Minutes of the Sixth Meeting of Senate
Friday, April 9, 2021
3:00 – 5:00 pm
Via Zoom

Present: A. Abd-El-Aziz (Chair), D. Sutton (Secretary to Senate) R. Bissessur , A. Braithwaite, M. Buote, B. Campbell, D. Coll, E. Côté, D. Dahn, R. Dennis, L. Doiron, A. Doyle, N. Etkin, A. Fitzgerald, K. Gottschall-Pass, L. Heider, J. Heartz, G. Keefe, N. Kujundzic, M. LeClair, T. Mady, J. MacDonald, R. MacDonald, K. Mears, W. Montelpare, J. Moran, D. Moses, C. Murray, M. Murray, J. McIntyre, M. Nassar, T. Ngo, T. Oginni, J. Perry, W. Peters, R. Raiswell, C. Ryan , J. Spears, J. Stewart, C. Stevenson, B. Waterman, A. Zinck, M. Arfkan

Regrets: J. Podger

Guests: D. McCardle, N. Phillips

Recorder: M. Arbing

President Abd-El-Aziz called the meeting to order at 3:01 p.m.

1. **Approval of Agenda**
   MOTION (L. Doiron/C. Murray) to approve the agenda as presented. UNANIMOUSLY CARRIED.

2. **Approval of Minutes – March 12, 2021**
   MOTION (N. Etkin/M. Nassar) to approve the minutes of March 12, 2021 as presented with an edit to attendees. UNANIMOUSLY CARRIED.

3. **President's Report**
   President Abd-El-Aziz shared the exciting news that Dr. Ann Braithwaite has been named a 3M National Teaching Fellow by the Society for Teaching and Learning in Higher Education and 3M Canada. Dr. Abd-El-Aziz praised Dr. Braithwaite's exceptional contributions to our great University and indicated how proud we are of her earning this prestigious award.
   President Abd-El-Aziz extended best wishes to all students for their upcoming exams, noting that the support of faculty and staff is with them.
   There will be a notice to students early next week, followed by the campus community regarding convocation. President Abd-El-Aziz indicated how proud he is for those working to make this convocation the best it can be given the pandemic situation, in particular the Interim Vice-President Academic and Research, the Associate Vice-President Students and Registrar, N. Philips and all Deans, noting that everyone wants to celebrate with the students in a special way, both virtually and in-person, in accordance with the Chief Public Health Office.

4. **Business Arising**

President Abd-El-Aziz indicated that the Senate Steering Committee spoke about the following three items and felt it important that these items be on the agenda for each Senate meeting for an update until each is finalized.

a. Update on Convocation

Dr. Kathy Gottschall-Pass reiterated that convocation this year will be a dual component convocation, using both virtual and in-person components on campus, in adherence to Chief Public Health Office directives. A notice would be circulated in the coming week.

Dr. Gottschall-Pass will provide an update at the May Senate meeting.

b. Update on Summer 2021 Semester

Dr. Kathy Gottschall-Pass reiterated that Summer 2021 courses will primarily be online with some in person in professional programs, such as nursing, veterinary medicine, sustainable design engineering and education.

Dr. Gottschall-Pass will provide an update at the May Senate meeting.

c. Update on Fall 2021 Semester

Dr. Kathy Gottschall-Pass reiterated that planning continues for Fall 2021 with a move towards more in-person instruction. Plans will not be finalized until closer to the start of the fall semester when we have better knowledge of the state of the pandemic.

Dr. Gottschall-Pass will provide an update at the May Senate meeting.

5. **Student Code of Conduct**

The Vice-President Academic and Research indicated that the Student Code of Conduct provided for today's meeting is the result of consultations with members of the current Student Union Executive as well as the previous Executive as well as with APCC.

MOTION (L. Doiron/N. Etkin) that the Student Code of Conduct be approved as presented.

Following discussion amongst Senators, additional amendments and clarifications were requested to be made to the Code.

MOTION (N. Etkin/R. Raiswell) to table the Student Code of Conduct so that revisions based on the discussions can be done by the Vice-President Academic and Research and reviewed for

approval at the next Senate meeting. UNANIMOUSLY CARRIED.

6. Senate Reports

a. Academic Planning and Curriculum Committee

i. Update on UPEI 1010/1020/1030

The following motion was tabled from the March 12, 2021 Senate meeting:

OMNIBUS MOTION (K. Gottschall-Pass/ R. Bissesseur) that motions 64-66 be approved as noted below :

> **64) To add a note to UPEI 1010 Academic Writing to allow credit for only one of the First Year Experience courses (UPEI 1010, 1020 or 1030).**
> (See details on the Curriculum Report Attached – Page 87)
>
> **65) To add a note to UPEI 1020 Inquiry studies to allow credit for only one of the First Year Experience courses (UPEI 1010, 1020 or 1030).**
> (See details on the Curriculum Report Attached – Page 88)
>
> **66) To add a note to UPEI 1030 University Studies to allow credit for only one of the First Year Experience courses (UPEI 1010, 1020 or 1030).**
> (See details on the Curriculum Report Attached – Page 89)

The Vice-President Academic and Research provided an update. Following the March Senate meeting, the Vice-President Academic and Research collected course outlines and spoke with some of the course coordinators. APCC then met to review this information.

Following discussion amongst Senators motions 64, 65 and 66 (tabled from the March 12, 2021 Senate meeting) were agreed upon with the following amendments:

> **64) To add a note to UPEI 1010 Academic Writing to allow credit for only one of the First Year Experience courses (UPEI 1010, 1020 or 1030). In exceptional circumstances, students may request permission from the dean to take an additional course(s) for credit.**
> (See details on the Fifth Curriculum Report – Page 87)
>
> **65) To add a note to UPEI 1020 Inquiry studies to allow credit for only one of the First Year Experience courses (UPEI 1010, 1020 or 1030). In exceptional circumstances,**

students may request permission from the dean to take an additional course(s) for credit.
(See details on the Fifth Curriculum Report – Page 88)

66) To add a note to UPEI 1030 University Studies to allow credit for only one of the First Year Experience courses (UPEI 1010, 1020 or 1030). In exceptional circumstances, students may request permission from the dean to take an additional course(s) for credit.
(See details on the Fifth Curriculum Report– Page 89)

It is noted that five Senators voted against this amended motion. Of the five, two indicated to note their vote: A. Braithwaite and A. Zinck. There were no abstentions and all other present Senators voted in favor.

The Vice-President Academic and Research and APCC will review restrictions on when students can take course(s).

ii. **Sixth Curriculum Report**

<u>Faculty of Arts</u>

OMNIBUS MOTION (K. Gottschall-Pass/ N. Kujundzic) that motions 1-8 be approved as noted below: UNANIMOUSLY CARRIED.

1) **To approve that a new course entitled PSY 2600 Sensation and Perception as proposed.**
(See details on the Curriculum Report Attached – Pages 5-6)

2) **To approve the change in course description for PSY 8202 Clinical Psychology for Organizational and Systems Change as proposed.**
(See details on the Curriculum Report Attached – Page 7)

3) **To approve the change in course title and description for Spanish 1010 Introductory Spanish as proposed.**
(See details on the Curriculum Report Attached – Page 8)

4) **To approve the change in course title and description for Spanish 1020 Introductory Spanish as proposed.**
(See details on the Curriculum Report Attached – Page 9)

5) **To approve the change in course title and description for Spanish 2010 Intermediate Spanish as proposed.**
(See details on the Curriculum Report Attached – Pages 10-11)

6) **To approve the change in course title and description for Spanish 2020 Intermediate Spanish as proposed.**
(See details on the Curriculum Report Attached – Page 12)

7) **To approve the change in course description for Spanish 3010 Compostion and Oral Practice I as proposed.**
(See details on the Curriculum Report Attached – Page 13)

8) **To approve the change in course description for Spanish 3020 Compostion and Oral Practice II as proposed.**
(See details on the Curriculum Report Attached – Page 14)

Faculty of Education

OMNIBUS MOTION (K. Gottschall-Pass/ R. MacDonald) that motions 9-10 be approved as noted below: UNANIMOUSLY CARRIED.

9) **To approve the changes to the admission requirements and application process for the Bachelor of Education program as proposed.**
(See details on the Curriculum Report Attached – Pages 15-19)

10) **To approve the changes to the admission requirements and application process for the Bachelor of Education (français langue seconde) program as proposed.**
(See details on the Curriculum Report Attached – Pages 20-23)

Faculty of Science

OMNIBUS MOTION (K. Gottschall-Pass/ L. Doiron) that motions 11-67 be approved as noted below: UNANIMOUSLY CARRIED.

11) **To approve a new course entitled FN 3001 Integrated Dietetic Practice I be approved as proposed.**
(See details on the Curriculum Report Attached – Page 24-28)

12) **To approve a new course entitled FN 4001 Integrated Dietetic Practice II as proposed.**
(See details on the Curriculum Report Attached – Page 29)

13) **To approve a new course entitled FN 4002 Integrated Dietetic Practice III as proposed.**
(See details on the Curriculum Report Attached – Pages 30-31)

14) **To approve the deletion the course AHS 6002 Ethical Foundation of Applied Health Research .**
(See details on the Curriculum Report Attached – Pages 32-35)

15) **To approve the deletion the course AHS 6002 Ethical Foundation of Applied Health Research**
(See details on the Curriculum Report Attached – Page 36)

16) **To approve the deletion of the course AHS 6003 Research & Evaluation Design and Methods .**
(See details on the Curriculum Report Attached – Page 37)

17) **To approve a new course entitled AHS 6000 Introduction to Health Services Research be approved as proposed.**
(See details on the Curriculum Report Attached – Page 38-41)

18) **To approve a new course entitled AHS 6011 Indigenous Health as proposed.**
(See details on the Curriculum Report Attached – Pages 42-46)

19) **To approve the change in course title, description and prerequisite for AHS 6120 Work Integrated Learning as proposed.**
(See details on the Curriculum Report Attached – Page 47)

20) **To approve the changes to the admissions section of the calendar entry for the Master of Applied Health Services Research program as proposed.**
(See details on the Curriculum Report Attached – Page 48)

21) **To approve the change in the calendar entry for the Master of Applied Health Services Research approved as proposed.**
(See details on the Curriculum Report Attached – Pages 49-50)

22) **To approve the change in prerequisites as proposed for Biology 3040 Vertebrate Zoology.**
(See details on the Curriculum Report Attached – Page 51)

23) To approve the change in prerequisites as proposed for Biology 3110 Plants and People.
(See details on the Curriculum Report Attached – Page 52)

24) To approve the change in prerequisites as proposed for Biology 3140 Plant Community Ecology.
(See details on the Curriculum Report Attached – Page 53)

25) To approve the change in prerequisites as proposed for Biology 3230 Genetics II.
(See details on the Curriculum Report Attached – Page 54)

26) To approve the change in prerequisites as proposed for Biology 3260 Introductory Physiology of Cells and Organisms.
(See details on the Curriculum Report Attached – Page 55)

27) To approve the change in prerequisites as proposed for Biology 3270 Field Coastal Ecology.
(See details on the Curriculum Report Attached – Page 56)

28) To approve the change in prerequisites as proposed for Biology 3310 Research Methods and Communications in Biology.
(See details on the Curriculum Report Attached – Page 57)

29) To approve the change in prerequisites as proposed for Biology 3350 Animal Behaviour.
(See details on the Curriculum Report Attached – Page 58)

30) To approve the change in prerequisites as proposed for Biology 3520 Molecular Biology Research Techniques
(See details on the Curriculum Report Attached – Page 59)

31) To approve the change in prerequisites as proposed for Biology 3820 Evolutionary Biology.
(See details on the Curriculum Report Attached – Page 60)

32) To approve the change in prerequisites as proposed for Biology 3910 Marine Biology.
(See details on the Curriculum Report Attached – Page 61)

33) To approve the change in prerequisites as proposed for Biology 4440 Investigative Plant Anatomy.
(See details on the Curriculum Report Attached – Page 62)

34) To approve the change in prerequisites as proposed for Biology 4540 Biodiversity and Conservation Biology.
(See details on the Curriculum Report Attached – Page 63)

35) To approve the change in prerequisites as proposed for Biology 4720 Biology of Cancer and Other Diseases .
(See details on the Curriculum Report Attached – Page 64)

36) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Pages 65-66)

37) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 67)

38) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 68)

39) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 69)

40) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 70)

41) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 71)

42) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed
(See details on the Curriculum Report Attached – Page 72)

43) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 73)

44) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 74)

45) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 75)

46) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 76)

47) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 77)

48) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 78)

49) To approve the he following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 79)

50) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 80)

51) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 81)

52) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 82)

53) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 83)

54) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 84)

55) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 85)

56) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 86)

57) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 87)

58) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 88)

59) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 89)

60) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 90)

61) To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 91)

62) To approve to the following graduate course in the Mathematical and Computational Sciences be approved as proposed.
(See details on the Curriculum Report Attached – Page 92)

63) **To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.**
(See details on the Curriculum Report Attached – Page 93)

64) **To approve the following graduate course in the Mathematical and Computational Sciences be approved as proposed.**
(See details on the Curriculum Report Attached – Page 94)

65) **To approve the changes to the MSc Program (Faculty of Science) be adopted as proposed to add a Specialization in the Mathematical and Computational Sciences.**
(See details on the Curriculum Report Attached – Pages 95-97)

66) **To approve to have the requirements changed in the Actuarial Science Major to make STAT 4330 Time Series a required course as proposed.**
(See details on the Curriculum Report Attached – Pages 99-100)

67) **To approve to have the requirements changed in the Actuarial Science Major Pre-Professional Specialization to make STAT 4330 Time Series a required course as proposed.**
(See details on the Curriculum Report Attached – Pages 101-103)

Faculty of Engineering

OMNIBUS MOTION (K. Gottschall-Pass/ W. Peters) that motion 68-69 be approved as noted below: UNANAMOUSLY CARRIED.

