saskatchewan Polytechnic and Lethbridge College)**

This is a joint program with Saskatchewan Polytechnic and Lethbridge College. To complete the BSc in Environmental Biology, students must have completed the Diploma of Integrated Resource Management from Saskatchewan Polytechnic or the Diploma in Renewable Resource Management from Lethbridge College with a minimum 60.00% graduating average and a passing grade in Pre-Calculus 30 or equivalent. Graduation from a similar program may be used for admission to this program and will be reviewed on a case by case basis. Students meeting admission requirements will be granted 60.0 hours of block transfer credit toward this degree program.

<b>Credit hours</b>	<b>BSc in Environmental Biology (University of Regina) Required Courses</b>
3.0	BIOL 100
3.0	BIOL 101
3.0	BIOL 205
0.0	BIOL 488 (term 1)
0.0	BIOL 488 (term 2)
3.0	Three courses from <u>List C</u> :-
3.0	<del>BIOL 316, 335, 341 (or STAT 342), 356, 365, 367, 380, 385, 402,</del>
3.0	<del>435, 456, 457, 463, 485</del>
3.0	CHEM 104
3.0	CHEM 140
3.0	ENST 200
3.0	GEOG 121
3.0	GEOG 325, 326, or 327
3.0	MATH 103 or 110
3.0	PHYS 109 or 111
3.0	STAT 200
3.0	ENGL 100
3.0	ENGL 110
3.0	Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
<b>60.0</b>	<b>Subtotal: 65.00% U of R GPA required</b>
<b>120.0</b>	<b>Total</b>

**BSc Honours in Environmental Biology  
(Joint Program with Saskatchewan Polytechnic and Lethbridge College)**

This is a joint program with Saskatchewan Polytechnic and Lethbridge College. To complete the BSc in Environmental Biology, students must have completed the Diploma of Integrated Resource Management from Saskatchewan Polytechnic, or the Diploma in Renewable Resource Management from Lethbridge College with a minimum 60.00% graduating average and a passing grade in Pre-Calculus 30 or equivalent. Graduation from a similar program may be used for admission to this program and will be reviewed on a case by case basis. Students meeting admission requirements will be granted 60.0 hours of block transfer credit toward this degree program.

<b>Credit hours</b>	<b>BSc Honours in Environmental Biology (University of Regina) Required Courses</b>
3.0	BIOL 100
3.0	BIOL 101
3.0	BIOL 205
0.0	BIOL 488 (term 1)
0.0	BIOL 488 (term 2)
3.0	BIOL 498
3.0	BIOL 499
3.0	Five courses from <u>List C</u> : <del>BIOL 316, 335, 341 (or STAT 342), 356, 365, 367, 380, 385, 402, 435, 456, 457, 463, 485</del>
3.0	
3.0	
3.0	
3.0	
3.0	CHEM 104
3.0	CHEM 140
3.0	ENST 200
3.0	GEOG 121
3.0	GEOG 325, 326, or 327
3.0	MATH 103 or 110
3.0	PHYS 109 or 111
3.0	STAT 200
3.0	ENGL 100
3.0	ENGL 110
3.0	Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
<b>72.0</b>	<b>Subtotal: 70.00% U of R GPA required</b>

**BSc in Environmental Biology (Joint Program with Lakeland College)**

This is a joint program with Lakeland College. To complete the BSc in Environmental Biology, students must have completed the Diploma in Wildlife and Fisheries Conservation, or the Diploma in Conservation and Restoration Ecology at Lakeland College with a minimum 60.00% graduating average and a passing grade in Pre-Calculus 30 or equivalent. Graduation from a similar program may be used for admission to this program and will be reviewed on a case by case basis. Students meeting admission requirements will be granted 60.0 hours of block transfer credit toward this degree program.

<b>Credit hours</b>	<b>BSc in Environmental Biology (University of Regina) Required Courses</b>
3.0	BIOL 100
3.0	BIOL 101
3.0	BIOL 205
3.0	BIOL 200-, 300-, or 400-level
3.0	One of: BIOL 266 or 378
0.0	BIOL 488 (term 1)
0.0	BIOL 488 (term 2)
3.0	Three courses from <u>List C</u> :
3.0	<del>BIOL 316, 335, 341 (or STAT 342), 356, 365, 367, 380, 385, 402,</del>
3.0	<del>435, 456, 457, 463, 485</del>
3.0	ENST 200
3.0	GEOG 121
3.0	GEOG 325, 326, or 327
3.0	MATH 103 or 110
3.0	PHYS 109 or 111
3.0	STAT 200
3.0	ENGL 100
3.0	ENGL 110
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
<b>60.0</b>	<b>Subtotal: 65.00% U of R GPA required</b>



**BSc Honours in Environmental Biology (Joint Program with Lakeland College)**

This is a joint program with Lakeland College. To complete the BSc in Environmental Biology, students must have completed the Diploma in Wildlife and Fisheries Conservation, or the Diploma in Conservation and Restoration Ecology at Lakeland College with a minimum 60.00% graduating average and a passing grade in Pre-Calculus 30 or equivalent. Graduation from a similar program may be used for admission to this program and will be reviewed on a case by case basis. Students meeting admission requirements will be granted 60.0 hours of block transfer credit toward this degree program.

<b>Credit hours</b>	<b>BSc Honours in Environmental Biology (University of Regina) Required Courses</b>
3.0	BIOL 100
3.0	BIOL 101
3.0	BIOL 205
3.0	BIOL 200-, 300-, or 400-level
3.0	One of: BIOL 266 or 378
0.0	BIOL 488 (term 1)
0.0	BIOL 488 (term 2)
3.0	BIOL 498
3.0	BIOL 499
3.0	Five courses from List C.∴ <del>BIOL 316, 335, 341 (or STAT 342), 356, 365, 367, 380, 385, 402, 435, 456, 457, 463, 485</del>
3.0	
3.0	
3.0	
3.0	
3.0	ENST 200
3.0	GEOG 121
3.0	GEOG 325, 326, or 327
3.0	MATH 103 or 110
3.0	PHYS 109 or 111
3.0	STAT 200
3.0	ENGL 100
3.0	ENGL 110
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
3.0	Science, Arts, or Media, Art, and Performance elective
<b>72.0</b>	<b>Subtotal: 70.00% U of R GPA required</b>

**(end of item 5)**

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