68) **To approve that a new course entitled SDE 8030 Contemporary Topics in Sustainable Design Engineering be approved as proposed.**
(See details on the Curriculum Report Attached – Pages 105-108)

69) **To approve that a new course entitled SDE 8050 Engineering Research Methods & Experiment Design be approved as proposed.**
(See details on the Curriculum Report Attached – Pages 109-111)

MOTION (R. MacDonald/L. Doiron) to extend Senate by 15 minutes. UNANIMOUSLY CARRIED.

iii. **Interdisciplinary Doctoral Program (PhD) in Sustainable Design Engineering**
Dr. Gottschall-Pass updated Senators that the Interdisciplinary Doctoral Program (PhD) in SDE was previously approved in principle by Senate and prior to proceeded to MPHEC. The FSDE has been working to revise the program and will bring the revisions back to Senate after MPHEC approval.

Motion (L. Doiron/B. Campbell) that the meeting be adjourned at 5:15 p.m.

6. **Other Business**

7. **Adjournment**

Motion (B. Waterman/B. Campbell) that the meeting be adjourned at 5:15 p.m.

Respectfully submitted,
Donna Sutton
Secretary of Senate

Attachment: Sixth Curriculum Report April 9, 2021

UNIVERSITY of Prince Edward ISLAND

Academic Planning and Curriculum Committee
March 23, 2021 (APCC)
April 9, 2021 (Senate)

SUMMARY OF FACULTY OF ARTS MOTION #'S 1-8

Faculty of Arts
Summary of Calendar and Curriculum Changes
March 1, 2021

1. New Course PSY 2600 Sensation and Perception
2. Course Description Change PSY 8202 Clinical Psychology for Organizational and Systems Change
3. Course Description Change SPAN 1010 Introductory Spanish I
4. Course Description Change SPAN 1020 Introductory Spanish II
5. Course Description Change SPAN 2010 Intermediate Spanish I
6. Course Description Change SPAN 2020 Intermediate Spanish II
7. Course Description Change SPAN 3010 Composition and Oral Practice I
8. Course Description Change SPAN 3020 Composition and Oral Practice II

NEW COURSE PROPOSAL Motion #1

Faculty/School: **Arts**

Department/Program(s): **Psychology**

MOTION: That a new course entitled PSY 2600 Sensation and Perception be approved as proposed.

Course Number and Title	2600 SENSATION AND PERCEPTION
Description	This course examines how the more basic senses work and how they contribute to our awareness of the world. The sense of touch seems to give us direct contact with the world. The abilities to sense chemicals in the food we eat and the air we breathe guide not only what we eat but also our emotions. Sensing vibrations in air enables us to detect events out of sight and to receive both verbal and musical communications from others. Content covered in this course also considers principles and theories of how visual information is received, and how it is processed and combined to produce visual images. These vastly different sources of information-mechanical, chemical and gravitational, as well as the electromagnetic basis of vision are sensed by specialized biological receptors that transform the information into nerve impulses. This course examines how the principles used by the brain to interpret the diverse information are surprisingly similar.
Cross-Listing	NA
Prerequisite/Co-Requisite	Psychology 1010 and 1020
Credit(s)	3
Notation	NOTE: Credit will not be allowed for Psychology 2600 if a student has already received credit for Psychology 2610 or Psychology 2620

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 70

Is there an Enrolment Cap: No

Rationale for New Course: To replace Psychology 2610 and 2620.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Dr. Tracy Doucette	February 4, 2021
Faculty/School Approval: Arts Curriculum Committee	March 1, 2021
Faculty Dean's Approval: Neb Kujundzic	March 1, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

PSY 2600 SENSATION AND PERCEPTION

Library Resource Requirements *(to be completed by the liaison and/or collections librarian)*

Existing resources:

- Collections - Holdings, Subscriptions, Other
  - Journals
    - Our collection includes 1146 peer review journals in the subject of psychology.
  - Databases
    - APA PsycINFO
    - PsycARTICLES
    - Gale OneFile: Psychology
  - Books
    - A search for print and online books with the subjects perception or senses and sensation retrieved 824 books published within the last 10 years.
  - Videos
    - Academic Videos Online (AVON, Alexander Street Press)
    - Psychotherapy.net (100 videos)
- Subscription Dependencies (in interdisciplinary packages)
  - OneSearch (EBSCOhost Discovery Service)
  - PubMed (UPEI provides a customlink back to our own full text holdings)
  - MEDLINE (EBSCOhost, integrated with OneSearch)
  - CINAHL (EBSCOhost, integrated with OneSearch) - nursing and allied health
  - Cochrane Library
  - ERIC (EBSCOhost, integrated with OneSearch) - education, including educational psychology
  - SocIndex with Full Text (EBSCOhost, integrated with OneSearch) - sociology, with significant overlap with social psychology
  - CBCA (Proquest) - contains articles from scholarly journals, popular magazines and newspapers with a Canadian focus
  - Wiley Online
  - Elsevier ScienceDirect
  - SAGE Premier Collection
  - Springer LINK
  - Oxford University Press Journals
  - Ingenta
  - Lippincott, Williams, & Wilkins Nursing and Health Professions Premier Collection
- Physical Space in Library (other than holdings, explain) – N/A

- Library Administrative/Research Support – A librarian provides research and instruction assistance to faculty and students.

New resources needed to support this proposal:

- Capital Requirements *(other than new course-specific)*
- Collections:
  - Monographs – sufficient but dependencies.
  - Subscriptions – sufficient but dependencies.
  - Databases - sufficient but dependencies.
  - Other – none
- Physical Space in Library (other than holdings, explain) – none
- Library Administrative/Research Support - none
- Other One-Time or Ongoing Library expenses (e.g. software licenses) – none

Summary of additional budget allocation required:

- One-time: ____none_____ For each of ___0__ consecutive years
- Annual: ___none_____
  - Per-year percentage increase in annual: __0____

Does the budget allocation for library resources in this proposal meet the requirement?

Existing library budget can support this course as long as subscriptions can be maintained.

Date Received by Liaison/Collections Librarian	February 4, 2021
Name of Librarian to be Contacted for Questions	Kim Mears
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	February 12, 2021

Form Version: September 2020

CALENDAR & CURRICULUM CHANGE Motion #2

Revision is for a: **Course Description Change**

Faculty/School/Department: **Arts**

Department/Program(s)/Academic Regulations: **Doctor of Psychology**

MOTION: To have the change in course description for PSY 8202 Clinical Psychology for Organizational and Systems Change be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
PSY 8202 CLINICAL PSYCHOLOGY FOR ORGANIZATIONAL AND SYSTEMS CHANGE Students explore roles for clinical psychology in development and change of organizations and of systems. We consider questions such as: What is the nature of organizations and systems in the public, not-for-profit, and private sectors? What are opportunities and responsibilities to influence policy and practice leadership? How can research evidence be translated to policy and practice? What is the psychologist's role when minorities and marginalized communities? How can communication and collaboration be fostered within and across organizations and systems to support health and wellness promotion; prevention of disorder; timely and appropriate assessment, intervention, and consultation; and meaningful support? What is the role of advocacy for clients and populations? Implications of cultural and individual diversities for application of clinical psychology to organizational and systems change are explored.	PSY 8202 CLINICAL PSYCHOLOGY FOR ORGANIZATIONAL AND SYSTEMS CHANGE Students explore roles for clinical psychology in development and change of organizations and of systems. We consider questions such as: What is the nature of organizations and systems in the public, not-for-profit, and private sectors? What are opportunities and responsibilities to influence policy and practice leadership? How can research evidence be translated to policy and practice? What is the psychologist's role when ~~minorities and marginalized communities?~~ the experiences of marginalized communities are not reflected in policy and practice? How can communication and collaboration be fostered within and across organizations and systems to support health and wellness promotion; prevention of disorder; timely and appropriate assessment, intervention, and consultation; and meaningful support? What is the role of advocacy for clients and populations? Implications of cultural and individual diversities for application of clinical psychology to organizational and systems change are explored.

Rationale for Change: The current calendar description contains an incomplete sentence; the amendment corrects that error with a replacement sentence.

Effective Term: FALL 2021 **Implications for Other Programs**: None

Impact on Students Currently Enrolled: None

Authorization ***Date:***

Departmental Approval: Dr. Tracy Doucette	March 8, 2021
Faculty/School Approval: Arts Curriculum Committee	March 8, 2021
Faculty Dean's Approval: Neb Kujundzic	March 8, 2021
Grad. Studies Dean's Approval: Rabin Bissessur	March 8, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE Motion #3

Revision is for a: **Course Description Change**

Faculty/School/Department: **Arts**

Department/Program(s)/Academic Regulations: **Modern Languages**

MOTION: To have the change in course title and description for Spanish 1010 Introductory Spanish be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
1010 INTRODUCTORY SPANISH Spanish 1010 is intended for students with no knowledge of Spanish. Spanish 1020 is a continuation of 1010. These courses give students solid grounding in the fundamentals of the Spanish language by engaging them, in both classroom and language laboratory settings, in communicative use of the four language skills: listening, speaking, reading and writing. By the end of Spanish 1020, students obtain a comprehensive outline of Spanish grammar and are able to sustain a conversation on a variety of daily topics. Three hours a week plus lab.	1010 INTRODUCTORY SPANISH I Spanish 1010 is intended for students with no knowledge of Spanish. ~~Spanish 1020 is a continuation of 1010.~~ These course gives students solid grounding in the fundamentals of the Spanish language by engaging them, in both classroom and language laboratory settings, in communicative use of the four language skills: listening, speaking, reading and writing. ~~By the end of Spanish 1020~~Upon successful completion of the course, students obtain a comprehensive outline of Spanish grammar and are able to sustain a conversation on a variety of daily topics. NOTE: This course may not be taken for credit if any of the following have already been successfully completed: SPAN-1020, SPAN-2010, SPAN-2020, SPAN-3010, SPAN-3020, SPAN-3150, SPAN-4010, or SPAN-4020. Three hours a week plus lab.

Rationale for Change: Course description modified to distinguish SPAN-1010 and SPAN-1020 descriptions, and note added to requisites to deter students from taking courses in reverse sequence (i.e., introductory language course after having taken advanced language course).

Effective Term: FALL 2021 **Implications for Other Programs**: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Carlo Lavoie	February 24, 2021
Faculty/School Approval: Arts Curriculum Committee	March 1, 2021
Faculty Dean's Approval: Neb Kujundzic	March 1, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #4

Revision is for a: **Course Description Change**

Faculty/School/Department: **Arts**

Department/Program(s)/Academic Regulations: **Modern Languages**

MOTION: To have the change in course title and description for Spanish 1020 Introductory Spanish be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
SPANISH 1020 INTRODUCTORY SPANISH Spanish 1010 is intended for students with no knowledge of Spanish. Spanish 1020 is a continuation of 1010. These courses give students solid grounding in the fundamentals of the Spanish language by engaging them, in both classroom and language laboratory settings, in communicative use of the four language skills: listening, speaking, reading and writing. By the end of Spanish 1020, students obtain a comprehensive outline of Spanish grammar and are able to sustain a conversation on a variety of daily topics. Three hours a week plus lab.	SPANISH 1020 INTRODUCTORY SPANISH II ~~SPANISH 1010 is intended for students with no knowledge of Spanish.~~ Spanish 1020 is a continuation of Spanish 1010. Theseis courses further develops the language structures introduced in Spanish 1010. ~~give students solid grounding in~~ Students are exposed to the fundamentals of the Spanish language by a) engaging them in classroom and language laboratory settings; b) in communicative use of the four language skills: listening, speaking, reading and writing; and c) familiarizing them with aspects of Hispanic culture. ~~By the end of Spanish 1020, students obtain a comprehensive outline of Spanish grammar and are able to sustain a conversation on a variety of daily topics.~~ NOTE: This course may not be taken for credit if any of the following have already been successfully completed: SPAN-2010, SPAN-2020, SPAN-3010, SPAN-3020, SPAN-3150, SPAN-4010, or SPAN-4020. PREREQUISITE: Spanish 1010 or permission of the instructor - Must be completed prior to taking this course. Three hours a week plus lab.

Rationale for Change: Course description modified to distinguish SPAN-1010 and SPAN-1020 descriptions, and note added to requisites to deter students from taking courses in reverse sequence (i.e., introductory language course after having taken advanced language course).

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Carlo Lavoie	February 24, 2021
Faculty/School Approval: Arts Curriculum Committee	March 1, 2021
Faculty Dean's Approval: Neb Kujundzic	March 1, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: May/2020

CALENDAR & CURRICULUM CHANGE — Motion #5

Revision is for a: **Course Description Change**

Faculty/School/Department: **Arts**

Department/Program(s)/Academic Regulations: **Modern Languages**

MOTION: To have the change in course title and description for Spanish 2010 Intermediate Spanish be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
2010 INTERMEDIATE SPANISH These courses are intended for students who have successfully completed Introductory Spanish. They enhance students' linguistic proficiency, allowing them to handle a variety of social situations. Students also develop cultural and historical understanding of Spain and Latin America. By the end of Spanish 2020, students have insight into the grammatical structures of the language, are able to sustain conversations in real-life situations, and are able to discuss aspects of the Hispanic world. PREREQUISITE: Spanish 1020 or permission of the instructor Three hours a week.	2010 INTERMEDIATE SPANISH I Thisese courses ~~are~~ is intended for students who have successfully completed Introductory Spanish (SPAN-1010 and SPAN-1020). ~~They enhance students' linguistic proficiency, allowing them to handle a variety of social situations. Students also develop cultural and historical understanding of Spain and Latin America. By the end of Spanish 2020, students have insight into the grammatical structures of the language, are able to sustain conversations in real life situations, and are able to discuss aspects of the Hispanic world.~~ It prepares intermediate students to use Spanish in real-life situations by emphasizing oral communication and by developing reading and writing language skills. Practical, high frequency vocabulary presented in culturally authentic contexts takes students beyond the basic survival skills acquired in introductory classes and sets the stage for extended interaction. The course gives special attention to matters of syntax and style through written composition and translation exercises. The course also includes oral discussions, conversations, and literary and cultural readings. NOTE: This course may not be taken for credit if any of the following have already been successfully completed: SPAN-3010, SPAN-3020, SPAN-3150, SPAN-4010, or SPAN-4020. PREREQUISITE: Spanish 1020 or permission of the instructor Three hours a week

Rationale for Change: Course description modified to distinguish SPAN-2010 and SPAN-2020 descriptions, and note added to requisites to deter students from taking courses in reverse sequence (i.e., introductory language course after having taken advanced language course).

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

CALENDAR & CURRICULUM CHANGE

Motion #5

Authorization	***Date:***
Departmental Approval: Carlo Lavoie	February 24, 2021
Faculty/School Approval: Arts Curriculum Committee	March 1, 2021
Faculty Dean's Approval: Neb Kujundzic	March 1, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #6

Revision is for a: **Course Description Change**

Faculty/School/Department: **Arts**

Department/Program(s)/Academic Regulations: **Modern Languages**

MOTION: To have the change in course title and description for Spanish 2020 Intermediate Spanish be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
2020 INTERMEDIATE SPANISH These courses are intended for students who have successfully completed Introductory Spanish. They enhance students' linguistic proficiency, allowing them to handle a variety of social situations. Students also develop cultural and historical understanding of Spain and Latin America. By the end of Spanish 2020, students have insight into the grammatical structures of the language, are able to sustain conversations in real-life situations, and are able to discuss aspects of the Hispanic world. PREQUISITE: Spanish 1020 or permission of the instructor Three hours a week.	2020 INTERMEDIATE SPANISH II ~~These courses are~~ This course is intended for students who have successfully completed ~~Introductory~~ Intermediate Spanish I (SPAN-2010). It prepares students to use Spanish in real-life situations by emphasizing oral communication and by developing reading and writing language skills. It ~~They~~ enhances students' linguistic proficiency, allowing them to handle a variety of social situations. Students also develop cultural and historical understanding of Spain and Latin America. By the end of Spanish 2020, students have insight into the grammatical structures of the language, are able to recognize different varieties of Spanish, and sustain conversations in real-life situations~~, and are able to discuss aspects of the Hispanic world~~. NOTE: This course may not be taken for credit if any of the following have already been successfully completed: SPAN-3010, SPAN-3020, SPAN-3150, SPAN-4010, or SPAN-4020. PREREQUISITE: Spanish 1020 or permission of the instructor Three hours a week

Rationale for Change: Course description modified to distinguish SPAN-2010 and SPAN-2020 descriptions, and note added to requisites to deter students from taking courses in reverse sequence (i.e., introductory language course after having taken advanced language course).

Effective Term: FALL 2021 **Implications for Other Programs:** None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Carlo Lavoie	February 24, 2021
Faculty/School Approval: Arts Curriculum Committee	March 1, 2021
Faculty Dean's Approval: Neb Kujundzic	March 1, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE Motion #7

Revision is for a: **Course Description Change**

Faculty/School/Department: **Arts**

Department/Program(s)/Academic Regulations: **Modern Languages**

MOTION: To have the change in course description for Spanish 3010 Compostion and Oral Practice I be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3010 COMPOSITION AND ORAL PRACTICE I This course aims to develop a high degree of competence in written and oral Spanish. Two hours a week are devoted to "composition," including grammar, vocabulary, translation, stylistics, and original expression. The third hour is devoted to oral work in a small "conversation" class. (Also offered in Salamanca and Uruguay). PREREQUISITES: Spanish 2020 or permission of the instructor	3010 COMPOSITION AND ORAL PRACTICE I This course aims to develop a high degree of competence in written and oral Spanish. Two hours a week are devoted to composition, including grammar, vocabulary, translation, stylistics, and original expression. The third hour is devoted to oral work in a small conversation class. (Also offered in Salamanca and Uruguay). NOTE: This course may not be taken for credit if any of the following have already been successfully completed: SPAN-3020, SPAN-4010, or SPAN-4020. PREREQUISITES: Spanish 2020 or permission of the instructor

Rationale for Change: Note added to requisites to deter students from taking courses in reverse sequence (i.e., introductory language course after having taken advanced language course).

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Carlo Lavoie	February 24, 2021
Faculty/School Approval: Arts Curriculum Committee	March 1, 2021
Faculty Dean's Approval: Neb Kujundzic	March 1, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #8

Revision is for a: **Course Description Change**

Faculty/School/Department: **Arts**

Department/Program(s)/Academic Regulations: **Modern Languages**

MOTION: To have the change in course description for Spanish 3020 Compostion and Oral Practice II be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3020 COMPOSITION AND ORAL PRACTICE II This course is a continuation of Spanish 3010. The course focuses on reading and composition, and is intended to give students the opportunity to acquire and use new vocabulary, resolve persistent grammatical difficulties, and learn techniques for the development of a good writing style. Requirements include completion of an anthology of readings in Spanish, and regular short essay assignments. (Also offered in Salamanca and Uruguay). PREREQUISITES: Spanish 3010 or permission of the instructor	3020 COMPOSITION AND ORAL PRACTICE II This course is a continuation of Spanish 3010. The course focuses on reading and composition, and is intended to give students the opportunity to acquire and use new vocabulary, resolve persistent grammatical difficulties, and learn techniques for the development of a good writing style. Requirements include completion of an anthology of readings in Spanish, and regular short essay assignments. (Also offered in Salamanca and Uruguay). NOTE: This course may not be taken for credit if any of the following have already been successfully completed: SPAN-4010 or SPAN-4020. PREREQUISITES: Spanish 3010 or permission of the instructor

Rationale for Change: Note added to requisites to deter students from taking courses in reverse sequence (i.e., introductory language course after having taken advanced language course).

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Carlo Lavoie	February 24, 2021
Faculty/School Approval: Arts Curriculum Committee	March 1, 2021
Faculty Dean's Approval: Neb Kujundzic	March 1, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

SUMMARY OF FACULTY OF EDUCATION MOTION #'S 9-10

Faculty of Education Summary of Motions

- The Faculty of Education requests that the admission requirements and application process for the Bachelor of Education program be modified as submitted.

- The Faculty of Education requests that the admission requirements and application process for the Bachelor of Education (français langue seconde) program be modified as submitted.

CALENDAR & CURRICULUM CHANGE — Motion #9

Revision is for a: **Calendar Entry Change**

Faculty/School/Department: **Faculty of Education**

Department/Program(s)/Academic Regulations: **Bachelor of Education**

MOTION: To have the changes to the admission requirements and application process for the Bachelor of Education program be approved as proposed.

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Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
(b) Intermediate/Senior (grades 7-12) • At least 6 credit hours in Math. Applicants must have appropriate coursework in two defined teachable areas as outlined below: • at least 42 credit hours of university coursework in a first teachable area as listed below; and • at least 18 credit hours of university coursework in a second teachable area as listed below, preferably in a teachable area different from the first. The following courses* relate to teachable areas: English (includes Communications, Creative Writing, Drama, Journalism, linguistic, Media Studies, and Theatre); Social Studies (includes Acadian Studies, Anthropology, Canadian Studies, Economics, Environmental Studies, Family Science, Geography,	(b) Intermediate/Senior (grades 7-12) • At least ~~6~~ 3 credit hours in Math. Applicants must have appropriate coursework in two defined teachable areas as outlined below: • at least 42 credit hours of university coursework in a first teachable area as listed below; and • at least 18 credit hours of university coursework in a second teachable area as listed below, preferably in a teachable area different from the first. The following courses* relate to teachable areas: English (includes Communications, Creative Writing, Drama, Journalism, linguistic, Media Studies, and Theatre); Social Studies (includes Acadian Studies, Anthropology, Canadian Studies, Economics, Environmental Studies, Family Science, Geography, Global Studies, History, Indigenous Studies, Law, Philosophy, Political Science,

Global Studies, History, Indigenous Studies, Law, Philosophy, Political Science, Religious Studies, Sociology, and Diversity and Social Justice Studies); Science (includes Chemistry, Biology, Foods and Nutrition, Forestry, Geology/Earth Sciences, Health Sciences, Kinesiology, Oceanography, Environmental Science, Agriculture, and Physics); Mathematics (includes Mathematics, Physics, Statistics, and Computer Science); French; and Music (offered through the Bachelor of Music Education program in the Faculty of Arts). *Courses not listed may be evaluated on a case-by-case basis. (iii) Application Process Apply before February 15 to be considered for entrance scholarships. The program begins in May and applications will be accepted until the program has reached the full complement of students. Applications received after the full complement of students will only be considered if a seat becomes available or for the following academic year. Applicants are encouraged to apply early Follow UPEI's undergraduate application process for professional programs, and submit other requirements including: • UPEI Application Fee • Official transcripts are required from each	Religious Studies, Sociology, and Diversity and Social Justice Studies); Science (includes Chemistry, Biology, Foods and Nutrition, Forestry, Geology/Earth Sciences, Health Sciences, Kinesiology, Oceanography, Environmental Science, Agriculture, and Physics); Mathematics (includes Mathematics, Physics, Statistics, and Computer Science); French; and Music (offered through the Bachelor of Music Education program in the Faculty of Arts). *Courses not listed may be evaluated on a case-by-case basis. (iii) Application Process ~~Apply before February 15 to be considered for entrance scholarships. The program begins in May and applications will be accepted until the program has reached the full complement of students. Applications received after the full complement of students will only be considered if a seat becomes available or for the following academic year. Applicants are encouraged to apply early to be considered for the program.~~ Applications for the Bachelor of Education Program open on June 1st of each year and will close on September 15th. Applicants are normally notified of admission decisions in late November. **Expanded Admission entry:** The minimum entrance requirement is an undergraduate

post-secondary institution where you have taken a course. Original transcripts are required even if transfer credits were given by another institution. to be considered for the program. • Experience Profile	degree along with the minimum requirements to be certified as a licensed teacher by the province of PEI. • If a potential applicant does not meet the other established entry criteria to be considered for acceptance, but has a combination of study and life/work experience that may demonstrate the potential for a successful educational career, such individuals are encouraged to apply for Expanded Admission. • Additional consideration will be made for applicants who identify themselves as belonging to an FNMI (First Nations, Métis and Inuit) or an under-represented community. • The required Experience Profile plays an important role in the decision-making process by the Selection Committee. • Expanded Admission entry applicants being considered by the Selection Committee may be required to participate in an interview. Follow UPEI's undergraduate application process for professional programs, and submit other requirements including: • UPEI Application Fee • Official transcripts are required from each post-secondary institution where you have taken a course. Original transcripts are required even if transfer credits were given by another institution • The Experience Profile and official transcripts must be received by the Registrar's Office in order for an application to be assessed.

Rationale for Change: Reduction in math requirements: Students within the Intermediate/Senior stream

take methods courses in the B.Ed program based on their major and minor areas of study. Any student who has Math as a teachable would have a minimum of 18 credit hours in the subject. After graduating from the B.Ed program, it would be unlikely for anyone who did not major or minor in Math to be assigned to teach Math at the Intermediate or Senior High level. Having two pre-requisite requirements and no Methods courses in Mathematics does not qualify a pre-service teacher to teach Mathematics. Nationwide, the current standard of Math admission requirement for Intermediate/Senior streams of study sits at zero unless math would be one of their teachables. As some provinces require at least one math for certification, we've opted to lower the admission requirement to 3 credits rather than eliminate it so that our students may be qualified for certification nationally.

Admission Changes: There have been an increasing number of applicants who may have extensive training or experience but would need to take a number of additional courses to meet the prerequisites for possible entry. Some may even have additional degrees beyond the undergraduate degree and a number of years of relevant experience but cannot be accepted due to the required single pathway. The Faculty's goal is to respond to the Truth and Reconciliation Calls to Action in a concrete manner by encouraging Indigenous applicants to apply through this route. Also, in supporting Diversity, Inclusion and Equity, the faculty strives to promote this with the admissions process by providing an Expanded Admissions process for members of under-represented or disadvantaged individuals and communities. All students, regardless of entry pathway must meet the provincial requirements for certification.

Finally, the Faculty of Education has added one piece of supplemental documentation to the admissions process for the Bachelor of Education Program. The "Experience Profile" will serve as a tool by which to rank applicants for admission. This tool is being implemented in order to admit better qualified and more prepared pre-service teachers. Whereas the Bachelor of Education program has filled to capacity within two months of applications opening for the past number of years, the Faculty is prepared to make the process more rigorous. The Experience Profile is also a critical piece to the Expanded Admission process as the Faculty will require additional information to assess the candidate's eligibility.

Effective Term: May 2021 **Implications for Other Programs**: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Bachelor of Education Committee	February 23, 2021
Faculty/School Approval: Faculty of Education Council	February 26, 2021
Faculty Dean's Approval: Dr. Ron MacDonald, Dean of Education	February 26, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #10

Revision is for a: **Calendar Entry Change**

Faculty/School/Department: **Faculty of Education**

Department/Program(s)/Academic Regulations: **Bachelor of Education (fls)**

MOTION: To have the changes to the admission requirements and application process for the Bachelor of Education (français langue seconde) program be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
. (b) Intermediate\Senior (grades 7-12) • At least 6 credit hours in Math. Applicants must have appropriate coursework in two defined teachable areas as outlined below: • at least 42 credit hours of university coursework in a first teachable area as listed below; and • at least 18 credit hours of university coursework in a second teachable area as listed below, preferably in a teachable area different from the first. The following courses* relate to teachable areas: English (includes Communications, Creative Writing, Drama, Journalism, linguistic, Media Studies, and Theatre); Social Studies (includes Acadian Studies, Anthropology, Canadian Studies, Economics, Environmental Studies, Family Science, Geography, Global Studies, History, Indigenous Studies, Law, Philosophy, Political Science, Religious Studies, Sociology, and Diversity and Social Justice Studies); Science (includes Chemistry, Biology, Foods and Nutrition, Forestry, Geology/Earth Sciences, Health Sciences, Kinesiology, Oceanography, Environmental Science, Agriculture, and Physics); Mathematics (includes Mathematics, Physics,	. (b) Intermediate\Senior (grades 7-12) • At least 6 3 credit hours in Math. Applicants must have appropriate coursework in two defined teachable areas as outlined below: • at least 42 credit hours of university coursework in a first teachable area as listed below; and • at least 18 credit hours of university coursework in a second teachable area as listed below, preferably in a teachable area different from the first. The following courses* relate to teachable areas: **English** (includes Communications, Creative Writing, Drama, Journalism, linguistic, Media Studies, and Theatre); **Social Studies** (includes Acadian Studies, Anthropology, Canadian Studies, Economics, Environmental Studies, Family Science, Geography, Global Studies, History, Indigenous Studies, Law, Philosophy, Political Science, Religious Studies, Sociology, and Diversity and Social Justice Studies); **Science** (includes Chemistry, Biology, Foods and Nutrition, Forestry, Geology/Earth Sciences, Health Sciences, Kinesiology, Oceanography, Environmental Science, Agriculture, and Physics); **Mathematics** (includes Mathematics, Physics, Statistics,

Statistics, and Computer Science); French; and Music (offered through the Bachelor of Music Education program in the Faculty of Arts). *Courses not listed may be evaluated on a case-by-case basis. Please note: Preference will be given to: • Candidates who have completed a first degree in any relevant discipline from a French language university; • Candidates who have completed a major in French from an English university; • Candidates who have at least a minor in French studies at a recognized university; • Applicants who have significant professional and or life experiences in a French environment are also encouraged to apply. Successful applicants may be required to complete French language course requirements during the two year education program. (iii) Application Process Apply before February 15 to be considered for entrance scholarships. The program begins in May and applications will be accepted until the program has reached the full complement of students. Applications received after the full complement of students will only be considered if a seat becomes available or for the following academic year. Applicants are encouraged to apply early to be considered for the program. Follow UPEI's undergraduate application process for professional programs, and submit other requirements including: • UPEI Application Fee • Two copies of official transcripts are required from each post-secondary institution where you have taken a course. Original transcripts are required even if transfer credits were given by another institution. • Experience Profile	and Computer Science); **French**; and **Music** (offered through the Bachelor of Music Education program in the Faculty of Arts). *Courses not listed may be evaluated on a case-by-case basis. **Please note:** Preference will be given to: • Candidates who have completed a first degree in any relevant discipline from a French language university; • Candidates who have completed a major in French from an English university; • Candidates who have at least a minor in French studies at a recognized university; • Applicants who have significant professional and or life experiences in a French environment are also encouraged to apply. Successful applicants may be required to complete French language course requirements during the two year education program. **(iii) Application Process** ~~Apply before **February 15** to be considered for entrance scholarships. The program begins in May and applications will be accepted until the program has reached the full complement of students. Applications received after the full complement of students will only be considered if a seat becomes available or for the following academic year. Applicants are encouraged to apply early to be considered for the program.~~ Applications for the Bachelor of Education Program open on June 1st of each year and will close on September 15th. Applicants are normally notified of admission decisions in late November. **Expanded Admission entry:** The minimum entrance requirement is an undergraduate degree along with the minimum requirements to be certified as a licensed teacher by the province of PEI.

	• If a potential applicant does not meet the other established entry criteria to be considered for acceptance, but has a combination of study and life/work experience that may demonstrate the potential for a successful educational career, such individuals are encouraged to apply for Expanded Admission. • Additional consideration will be made for applicants who identify themselves as belonging to an FNMI (First Nations, Métis and Inuit) or an under-represented community. • The required Experience Profile plays an important role in the decision-making process by the Selection Committee. • Expanded Admission entry applicants being considered by the Selection Committee may be required to participate in an interview. Follow UPEI's undergraduate application process for professional programs, and submit other requirements including: • UPEI Application Fee • ~~Two~~ Copies of official transcripts are required from each post-secondary institution where you have taken a course. Original transcripts are required even if transfer credits were given by another institution. • The Experience Profile and official transcripts must be received by the Registrar's Office in order for an application to be assessed.

Rationale for Change

Reduction in math requirements: Students within the Intermediate/Senior stream take methods courses in the B.Ed program based on their major and minor areas of study. Any student who has Math as a teachable would have a minimum of 18 credit hours in the subject. After graduating from the B.Ed program, it would be unlikely for anyone who did not major or minor in Math to be assigned to teach Math at the Intermediate or Senior High level. Having two pre-requisite requirements and no Methods courses in Mathematics does not qualify a pre-service teacher to teach Mathematics. Nationwide, the current

standard of Math admission requirement for Intermediate/Senior streams of study sits at zero unless math would be one of their teachables. As some provinces require at least one math for certification, we've opted to lower the admission requirement to 3 credits rather than eliminate it so that our students may be qualified for certification nationally.

Admission Changes: There have been an increasing number of applicants who may have extensive training or experience but would need to take a number of additional courses to meet the prerequisites for possible entry. Some may even have additional degrees beyond the undergraduate degree and a number of years of relevant experience but cannot be accepted due to the required single pathway. The Faculty's goal is to respond to the Truth and Reconciliation Calls to Action in a concrete manner by encouraging Indigenous applicants to apply through this route. Also, in supporting Diversity, Inclusion and Equity, the faculty strives to promote this with the admissions process by providing an Expanded Admissions process for members of under-represented or disadvantaged individuals and communities. All students, regardless of entry pathway must meet the provincial requirements for certification.

Finally, the Faculty of Education has added one piece of supplemental documentation to the admissions process for the Bachelor of Education Program. The "Experience Profile" will serve as a tool by which to rank applicants for admission. This tool is being implemented in order to admit better qualified and more prepared pre-service teachers. Whereas the Bachelor of Education program has filled to capacity within two months of applications opening for the past number of years, the Faculty is prepared to make the process more rigorous. The Experience Profile is also a critical piece to the Expanded Admission process as the Faculty will require additional information to assess the candidate's eligibility.

Effective Term: May 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Bachelor of Education Committee	February 23, 2021
Faculty/School Approval: Faculty of Education Council	February 26, 2021
Faculty Dean's Approval: Dr. Ron MacDonald, Dean of Education	February 26, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: May/2020

SUMMARY OF FACULTY OF SCIENCE MOTION #'S 11-67

Faculty of Science

Department of Applied Human Sciences

- New Course Proposals for FN 3001, FN 4001, FN 4002
- Calendar Entry Changes relating to sections titled *'Integrated Dietetic Internship Admission Requirements', 'Integrated Dietetic Internship Continuance Requirements'.*

Masters of Applied Health Services Research

- Course Deletions for AHS 6002, AHS 6003
- New Course Proposals for AHS 6000, AHS 6011
- Course Name Change for AHS 6120
- Calendar Entry Changes relating to sections titled *'MAHSR Admissions'* and *'A) Program Requirements'*

Department of Biology

- Pre-Requisite Changes for BIO 3040, BIO 3110, BIO 3140,BIO 3230, BIO 3260, BIO 3270, BIO 3310, BIO 3350, BIO 3520, BIO 3820, BIO 3910, BIO 4440, BIO 4540, BIO 4720

School of Mathematical and Computational Sciences

- New Course Proposals for MCS 8000, MCS 8060, MCS 8090, MCS 8110, MCS 8120, MCS 8130, MCS 8240, MCS 8280, MCS 8310, MCS 8340, MCS 8410, MCS 8420, MCS 8440, MCS 8520, MCS 8530, MCS 8550, MCS 8560, MCS 8610, MCS 8620, MCS 8660, MCS 8680, MCS 8710, MCS 8720, MCS 8740, MCS 8810, MCS 8820, MCS 8900, MCS 8910, MCS 8920.
- Calendar Entry Changes relating to sections titled '*MSc Program*', '*Actuarial Science Major'* and '*Actuarial Science Major Pre-Professional Specialization*'

NEW COURSE PROPOSAL Motion #11

Faculty/School: **Science**

Department/Program(s): **Applied Human Sciences**

MOTION: That a new course entitled FN 3001 Integrated Dietetic Practice I be approved as proposed.

Course Number and Title	3001 Integrated Dietetic Practice I
Description	This course introduces students to dietetic practice, and provides opportunities for students to integrate theory and practice. Students complete one week of classroom experience followed by two separate work practica for a total of 9 weeks experience in select dietetic practice settings.
Cross-Listing	
Prerequisite/Co-Requisite	FN 3210, 3520, 3820, 3830, Admission to the UPEI Integrated Dietetic Internship Program.
Credit(s)	3
Notation	

This is: A Core Course **Grade Mode**: Pass/Fail

Anticipated Enrolment: 10 **Is there an Enrolment Cap**: Yes
If there is an enrolment limit, please explain. Only the 10 students accepted into the internship program may enrol in the course

Rationale for New Course: Interns have normally completed three non-credit practica courses: Diet 1000 is completed after third year and Diet 2000-1 and 2000-3 are completed after fourth year (from May-Aug; Sept-Dec). These have been historically referred to as 'levels' rather than non-credit courses. They will be replaced with 3-semester hour credit courses Foods and Nutrition 3001 Integrated Dietetic Practice, Foods and Nutrition 4001 Integrated Dietetic Practice II and Foods and Nutrition 4002 Integrated Dietetic Practice III. The rationale for this is as follows: it is now mandatory for international UPEI students to be enrolled in a credit course in order to qualify for the required co-op work permit. The current program design, with its non-credit 'practica' courses, is a barrier to their eligibility for a co-op work permit. Since the number of these students have increased significantly in recent years, it is important to ensure that these barriers are removed. This change will also benefit domestic students who are not from PEI and require financial assistance: these students are not eligible for student loans unless they are enrolled full time in a credit course at UPEI

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: Students who will register for Diet 2000-1 and 2000-2 May-December 2021 will complete their program as planned. Those who have been accepted into the internship Feb 2021 will enrol in FN 3001 in May (pending approval). If these changes are not passed in

time, students can register for Diet 1000 and will complete the original program.

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No
If yes, please explain.

Authorization	***Date:***
Departmental Approval: Dany MacDonald	February 10, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

LIBRARY RESOURCE REQUIREMENTS FOR NEW COURSE PROPOSALS

Foods and Nutrition 3001 Integrated Dietetic Practice I, Foods and Nutrition 4001 Integrated Dietetic Practice II and Foods and Nutrition 4002 Integrated Dietetic Practice III – these courses are a renumbering/renaming of a practicum that has been taught for many years and no new resources have been requested. The courses can be supported with existing content.

Library Resource Requirements *(to be completed by the liaison and/or collections librarian)*

Existing resources:

- Collections - Holdings, Subscriptions, Other
- Subscription Dependencies (in interdisciplinary packages)
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support

New resources needed to support this proposal:

- Capital Requirements *(other than new course-specific)*
- Collections:
  - Monographs
  - Subscriptions
  - Databases
  - Other
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
- Other One-Time or Ongoing Library expenses (e.g. software licenses)

Summary of additional budget allocation required:

- One-time: _____0_____ For each of _____ consecutive years
- Annual: _____
  - Per-year percentage increase in annual: ___0___

Does the budget allocation for library resources in this proposal meet the requirement?

Our existing holdings (as long as subscriptions are maintained) can support this course so no new budget allocation is required.

Date Received by Liaison/Collections Librarian	March 23, 2021
Name of Librarian to be Contacted for Questions	Keri McCaffrey
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	March 26, 2021

NEW COURSE PROPOSAL

Motion #12

Faculty/School: **Science**

Department/Program(s): **Applied Human Sciences**

MOTION: That a new course entitled FN 4001 Integrated Dietetic Practice II be approved as proposed.

Course Number and Title	4001 Integrated Dietetic Practice II
Description	Students continue to synthesize their knowledge, skills, and professional competence in dietetic practice settings. Emphasis is on more complex dietetic practice. Students complete 14-16 weeks full-time experience in select dietetic practice settings.
Cross-Listing	
Prerequisite/Co-Requisite	FN 3001
Credit(s)	3
Notation	

This is: A Core Course **Grade Mode**: Pass/Fail

Anticipated Enrolment: 10 **Is there an Enrolment Cap**: Yes
Only the 10 students accepted into the internship program may enrol in the course

Rationale for New Course: Interns have normally completed three non-credit practica courses: Diet 1000 is completed after third year and Diet 2000-1 and 2000-3 are completed after fourth year (from May-Aug; Sept-Dec). These have been historically referred to as 'levels' rather than non-credit courses. They will be replaced with 3-semester hour credit courses Foods and Nutrition 3001 Integrated Dietetic Practice, Foods and Nutrition 4001 Integrated Dietetic Practice II and Foods and Nutrition 4002 Integrated Dietetic Practice III. The rationale for this is as follows: it is now mandatory for international UPEI students to be enrolled in a credit course in order to qualify for the required co-op work permit. The current program design, with its non-credit 'practica' courses, is a barrier to their eligibility for a co-op work permit. Since the number of these students have increased significantly in recent years, it is important to ensure that these barriers are removed. This change will also benefit domestic students who are not from PEI and require financial assistance: these students are not eligible for student loans unless they are enrolled full time in a credit course at UPEI

Effective Term: FALL 2021 **Implications for Other Programs**: None

Impact on Students Currently Enrolled: Students who will register for Diet 2000-1 and 2000-2 May-December 2021 will complete their program as planned. Those who have been accepted into the internship Feb 2021 will enrol in FN 3001 in May (pending approval). If these changes are not passed in time, students can register for Diet 1000 and will complete the original program.

Resources Required: None

NEW COURSE PROPOSAL Motion #12

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Dany MacDonald	February 10, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

NEW COURSE PROPOSAL

Motion #13

Faculty/School: **Science**

Department/Program(s): **Applied Human Sciences**

MOTION: That a new course entitled FN 4002 Integrated Dietetic Practice III be approved as proposed.

Course Number and Title	4002 Integrated Dietetic Practice III
Description	This course is a continuation of FN 4001, and may involve supervised staff relief. Students complete 12-14 weeks full-time experience in select dietetic practice settings.
Cross-Listing	
Prerequisite/Co-Requisite	FN 4001
Credit(s)	3
Notation	

This is: A Core Course

Grade Mode: Pass/Fail

Anticipated Enrolment: 10

Is there an Enrolment Cap: Yes

Only the students accepted into the internship program may enrol in the course.

Rationale for New Course: Interns have normally completed three non-credit practica courses: Diet 1000 is completed after third year and Diet 2000-1 and 2000-3 are completed after fourth year (from May-Aug; Sept-Dec). These have been historically referred to as 'levels' rather than non-credit courses. They will be replaced with 3-semester hour credit courses Foods and Nutrition 3001 Integrated Dietetic Practice, Foods and Nutrition 4001 Integrated Dietetic Practice II and Foods and Nutrition 4002 Integrated Dietetic Practice III. The rationale for this is as follows: it is now mandatory for international UPEI students to be enrolled in a credit course in order to qualify for the required co-op work permit. The current program design, with its non-credit 'practica' courses, is a barrier to their eligibility for a co-op work permit. Since the number of these students have increased significantly in recent years, it is important to ensure that these barriers are removed. This change will also benefit domestic students who are not from PEI and require financial assistance: these students are not eligible for student loans unless they are enrolled full time in a credit course at UPEI.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: Students who will register for Diet 2000-1 and 2000-2 May-December 2021 will complete their program as planned. Those who have been accepted into the internship Feb 2021 will enrol in FN 3001 in May (pending approval). If these changes are not passed in time, students can register for Diet 1000 or 2001-1/2001-2 and will complete the original program.

Resources Required: None

NEW COURSE PROPOSAL Motion #13

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Dany MacDonald	February 10, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE

Motion #14

Revision is for a: **Calendar Entry Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Integrated Dietetic Internship**

MOTION: To have the change in the requirements for the Integrated Dietetic Internship Program implemented as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
Integrated Dietetic Internship Program This dietetic education program is an accredited program recognized by the Partnership for Dietetic Education and Practice (PDEP). Students majoring in Foods and Nutrition may apply for admission to the optional Integrated Dietetic Internship Program. The integrated approach to professional training enables students to build upon and apply theoretical knowledge gained from their academic program. On successful completion of the Program, students will have fulfilled the competencies required to reach entry-level professional dietetic competence as determined by the PDEP, and will be eligible to apply for admission to the dietetics profession. Internship levels and their results will be recorded on students' transcripts. Upon successful completion of both the accredited degree program and the required internship levels, students will be granted a university certificate attesting to their successful completion of the Integrated Dietetic Internship Program. ADMISSION REQUIREMENTS All students majoring in Foods and Nutrition who have achieved a minimum cumulative GPA of 3.0 with no Foods and Nutrition course below a GPA of 2.7, and have completed the following required courses will be eligible to apply for the program: Foods & Nutrition 1110 Introductory Foods Foods & Nutrition 2110 Introductory Nutrition I Foods & Nutrition 2120 Introductory Nutrition II Foods & Nutrition 2230 Determinants of Dietary Behaviour Foods & Nutrition 3210 Food Service Management Foods & Nutrition 3310 Research Methods	**Integrated Dietetic Internship Program** This dietetic education program is an accredited program recognized by the Partnership for Dietetic Education and Practice (PDEP). Students majoring in Foods and Nutrition may apply for admission to the optional Integrated Dietetic Internship Program. The integrated approach to professional training enables students to build upon and apply theoretical knowledge gained from their academic program. On successful completion of the Program, students will have fulfilled the competencies required to reach entry-level professional dietetic competence as determined by the PDEP, and will be eligible to apply for admission to the dietetics profession. Internship courses ~~levels~~ and their results will be recorded on students' transcripts. Upon successful completion of both the accredited degree program and the required internship courses ~~levels~~, students will be granted a university certificate attesting to their successful completion of the Integrated Dietetic Internship Program. ADMISSION REQUIREMENTS All students majoring in Foods and Nutrition who have achieved a minimum cumulative GPA of 3.0 with no Foods and Nutrition course below a GPA of 2.7, and have completed the following required courses will be eligible to apply for the program: Foods & Nutrition 1010 Nutrition Concepts and Controversies Foods & Nutrition 2110 Introductory Nutrition I Foods & Nutrition 2120 Introductory Nutrition II Foods & Nutrition 2230 Determinants of Dietary Behaviour Foods & Nutrition 2810 ~~1110~~ Introductory Foods

Foods & Nutrition 3510 Nutritional Assessment Foods & Nutrition 3830 Professional Practice in Dietetics Chemistry 1110 General Chemistry I Chemistry 1120 General Chemistry II Chemistry 2430 Organic Chemistry Biology 1220 Human Physiology Biology 1310 Introduction to Cell and Molecular Biology Interested candidates are encouraged to consult the Director of Internship early in their program to discuss admission and course scheduling. Students interested in pursuing this option are also encouraged to seek relevant paid or unpaid work experience in the summer preceding application. A formal application for admission to the Integrated Dietetic Internship Program is required. Application forms are available from the department. A selection panel will determine student admissibility based upon academic performance, paid and unpaid work experience, motivation and personal suitability. Students meeting the admission criteria will be ranked and the top candidates will be interviewed. By the first week of February, the Professional Practice Coordinator Dietetics will notify, in writing, all students interviewed as to the outcome of the process. Students accepted into the dietetic internship program must show evidence of all immunizations being up to date prior entering the program. As well, each student will be required to show proof of a completed criminal record check prior to the start date. **CONTINUANCE REQUIREMENTS** Once admitted to the program, students must continue in full-time enrolment between internship levels. An academic review of students' performance will take place at the end of each semester. Students are required to maintain a cumulative GPA of 3.0 with no Foods and Nutrition course below a GPA of 2.7. Students who fail to meet these standards or who fail a required course(s) will not be permitted to begin the next internship level until standards are met. Internship students must complete all of the regular requirements for a Bachelor of Science (Foods and Nutrition) degree. Foods and Nutrition 3210 (Food Service Systems Management), Foods and Nutrition 3830 (Professional Practice in Dietetics), Foods and Nutrition 4220 (Quantity Food Production), Foods and	Foods & Nutrition 3210 Food Service Management Foods & Nutrition 3310 Research Methods Foods & Nutrition 3510 Nutritional Assessment Foods & Nutrition 3830 Professional Practice in Dietetics Chemistry 1110 General Chemistry I Chemistry 1120 General Chemistry II Chemistry 2430 Organic Chemistry Biology 1220 Human Physiology Biology 1310 Introduction to Cell and Molecular Biology Interested candidates are encouraged to consult the Director of Internship early in their program to discuss admission and course scheduling. Students interested in pursuing this option are also encouraged to seek relevant paid or unpaid work experience in the summer preceding application. A formal application for admission to the Integrated Dietetic Internship Program is required. Application forms are available from the department. A selection panel will determine student admissibility based upon academic performance, paid and unpaid work experience, motivation and personal suitability. Students meeting the admission criteria will be ranked and the top candidates will be interviewed. By the first week of February, the Professional Practice Coordinator Dietetics will notify, in writing, all students interviewed as to the outcome of the process. Students accepted into the dietetic internship program must show evidence of all immunizations being up to date prior entering the program. As well, each student will be required to show proof of a completed criminal record check prior to the start date. **CONTINUANCE REQUIREMENTS** Once admitted to the program, students must continue in full-time enrolment between internship courses ~~levels~~. An academic review of students' performance will take place at the end of each semester. Students are required to maintain a cumulative GPA of 3.0 with no Foods and Nutrition course below a GPA of 2.7. Students who fail to meet these standards or who fail a required course(s) will not be permitted to begin the next internship course ~~level~~ until standards are met. Internship students must complete all of the regular requirements for a Bachelor of Science (Foods and Nutrition) degree. Foods and Nutrition 3210 (Food Service Systems Management), Foods and Nutrition

CALENDAR & CURRICULUM CHANGE

Motion #14

Nutrition 4310 (Evidence Based Practice in the Health Sciences), and Foods and Nutrition 4610 (Clinical Nutrition II) must be included within their degree program. In addition to the above requirements, students must successfully complete two internship levels. **INTERNSHIP SCHEDULE** Students must complete two internship levels in the Integrated Dietetic Internship Program. The first internship level DIET 1000 is scheduled in the spring and summer months between the third and fourth academic years. The second internship level DIET 2000 is completed following graduation from the degree program. The first internship level will include a one week professional practice course, followed by an eight week placement, for a total of 9 weeks. This will be followed by a second internship level of no less then 26 weeks, for a total of at least 35 weeks. Satisfactory fulfilment of the Integrated Dietetic Internship levels requires: 1. A satisfactory evaluation from the Preceptor at the placement site. 2. Completion of the minimum number of required competencies as indicated on the appropriate evaluation form. WITHDRAWAL CONDITIONS Students will be required to withdraw from the Integrated Dietetic Internship Program if: 1. They are dismissed from, resign, or fail to achieve the required competencies during the program, or 2. They do not achieve a passing grade in required courses or do not maintain the standards for nutrition courses and overall GPA necessary for continuance in the Integrated Dietetic Internship Program, or 3. They fail to abide by the policies and procedures set out by the Advisory Committee for the Integrated Dietetic Internship Program and/or those of the placement organization. Students who voluntarily withdraw from or who are required to withdraw from the Integrated Dietetic Internship Program may remain in and continue with the regular Foods and Nutrition majors program. **REGISTRATION AND FEES** Students are required to register for both internship	3710 (Lifespan Nutrition), Foods and Nutrition 3830 (Professional Practice in Dietetics), Foods and Nutrition 4220 (Quantity Food Production), Foods and Nutrition 4310 (Evidence Based Practice in the Health Sciences), and Foods and Nutrition 4610 (Clinical Nutrition II) must be included within their degree program. In addition to the above requirements, students must successfully complete three ~~two~~ internship courses ~~levels~~. **INTERNSHIP SCHEDULE** Students must complete three ~~two~~ internship courses ~~levels~~ in the Integrated Dietetic Internship Program. The first internship course FN 3001 ~~level DIET 1000~~ is scheduled in the spring and summer months between the third and fourth academic years. The second and third internship courses FN 4001 and 4002 ~~level DIET 2000 is~~ are completed following fourth year ~~graduation from the degree program~~. The first internship course ~~level~~ will include a one week professional practice course, followed by an eight week placement, for a total of 9 weeks. This will be followed by ~~a~~ second and third internship courses ~~level~~ of no less than 26 weeks, for a total of at least 35 weeks. Placements may be extended if an intern has not completed all competencies. Satisfactory fulfilment of the Integrated Dietetic Internship courses ~~levels~~ requires: 1. A satisfactory evaluation from the Preceptor at the placement site. 2. Completion of the minimum number of required competencies as indicated on the appropriate evaluation form. WITHDRAWAL CONDITIONS Students will be required to withdraw from the Integrated Dietetic Internship Program if: 1. They are dismissed from, resign, or fail to achieve the required competencies during the program, or 2. They do not achieve a passing grade in required courses or do not maintain the standards for nutrition courses and overall GPA necessary for continuance in the Integrated Dietetic Internship Program, or 3. They fail to abide by the policies and procedures set out by the Advisory Committee for the Integrated Dietetic Internship Program and/or those of the placement organization. Students who voluntarily withdraw from or who are

CALENDAR & CURRICULUM CHANGE

Motion #14

levels according to normal registration procedures. Internship levels will officially be designated on students' transcripts as pass or fail. Students pay for their internship levels as they are taken. Students accepted to the Integrated Dietetic Internship Program are required to pay an Internship Fee (see Calendar section on fees). This amount is to be paid to the Accounting Office prior to the start date for the specified internship level. Additional information on policies and procedures related to the Integrated Dietetic Internship Program are available from the Department.	required to withdraw from the Integrated Dietetic Internship Program may remain in and continue with the regular Foods and Nutrition majors program. **REGISTRATION AND FEES** Students are required to register for all three ~~both~~ internship courses (FN 3001, 4001, 4002) ~~levels~~ according to normal registration procedures. Internship courses ~~levels~~ will officially be designated on students' transcripts as pass or fail. Students pay for their internship courses ~~levels~~ as they are taken. Students accepted to the Integrated Dietetic Internship Program are required to pay an Internship Fee (see Calendar section on fees). This amount is to be paid to the Accounting Office prior to the start date for the specified internship course ~~level.~~ Additional information on policies and procedures related to the Integrated Dietetic Internship Program are available from the Department.

Rationale for Change: Changes reflect proposed new credit practica courses for the dietetic internship program

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Dany MacDonald	February 10, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Grad. Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

CALENDAR & CURRICULUM CHANGE — Motion #15

Revision is for a: **Course Deletion**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Master of Applied Health Services Research**

MOTION: To delete the course AHS 6002 Ethical Foundation of Applied Health Research.

AHS 6002 (formerly 6020) ETHICAL FOUNDATIONS OF APPLIED HEALTH RESEARCH This course will acquaint students with the ethical basis of health research, as well as the substantive issues that arise at the macro, meso, and micro levels in the design and conduct of research. A variety of approaches to ethical decision- making will be surveyed, with particular attention given to how various approaches might apply in the context of Atlantic Canada. Standard topics will be explored in this course, such as informed consent, privacy and confidentiality of health information, and conflicts of interest. Special attention will be given to issues of rural/urban split, respect for the integrity of communities, and the potential abuse of expert or professional authority. HOURS OF CREDIT: 3	~~AHS 6002 (formerly 6020) ETHICAL FOUNDATIONS OF APPLIED HEALTH RESEARCH~~ ~~This course will acquaint students with the ethical basis of health research, as well as the substantive issues that arise at the macro, meso, and micro levels in the design and conduct of research. A variety of approaches to ethical decision- making will be surveyed, with particular attention given to how various approaches might apply in the context of Atlantic Canada. Standard topics will be explored in this course, such as informed consent, privacy and confidentiality of health information, and conflicts of interest. Special attention will be given to issues of rural/urban split, respect for the integrity of communities, and the potential abuse of expert or professional authority.~~ ~~HOURS OF CREDIT: 3~~

Rationale for Change: Course material is now included in the new proposed course AHS 6000 Introduction to Health Services Research.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: Current students have already taken AHS 6002 as a required course. Incoming students (Fall 21) will take the new course AHS 6000 Introduction to Health Services Research in its place.

Authorization	***Date:***
Departmental Approval:	
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin,Dean of Science	February 17, 2021
Grad. Studies Dean's Approval: Rabin Bissessur	February 24, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

CALENDAR & CURRICULUM CHANGE Motion #16

Revision is for a: **Course Deletion**
Faculty/School/Department: **Science**
Department/Program(s)/Academic Regulations: **Master of Applied Health Services Research**
MOTION: To delete the course AHS 6003 Research & Evaluation Design and Methods.

AHS 6003 (formerly 6030) RESEARCH & EVALUATION DESIGN AND METHODS In this course, students will become familiar with the research process, with the basic aim of developing skills to critically evaluate the work of others and to understand possible approaches in the design of their own research projects. The initial emphasis in the course will be on formulating research questions and determining strategies that may be used to address a particular research theme. As the course unfolds, the approach will switch to understanding how various qualitative and quantitative research techniques may be used to address research questions that the students have posed. HOURS OF CREDIT: 3	~~AHS 6003 (formerly 6030) RESEARCH & EVALUATION DESIGN AND METHODS~~ ~~In this course, students will become familiar with the research process, with the basic aim of developing skills to critically evaluate the work of others and to understand possible approaches in the design of their own research projects. The initial emphasis in the course will be on formulating research questions and determining strategies that may be used to address a particular research theme. As the course unfolds, the approach will switch to understanding how various qualitative and quantitative research techniques may be used to address research questions that the students have posed.~~ ~~HOURS OF CREDIT: 3~~

Rationale for Change: Course material is now included the new proposed course AHS 6000 Introduction to Health Services Research; some is also covered in AHS 6009 Advanced Quantitative Methods.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: Current students have already taken AHS 6003 as a required course. Incoming students (Fall 21) will take the new course AHS 6000 Introduction to Health Services Research in its place.

Authorization	***Date:***
Departmental Approval:	
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin,Dean of Science	February 17, 2021
Grad. Studies Dean's Approval: Rabin Bissessur	February 24, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

NEW COURSE PROPOSAL Motion #17

Faculty/School: **Science**

Department/Program(s): **Master of Applied Health Services Research**

MOTION: That a new course entitled AHS 6000 Introduction to Health Services Research be approved as proposed.

Course Number and Title	AHS 6000 Introduction to Health Services Research
Description	This course provides students an introduction and overview of Applied Health Services Research. It provides an overview of what we mean by health and health services, describes the broad research paradigms, the role of health research ethics and how these approaches fit into decision making in health.
Cross-Listing	
Prerequisite/Co-Requisite	
Credit(s)	3
Notation	NOTE: Credit will not be allowed for AHS 6000 if a student has already received credit for AHS 6002 or AHS 6003.

This is: A Core Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 12

Is there an Enrolment Cap: No

Rationale for New Course: This course will address a gap in the program by introducing students to the area of health services research in the first semester of their program. It will incorporate material from two other courses which will be deleted: AHS 6003 Research & Evaluation Design & Methods and AHS 6002 Ethical Foundations of Applied Health Research. This will prepare students for subsequent courses in the program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: Students already enrolled will not be required to take this course, but may if they wish. They would have already taken AHS 6003 as a required course and may have also taken AHS 6002 (both are being deleted)

Resources Required: In terms of teaching resources, there are no new resources required; this will be taught as part of FT faculty teaching loads (see below). There are no additional library resources required since this course combines material from pre-existing courses (AHS 6002, 6003).

In offering this course will UPEI require facilities or staff at other institutions: Yes

If yes, please explain. The MAHSR program involves three other Atlantic universities: Memorial, Saint Mary's and University of New Brunswick. The four partnering universities share resources in terms of core

faculty. This course will be co-taught by Dr. Bill Montelpare (UPEI) and Dr. Rick Audas (MUN) as part of their teaching load.

Authorization	***Date:***
Departmental Approval:	
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin,Dean of Science	February 17, 2021
Grad. Studies Dean's Approval: Rabin Bissessur	February 24, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

AHS 6000 Introduction to Health Services Research

Library Resource Requirements *(to be completed by the liaison and/or collections librarian)*

Existing resources:

- Collections - Holdings, Subscriptions, Other
  - Books - Catalogue
    - a subject search of "public health" and "research" has 235 books, 203 of which are available online
    - a subject search of "health services research" shows 207 which 189 are accessible online
    - a subject search of "epidemiology" has 1094 holdings and 868 are available online
    - a subject search of "public health" and "ethics" shows 98 books with 97 of those accessible online
    - a subject search of "medical ethics" provides 1165 books and 957 are available online
    - a subject search of "public health" and "canada" shows 224 books with 124 being available online
  - Journals
    - We have access to 7937 Health & Medicine journals at UPEI
  - Databases
    - AHS databases
      - CAB Abstracts
      - Child Welfare Information Gateway
      - CINAHL
      - Cochrane Library
      - Health & Wellness Resource Center
      - Health Evidence
      - Health Reference Center Academic
      - PEDro: Physiotherapy Evidence Database
      - PEN Nutrition
      - PsycINFO
      - Public Health +
      - PubMed
      - SPORTDiscus with Full Text
    - Other potentially useful databases
      - Academic Search Complete
      - JSTOR Arts & Sciences I - VIII, Complement Collections and Life Sciences
      - SAGE Premier Collection
      - ScienceDirect
      - SocINDEX with Full Text
      - Wiley Online
      - Women's Studies International (EBSCOhost)
      - Academic OneFile
      - CANSIM - Canadian Socio-Economic Information (via CHASS)
- Subscription Dependencies (in interdisciplinary packages)

- The Library subscribes to interdisciplinary journal packages with Elsevier (ScienceDirect), Wiley, Springer, Oxford, Sage, Taylor and Francis, and Project Muse.
- The Library subscribes to interdisciplinary ebook packages with Ebsco, Proquest, JStor, Wiley, Cambridge, ScienceDirect, and Project Muse.

- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
  - Keri McCaffrey - Liaison Librarian for AHS
    - Available for in-class or virtual instruction and one-on-one appointments for research support

New resources needed to support this proposal:

- Capital Requirements *(other than new course-specific)*
- Collections:
  - Monographs
  - Subscriptions
  - Databases
  - Other
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
- Other One-Time or Ongoing Library expenses (e.g. software licenses)

Summary of additional budget allocation required:

- One-time: _____ For each of _____ consecutive years
- Annual: _____
  - Per-year percentage increase in annual: _____

Does the budget allocation for library resources in this proposal meet the requirement?

Our existing holdings (as long as subscriptions are maintained) can support this course so no new budget allocation is required.

Date Received by Liaison/Collections Librarian	February 18, 2021
Name of Librarian to be Contacted for Questions	Keri McCaffrey
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	February 19, 2021

NEW COURSE PROPOSAL

Motion #18

Faculty/School: **Science**

Department/Program(s): **Master of Applied Health Services Research**

MOTION: That a new course entitled AHS 6011 Indigenous Health be approved as proposed.

Course Number and Title	AHS 6011 Indigenous Health
Description	This course provides students with an introduction to the historical and contemporary forces affecting Indigenous health, as well as to experience the cultural teachings and ceremonies that define wellness among this marginalized community. The student will build an understanding of Indigenous models of health and healing, community wellness and cultural safety to promote equitable health care practice and policy as well as explore tools for "Allyship".
Cross-Listing	
Prerequisite/Co-Requisite	
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 12

Is there an Enrolment Cap: No

Rationale for New Course: This course will address an important diversity and inclusion gap in the MAHSR program. It will provide an introduction to the historical and contemporary forces affecting Indigenous health, as well as to experience the cultural teachings and ceremonies that define wellness among this marginalized community. It will enable students to employ innovative approaches in health services research by embracing alternative worldviews and the importance of inclusiveness in decision-making processes and environments.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: Students may take this as an elective if desired.

Resources Required: 1 sessional stipend/year

In offering this course will UPEI require facilities or staff at other institutions: Yes

If yes, please explain. The MAHSR program involves three other Atlantic universities: Memorial, Saint Mary's and University of New Brunswick. The four partnering universities share costs of any sessional stipends and this is included in the current UPEI MAHSR budget.

NEW COURSE PROPOSAL

Motion #18

Authorization	***Date:***
Departmental Approval:	
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin,Dean of Science	February 17, 2021
Grad. Studies Dean's Approval: Rabin Bissessur	February 24, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

AHS 6011 Indigenous Health

Library Resource Requirements *(to be completed by the liaison and/or collections librarian)*

Existing resources:

- Collections - Holdings, Subscriptions, Other
  - Books - Catalogue
    - a subject search of "indigenous peoples" and [keyword] 'health' limited to a publication date of after 2011 has 27 books all of which are available online
    - a subject search of "native peoples" and [keyword] health limited to a publication date of after 2011 shows 48 which 32 are accessible online
    - a subject search of "indigenous peoples and [keyword] 'community health' limited to a publication date of after 2011 has 22 books and 16 of which are available online
    - a subject search of "native peoples and [keyword] 'community health' limited to a publication date of after 2011 has 18 books all of which are accessible online
    - a keyword search of 'indigenous wellness' shows 600 holdings published after 2011 and 561 of those available online
    - a keyword search of 'aboriginal wellness' shows 138 holdings published after 2011 and all of those are available online
  - Journals
    - We have access to 7937 Health & Medicine journals at UPEI
  - Databases
    - AHS or Course Specific databases
      - iPortal (indigenous Studies Portal)
      - Native Health Database
      - America: History and Life (Canada and US history)
      - CAB Abstracts
      - Canadian Electronic Library
      - Child Welfare Information Gateway
      - CINAHL
      - Cochrane Library
      - Health & Wellness Resource Center
      - Health Evidence
      - Health Reference Center Academic
      - PEN Nutrition
      - PsycINFO
      - Public Health +
      - PubMed

- Other potentially useful databases
  - Academic Search Complete
  - JSTOR Arts & Sciences I - VIII, Complement Collections and Life Sciences
  - SAGE Premier Collection
  - ScienceDirect
  - SocINDEX with Full Text
  - Wiley Online
  - Women's Studies International (EBSCOhost)
  - Academic OneFile
  - CANSIM - Canadian Socio-Economic Information (via CHASS)
- Subscription Dependencies (in interdisciplinary packages)
  - The Library subscribes to interdisciplinary journal packages with Elsevier (ScienceDirect), Wiley, Springer, Oxford, Sage, Taylor and Francis, and Project Muse.
  - The Library subscribes to interdisciplinary ebook packages with Ebsco, Proquest, JStor, Wiley, Cambridge, ScienceDirect, and Project Muse.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
  - Keri McCaffrey - Liaison Librarian for AHS
    - Available for in-class or virtual instruction and one-on-one appointments for research support

New resources needed to support this proposal:

- Capital Requirements *(other than new course-specific)*
- Collections:
  - Monographs
  - Subscriptions
  - Databases
  - Other
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
- Other One-Time or Ongoing Library expenses (e.g. software licenses)

Summary of additional budget allocation required:

- One-time: _____ For each of _____ consecutive years
- Annual: _____
  - Per-year percentage increase in annual: _____

Does the budget allocation for library resources in this proposal meet the requirement?

Our existing holdings (as long as subscriptions are maintained) can support this course so no new budget allocation is required.

NEW COURSE PROPOSAL

Motion #18

Date Received by Liaison/Collections Librarian	February 18, 2021
Name of Librarian to be Contacted for Questions	Keri McCaffrey
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	February 22, 2021

CALENDAR & CURRICULUM CHANGE Motion #19

Revision is for a: **Course Description Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Faculty of Science**

MOTION: To have the change in course title, description and prerequisite for AHS 6120 Work Integrated Learning be approved as proposed.

AHS 6120 Work Integrated Learning Students may undertake a four-month research residency with a decision-making organization. The residency is designed to provide hands-on research and decision-making experience, and to develop an understanding of how knowledge is transferred between the academic community and decision-makers. PREREQUISITE: Admission to the Master of Applied Health Services Research program HOURS OF CREDIT: 3	AHS 6120- ~~Work Integrated Learning~~ Residency Students ~~may~~ undertake a ~~four month~~ 240 hour research residency with a decision-making organization. The residency is designed to provide hands-on research and decision-making experience, and to develop an understanding of how knowledge is transferred between the academic community and decision-makers. PREREQUISITE: AHS 6000 and AHS 6004 ~~Admission to the Master of Applied Health Services Research program~~ HOURS OF CREDIT: 3

Rationale for Change: Name change is to ensure consistency across the four universities offering the MAHSR program. The name 'Residency' is consistent with the strong health and medical focus of this program. Reduction of residency placement from four months to 240 hours will make it less challenging to secure lengthy residency placements and will allow students to complete the residency part time over three months (e.g. 20H/week X 12 weeks)

Effective Term: FALL 2021 **Implications for Other Programs:** No impact on other programs.

Impact on Students Currently Enrolled: Students who are already in the program will be able to take a shorter residency, which will increase the availability of placements.

Authorization	***Date:***
Departmental Approval:	
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin,Dean of Science	February 17, 2021
Grad. Studies Dean's Approval: Rabin Bissessur	February 24, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE

Motion #20

Revision is for a: **Calendar Entry Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Faculty of Science**

MOTION: To have changes to the admissions section of the calendar entry for the Master of Applied Health Services Research program approved as proposed.

Master of Applied Health Services Research (MAHSR) Candidates for admission to the Masters of Applied Health Services Research program must have demonstrated high academic standing and potential for self-directed, sustained research. Normally, the basic requirements are: i. a Bachelor's degree of four years or a Bachelor's with honours, or equivalent professional degree, from an approved university, with a minimum GPA of 3.0 or an average of 75% or higher in the last 20 courses; ii. two references. **APPLICATION FOR ADMISSION** All documents pertaining to application for admission are to be sent to the Office of the Registrar. Application deadline is March 1. **APPLICATION FORM** Application forms for admission can be completed on line for the Office of the Registrar at http://www.upei.ca/discovermore/apply with the appropriate fee and supporting documentation.	**Master of Applied Health Services Research (MAHSR)** Candidates for admission to the Masters of Applied Health Services Research program must have demonstrated high academic standing and potential for self-directed, sustained research. Normally, the basic requirements are: i. a Bachelor's degree of four years or a Bachelor's with honours, or equivalent professional degree, from an approved university, with a minimum GPA of 3.0 or an average of 75% or higher in the last 20 courses; ii. two references. iii. a statement of interest, including research interests **APPLICATION FOR ADMISSION** All documents pertaining to application for admission are to be sent to the Office of the Registrar. Application deadline is March 1. **APPLICATION FORM** Application forms for admission can be completed on line for the Office of the Registrar at http://www.upei.ca/discovermore/apply with the appropriate fee and supporting documentation.

Rationale for Change: UPEI has not required a statement of interest from applicants which would provide important information for the selection committee. This will make the admission process consistent with other universities participating in the MAHSR program.

Effective Term: FALL 2021 **Implications for Other Programs:** No impact on other programs.

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval:	
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin,Dean of Science	February 17, 2021
Grad. Studies Dean's Approval: Rabin Bissessur	February 24, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE Motion #21

Revision is for a: **Calendar Entry Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Master of Applied Health Services Research**

MOTION: To have the change in the calendar entry for the Master of Applied Health Services Research approved as proposed.

Master of Applied Health Services Research (MAHSR) This program is intended for students who are interested in pursuing a career in health research. The Master's Degree in Health Services Research is a collaborative venture of Memorial University of Newfoundland, the University of New Brunswick, St. Mary's University, and the University of Prince Edward Island, and is coordinated through the Atlantic Research Training Centre (ARTC). The degree program provides knowledge and skills necessary to tackle complex health policy issues and contribute to the future of health services in Atlantic Canada. **A) PROGRAM REQUIREMENTS** Students complete three compulsory courses and attend three themed workshops, three elective courses, and a thesis. Compulsory Courses AHS 6003 – Research & Evaluation Design and Methods AHS 6004 – Determinants of Health: Healthy Public Policy AHS 6008 – Advanced Qualitative Methods OR AHS 6009 – Advanced Quantitative Methods Three themed workshops (scheduled throughout the degree program) Elective Courses AHS 6001 – Canadian Health System AHS 6002 – Ethical Foundations of Applied Health Research AHS 6005 – Policy and Decision Making AHS 6007 – Knowledge Transfer and Research Uptake AHS 6110 – Directed Studies AHS 6120 – Work Integrated Learning Thesis AHS 6010 – Thesis	**Master of Applied Health Services Research (MAHSR)** This program is intended for students who are interested in pursuing a career in health research. The Master's Degree in Applied Health Services Research is a collaborative venture of Memorial University of Newfoundland, the University of New Brunswick, St. Mary's University, and the University of Prince Edward Island, and is coordinated through the Atlantic Research Training Centre (ARTC). The degree program provides knowledge and skills necessary to tackle complex health policy issues and contribute to the future of health services in Atlantic Canada. **A) PROGRAM REQUIREMENTS** Students complete three compulsory and two elective courses and a thesis, and attend ~~three themed~~ one workshops and approximately 12 seminars. ~~three elective courses, and a thesis.~~ Compulsory Courses ~~AHS 6003 – Research & Evaluation Design and Methods~~ AHS 6000- Introduction to Health Services Research AHS 6004 – Determinants of Health: Healthy Public Policy AHS 6008 – Advanced Qualitative Methods OR AHS 6009 – Advanced Quantitative Methods ~~Three~~ One themed workshop and approximately 12 seminars (scheduled throughout the degree program) Elective Courses AHS 6001 – Canadian Health System ~~AHS 6002 – Ethical Foundations of Applied Health Research~~ AHS 6005 – Policy and Decision Making AHS 6007 – Knowledge Transfer and Research Uptake AHS 6011-Indigenous Health AHS 6110 – Directed Studies AHS 6120 – ~~Work Integrated Learning~~ Residency Thesis AHS 6010 – Thesis

CALENDAR & CURRICULUM CHANGE — Motion #21

Rationale for Change: The change in the degree name to Applied Health Services Research to be consistent with the four participating universities offering the MAHSR program. Changes to the number of workshops and seminars reflects current practice across the four participating universities. Other changes reflect 1) the proposed reduction in the number of electives from three to two, for a total number of five rather than six courses 2) proposed course deletions, additions and course name changes associated with updating and streamlining the current MAHSR program as a more research centred program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: Current students have already taken AHS 6002 and will not be required to take AHS 6000.

Authorization	***Date:***
Departmental Approval:	
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin,Dean of Science	February 17, 2021
Grad. Studies Dean's Approval: Rabin Bissessur	February 24, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE Motion #22

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3040 Vertebrate Zoology.

*3040 VERTEBRATE ZOOLOGY This course focuses on the taxonomy and evolution of vertebrates. Coverage of taxonomic orders and families may include discussion of systematics, taxonomy, evolution, palaeontology, zoogeography, and unique morphological, physiological, ecological, and behavioural characteristics. The laboratory component is dedicated to learning basic vertebrate morphology and taxonomic relationships among and within vertebrate groups using preserved specimens and dissections. PREREQUISITE: Biology 2040. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week	*3040 VERTEBRATE ZOOLOGY This course focuses on the taxonomy and evolution of vertebrates. Coverage of taxonomic orders and families may include discussion of systematics, taxonomy, evolution, palaeontology, zoogeography, and unique morphological, physiological, ecological, and behavioural characteristics. The laboratory component is dedicated to learning basic vertebrate morphology and taxonomic relationships among and within vertebrate groups using preserved specimens and dissections. PREREQUISITE: Biology 1310, 1320 and 2040. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #23

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3110 Plants and People.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
*3110 PLANTS AND PEOPLE This course surveys in detail the major current uses of plants, their history, morphology, and chemistry. Laboratory periods consist of demonstrations of plant structures and products derived from plant sources, practical exercises, and field trips. PREREQUISITE: Biology 2020 Three hours lecture, three hours laboratory a week	*3110 PLANTS AND PEOPLE This course surveys in detail the major current uses of plants, their history, morphology, and chemistry. Laboratory periods consist of demonstrations of plant structures and products derived from plant sources, practical exercises, and field trips. PREREQUISITE: Biology 1310, 1320 and 2020 Three hours lecture, three hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

CALENDAR & CURRICULUM CHANGE

Motion #24

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3140 Plant Community Ecology.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
*3140 PLANT COMMUNITY ECOLOGY A study of algae, fungi and major plant groups such as bryophytes, vascular seedless and seed plants. Emphasis will be placed on identification of common species, plant taxonomy and ecology. PREREQUISITE: Biology 2220 Three hours lecture; three to four hours laboratory a week, some of which consist of field trips	*3140 PLANT COMMUNITY ECOLOGY A study of algae, fungi and major plant groups such as bryophytes, vascular seedless and seed plants. Emphasis will be placed on identification of common species, plant taxonomy and ecology. PREREQUISITE: Biology 1310, 1320 and 2220 Three hours lecture; three to four hours laboratory a week, some of which consist of field trips

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

CALENDAR & CURRICULUM CHANGE — Motion #25

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3230 Genetics II.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
*3230 GENETICS II The principles of genetics at a more advanced level are considered in the context of practical laboratory investigation, on-line genetic data resources, and examination of current scholarly literature. Laboratory work will be conducted with fruit flies (Drosophila) and yeast (Saccharomyces), and will include molecular biological techniques. PREREQUISITE: Biology 2230 Three hours lecture, three hours laboratory a week	*3230 GENETICS II The principles of genetics at a more advanced level are considered in the context of practical laboratory investigation, on-line genetic data resources, and examination of current scholarly literature. Laboratory work will be conducted with fruit flies (Drosophila) and yeast (Saccharomyces), and will include molecular biological techniques. PREREQUISITE: Biology 1310, 1320 and 2230 Three hours lecture, three hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

CALENDAR & CURRICULUM CHANGE — Motion #26

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3260 Introductory Physiology of Cells and Organisms.

*3260 INTRODUCTORY PHYSIOLOGY OF CELLS AND ORGANISMS This course introduces students to basic themes and concepts in physiology. Students explore mechanisms underlying regulatory processes in cells, and the ways organisms function. Topics include feedback systems, signalling, membrane potentials, muscle and nerve function, endocrine, cardiopulmonary and osmoregulatory form and function in animals, carbohydrate synthesis and transport in plants, and plant responses to stress. PREREQUISITES: Biology 2210 and six semester hours of core Biology courses at the 2000 level Three hours lecture, three hours laboratory a week	*3260 INTRODUCTORY PHYSIOLOGY OF CELLS AND ORGANISMS This course introduces students to basic themes and concepts in physiology. Students explore mechanisms underlying regulatory processes in cells, and the ways organisms function. Topics include feedback systems, signalling, membrane potentials, muscle and nerve function, endocrine, cardiopulmonary and osmoregulatory form and function in animals, carbohydrate synthesis and transport in plants, and plant responses to stress. PREREQUISITES: Biology 1310, 1320 and 2210 and six semester hours of core Biology courses at the 2000 level Three hours lecture, three hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #27

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3270 Field Coastal Ecology.

*3270 FIELD COASTAL ECOLOGY Field coastal ecology is an intensive field-oriented course designed to provide 3rd-4th year students of the Biology program with knowledge and experience surveying and monitoring the organisms and habitats best represented in coastal Prince Edward Island. Using a hands-on approach, students are expected to learn and apply the sampling protocols that are most useful to each type of habitat. Although the course will have a broad theoretical component (early daily lectures on community types and sampling design), its main focus will be on activities to be developed in the field and subsequently in the laboratory. These activities include sampling, processing, and identification or organisms collected in the most typical benthic habitats of the island. PREREQUISITES: Biology 2020, 2040 and 2220. Students registered in Bachelor of Wildlife Conservation Program may take this course after completion of Bio 1310 and Bio 2220. Four hours lecture, four hours laboratory/field trips per day for two weeks (summer intensive course)	*3270 FIELD COASTAL ECOLOGY Field coastal ecology is an intensive field-oriented course designed to provide 3rd-4th year students of the Biology program with knowledge and experience surveying and monitoring the organisms and habitats best represented in coastal Prince Edward Island. Using a hands-on approach, students are expected to learn and apply the sampling protocols that are most useful to each type of habitat. Although the course will have a broad theoretical component (early daily lectures on community types and sampling design), its main focus will be on activities to be developed in the field and subsequently in the laboratory. These activities include sampling, processing, and identification or organisms collected in the most typical benthic habitats of the island. PREREQUISITES: Biology 1310, 1320, 2020, 2040 and 2220. Students registered in Bachelor of Wildlife Conservation Program may take this course after completion of Bio 1310 and Bio 2220. Four hours lecture, four hours laboratory/field trips per day for two weeks (summer intensive course)

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE Motion #28

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3310 Research Methods and Communications in Biology.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
*3310 RESEARCH METHODS AND COMMUNICATIONS IN BIOLOGY This course is an introduction to research methods and the basic principles of scientific communication, as expressed in the Biological Sciences. Lectures, exercises and assignments focus on science writing, critical reading, the principles of study design, and the analysis, interpretation, and presentation of biological data. PREREQUISITES: Nine semester-hours of Biology courses at the 2000 level or above Three hours lecture, Two hours laboratory a week	*3310 RESEARCH METHODS AND COMMUNICATIONS IN BIOLOGY This course is an introduction to research methods and the basic principles of scientific communication, as expressed in the Biological Sciences. Lectures, exercises and assignments focus on science writing, critical reading, the principles of study design, and the analysis, interpretation, and presentation of biological data. PREREQUISITES: Biology 1310,1320 and ~~N~~nine semester-hours of Biology courses at the 2000 level or above Three hours lecture, Two hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #29

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3350 Animal Behaviour.

*3350 ANIMAL BEHAVIOUR This course explores various aspects of animal behaviour, primarily from an evolutionary perspective. Topics covered include the development and expression of behaviour, animal communication, predator-prey interactions, reproductive and parental strategies of males and females, and the application of an evolutionary approach to the study of human behaviour. Laboratories focus on how behavioural data are collected and interpreted. PREREQUISITES: Biology 2040 and 2220. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week	*3350 ANIMAL BEHAVIOUR This course explores various aspects of animal behaviour, primarily from an evolutionary perspective. Topics covered include the development and expression of behaviour, animal communication, predator-prey interactions, reproductive and parental strategies of males and females, and the application of an evolutionary approach to the study of human behaviour. Laboratories focus on how behavioural data are collected and interpreted. PREREQUISITES: Biology 1310, 1320, 2040 and 2220. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021 **Implications for Other Programs:** None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE

Motion #30

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3520 Molecular Biology Research Techniques.

*3520 MOLECULAR BIOLOGY RESEARCH TECHNIQUES This course introduces students to basic techniques in molecular biology and genomic science. Lectures will cover theoretical aspects of research in the biologic sciences, such as cloning, PCR, DNA sequence analysis, genomics, and proteomics. In laboratories, students will work on projects to learn current methodologies in molecular biology such as keeping laboratory notebooks, basic cloning, PCR, gel electrophoresis, use of sequence databases, and analysis of transcriptomics/proteomics datasets. PREREQUISITES: Biology 2210, 2230 or 2240 Two hours lecture, four hours lab per week	*3520 MOLECULAR BIOLOGY RESEARCH TECHNIQUES This course introduces students to basic techniques in molecular biology and genomic science. Lectures will cover theoretical aspects of research in the biologic sciences, such as cloning, PCR, DNA sequence analysis, genomics, and proteomics. In laboratories, students will work on projects to learn current methodologies in molecular biology such as keeping laboratory notebooks, basic cloning, PCR, gel electrophoresis, use of sequence databases, and analysis of transcriptomics/proteomics datasets. PREREQUISITES: Biology 1310, 1320 and Biology 2210, 2230 or 2240 Two hours lecture, four hours lab per week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #31

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3820 Evolutionary Biology.

*3820 EVOLUTIONARY BIOLOGY This course is designed to provide students with a better understanding of evolution and how it applies to other biology courses and to their lives in general. We first trace the rise of evolutionary thought, examining the evidence for different evolutionary processes. We then more closely examine the mechanisms that result in evolutionary change. Subsequently, we look at the history of life and examine topics such as speciation, great moments in evolution, human evolution and extinction. Lastly, we deal with the diverse areas of study that benefit from an understanding of evolution. PREREQUISITE: Biology 2220 or Biology 2230. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week	*3820 EVOLUTIONARY BIOLOGY This course is designed to provide students with a better understanding of evolution and how it applies to other biology courses and to their lives in general. We first trace the rise of evolutionary thought, examining the evidence for different evolutionary processes. We then more closely examine the mechanisms that result in evolutionary change. Subsequently, we look at the history of life and examine topics such as speciation, great moments in evolution, human evolution and extinction. Lastly, we deal with the diverse areas of study that benefit from an understanding of evolution. PREREQUISITE: Biology 1310, 1320 and Biology 2220 or Biology 2230. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE Motion #32

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 3910 Marine Biology.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
*3910 MARINE BIOLOGY An introduction to the principles of Marine Biology emphasizing marine environments and organisms of PEI and the Eastern Atlantic region. Laboratory periods will involve field and laboratory studies. PREREQUISITES: Biology 2020 and 2040. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week	*3910 MARINE BIOLOGY An introduction to the principles of Marine Biology emphasizing marine environments and organisms of PEI and the Eastern Atlantic region. Laboratory periods will involve field and laboratory studies. PREREQUISITES: Biology 1310, 1320, 2020 and 2040. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

CALENDAR & CURRICULUM CHANGE — Motion #33

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 4440 Investigative Plant Anatomy.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
*4440 INVESTIGATIVE PLANT ANATOMY In this course students examine the simple and complex tissues of plants throughout their life cycles. Basic and advanced concepts pertaining to microscopy are taught. Students prepare material for both light and scanning electron microscopy. Innovative techniques in microscopy and preparation of photographic plates suitable for publication are also covered. PREREQUISITE: Biology 2020 Two hours lecture, four hours laboratory a week	*4440 INVESTIGATIVE PLANT ANATOMY In this course students examine the simple and complex tissues of plants throughout their life cycles. Basic and advanced concepts pertaining to microscopy are taught. Students prepare material for both light and scanning electron microscopy. Innovative techniques in microscopy and preparation of photographic plates suitable for publication are also covered. PREREQUISITE: Biology 1310, 1320 and 2020 Two hours lecture, four hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

CALENDAR & CURRICULUM CHANGE Motion #34

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 4540 Biodiversity and Conservation Biology.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
*4540 BIODIVERSITY AND CONSERVATION BIOLOGY This course examines fundamental concepts, ideas, and approaches used in conservation biology. Different philosophies and perspectives on setting priorities for preserving and man- aging biodiversity are also discussed. PREREQUISITE: Biology 2220. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week	*4540 BIODIVERSITY AND CONSERVATION BIOLOGY This course examines fundamental concepts, ideas, and approaches used in conservation biology. Different philosophies and perspectives on setting priorities for preserving and man- aging biodiversity are also discussed. PREREQUISITE: Biology 1310, 1320 and 2220. Students registered in the Bachelor of Wildlife Conservation Program may take this course after completion of Biology 1310 and Biology 2220. Three hours lecture, three hours laboratory a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021 **Implications for Other Programs:** None

Impact on Students Currently Enrolled: None

Authorization	*Date:*
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #35

Revision is for a: **Pre-requisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **Biology Department**

MOTION: To approve the change in prerequisites as proposed for Biology 4720 Biology of Cancer and Other Diseases.

*4720 BIOLOGY OF CANCER AND OTHER DISEASES This course presents the basic principles of pathobiology with emphasis on specific candidate human diseases. The focus of the course is on aspects of the basic biochemistry and cell biology associated with certain disease paradigms. The majority of this course will focus on the biology of cancer. The biology of heart disease, Alzheimer's disease, diabetes, and AIDS, as well as, other current topical disease paradigms will be presented. Cross-level listed with Human Biology 8720. PREREQUISITE: Biology 2060 and Biology 2210 Three hours lecture a week	*4720 BIOLOGY OF CANCER AND OTHER DISEASES This course presents the basic principles of pathobiology with emphasis on specific candidate human diseases. The focus of the course is on aspects of the basic biochemistry and cell biology associated with certain disease paradigms. The majority of this course will focus on the biology of cancer. The biology of heart disease, Alzheimer's disease, diabetes, and AIDS, as well as, other current topical disease paradigms will be presented. Cross-level listed with Human Biology 8720. PREREQUISITE: Biology 1310, 1320, 2060 and ~~Biology~~ 2210 Three hours lecture a week

Rationale for Change: To provide clarity - Bio 1310-1320 are required for entry into all Biology courses at the 3000 and 4000 level.

Effective Term: FALL 2021 **Implications for Other Programs**: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Kevin Teather, Chair of Biology Dept.	February 24, 2021
Faculty/School Approval: Science Council	February 26, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 26, 2021
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE

Motion #36

Faculty/School: **Science**

Department/Program(s): **School of Mathematical and Computational Sciences**

MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8000 Thesis
Description	Registration of thesis
Cross-Listing	None
Prerequisite/Co-Requisite	Admission to MSc program in the Mathematical and Computational Sciences
Credit(s)	NOTE: No credit, but registration required.
Notation	

This is: A Core Course

Grade Mode: Pass/Fail

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

Rationale for New Course: Thesis requirement for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE Motion #36

LIBRARY RESOURCE REQUIREMENTS FOR NEW COURSE PROPOSALS IN THE SCHOOL OF MATHEMATICAL AND COMPUTATIONAL SCIENCES

MCS 8000, 8060, 8090, 8110, 8120, 8130, 8240, 8280, 8310, 8340, 8410, 8420, 8440, 8520, 8530, 8550, 8560, 8610, 8620, 8660, 8680, 8710, 8720, 8740, 8810, 8820, 8900, 8910, 8920

Library Resource Requirements *(to be completed by the liaison and/or collections librarian)*

Existing resources:

- Collections - Holdings, Subscriptions, Other
- Subscription Dependencies (in interdisciplinary packages)
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support

New resources needed to support this proposal:

- Capital Requirements *(other than new course-specific)*
- Collections:
  - Monographs
  - Subscriptions
  - Databases
  - Other
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
- Other One-Time or Ongoing Library expenses (e.g. software licenses)

Summary of additional budget allocation required:

- One-time: _____ For each of _____ consecutive years
- Annual: $3000
  - Per-year percentage increase in annual: 5%

Does the budget allocation for library resources in this proposal meet the requirement?

Following discussions with the Interim, Associate Dean for the School of Mathematical and Computational Sciences agreed that an initial annual budget of $3,000 with an annual 5% increase would accommodate the current needs of the proposed program.

Date Received by Liaison/Collections Librarian	January 26, 2021
Name of Librarian to be Contacted for Questions	Donald Moses / Rosie Le Faive
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	February 17, 2021

Form Version: September 2020

NEW COURSE PROPOSAL Motion #37

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8060 Cloud Computing
Description	This course examines: the critical technology trends that are enabling cloud computing, the architecture and the design of existing deployments, the services and the applications they offer, and the challenges that need to be addressed to help cloud computing to reach its full potential. The format of this course will be a mix of lectures, seminar-style discussions, and student presentations. Graduate students are required to complete an additional project and report. This will be defined in consultation with the instructor to ensure the scope and assessment are sufficiently advanced to warrant graduate level credit. This course is cross-level listed with CS 4060. Credit cannot be received for both MCS 8060 and CS 4060.
Cross-Level Listing	CS 4060
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

NEW COURSE PROPOSAL

Motion #38

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed

Course Number and Title	MCS 8090 Advanced Topics in Financial Mathematics
Description	This course explores continuous-time models in financial mathematics. Topics include Brownian motion, geometric Brownian motion, quadratic variation, Riemann-Stieltjes and Ito integrals, Ito's formula, replication and risk-neutral pricing under the Black-Scholes economy, Black-Scholes partial differential equation, delta-hedging for multi asset derivatives, and valuation of cross currency options. Graduate students will be required to learn and implement additional computational techniques such as Monte Carlo or numerical solutions of partial differential equations resulting from option pricing problems. Higher expectations for graduate students will be established for assessments, including a graduate level project involving computational techniques. This course is cross-level listed with AMS 4090. Credit cannot be received for both MCS 8090 and AMS 4090.
Cross-Level Listing	AMS 4090
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

NEW COURSE PROPOSAL Motion #39

Faculty/School: **Science**

Department/Program(s): **School of Mathematical and Computational Sciences**

MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8110 Advanced Studies in Artificial Intelligence and Automated Reasoning
Description	This course introduces general problem-solving methods associated with automated reasoning and simulated intelligence. Topics include problem abstraction, state space heuristic search theory, pathfinding, flocking behaviour, knowledge representation, propositional logic, reasoning with uncertainty, machine learning and connectionism. Graduate students are required to complete an additional project and report. This will be defined in consultation with the instructor to ensure the scope and assessment are sufficiently advanced to warrant graduate level credit. This course is cross-level listed with CS 4110. Credit cannot be received for both MCS 8110 and CS 4110.
Cross-Level Listing	CS 4110
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL Motion #40

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8120 Machine Learning and Data Mining
Description	Machine learning is the study of mechanisms for acquiring knowledge from large data sets. This course examines techniques for detecting patterns in sets of uncategorized data. Supervised and unsupervised learning techniques are studied, with particular application to real-world data. A graduate-level project and report will be required with a focus on neural networks and an application of deep learning to a real world domain. This course is cross-level listed with CS 4120. Credit cannot be received for both MCS 8120 and CS 4120.
Cross-Level Listing	CS 4120
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course **Grade Mode**: Numeric (Standard)

Anticipated Enrolment: 5 **Is there an Enrolment Cap**: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

NEW COURSE PROPOSAL

Motion #41

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8130 User Experience Research Methods
Description	This course will provide students with the grounding in human computer interaction/user experience research, providing the skills for both academic research and for careers in user research and interaction design and evaluation. The aim of the course is to provide the students with a grounding in the principles and practice of the various research methods including: qualitative methods including content analysis, thematic analysis, grounded theory and observational studies; quantitative methods including experimental design and application of statistics to user data; and research governance including the ethical conduct of studies with the need for good data governance.
Cross-Listing	None
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	*Date:*
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #42

Faculty/School: **Science**

Department/Program(s): **School of Mathematical and Computational Sciences**

MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8240 Experimental Design
Description	This course builds upon the basis of inference to include statistical techniques commonly used in experimental studies. Students will study topics such as analysis of variance models, hypothesis testing in ANOVA models, randomization, and blocking techniques. Graduate students are required to complete an additional project and report. This will be defined in consultation with the instructor to ensure the scope and assessment are sufficiently advanced to warrant graduate level credit. This course is cross-level listed with Stat 4240. Credit cannot be received for both MCS 8240 and Stat 4240.
Cross-Level Listing	STAT 4240
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #43

Faculty/School: **Science**

Department/Program(s): **School of Mathematical and Computational Sciences**

MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8280 Generalized Linear Models
Description	This course covers the theory, methodology and applications of generalized linear models. Topics include logistic regression, probit regression, binomial regression, Poisson regression, overdispersion, quasi-likelihood, and the exponential family. Students will be required to use standard statistical software to analyze binary and count data. Graduate students will be required to demonstrate mastery of model building and assessment, parameter estimation, inference, and interpretation of findings from generalized linear models in a variety of settings inspired by real-world problems. This course is cross-level listed with STAT 4280. Credit cannot be received for both MCS 8280 and STAT 4280.
Cross-Level Listing	STAT 4280
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	*Date:*
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #44

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8310 Statistical Simulation
Description	This course introduces statistical simulation, and its use as a tool to investigate stochastic phenomena and statistical methods. Topics include the building and validation of stochastic simulation models useful in computing, operations research, engineering and science; related design and estimation problems; variance reduction; and the implementation and the analysis of the results. Graduate students will be required to understand each topic to a greater depth than their undergraduate classmates and will additionally be expected to gain knowledge of Markov Chain Monte Carlo methods. These differentiated expectations will be assessed throughout the term, including a graduate level project on the simulation and applications of Brownian Motion, Stochastic Differential Equations, Markov Chain Monte Carlo methods or other advanced stochastic models or techniques. This course is cross-level listed with STAT 4110. Credit cannot be received for both MCS 8310 and STAT 4110.
Cross-Level Listing	STAT 4110
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL Motion #45

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8340 Advanced Topics in Time Series
Description	This course includes topics from Time Series Econometrics, including Maximum Likelihood and Least Squares Estimation of ARIMA Models and GARCH Models, Wavelets and Financial Models. Non-stationary Time Series, multivariate Time Series and panel cointegration analysis are also covered. Graduate students must demonstrate their deep understanding of the course material by completing a project in which they develop and assess an appropriate model capable of performing forecasting in a real-world setting. This course is cross- level listed with STAT 4340. Credit cannot be received for both MCS 8340 and STAT 4340.
Cross-Level Listing	STAT 4340
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course **Grade Mode**: Numeric (Standard)

Anticipated Enrolment: 5 **Is there an Enrolment Cap**: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021 **Implications for Other Programs**: None

Impact on Students Currently Enrolled: None **Resources Required**: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #46

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8410 Stochastic Processes
Description	This course is an introduction to the branch of probability theory that deals with the analysis of systems that evolve over time. Topics include random walks, Markov chains, Poisson processes, continuous time Markov chains, birth and death processes, exponential models, and applications of Markov chains. Graduate students will be expected to acquire additional knowledge on discrete time martingales and their applications. In all course assessments, the graduate students will be held to a higher standard, including a graduate level project on Hidden Markov Chains, Brownian Motion, convergence of probability measures or other advanced topics. This course is cross-level listed with STAT 4410. Credit cannot be received for both MCS 8410 and STAT 4410.
Cross-Level Listing	STAT 4410
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	*Date:*
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #47

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8420 Cryptography and Codes
Description	This course is a study of encoding and encryption algorithms, and their applications. Linearcodes, error detection, and error-correcting codes are introduced. Symmetric and asymmetric key encryption algorithms are studied and analyzed. Other topics include confidentiality, message authentication, public and private keys, digital signatures, and security. Graduate students will have more challenging assessments than undergraduates to reflect the higher level of mastery of the material that they are expected to achieve. This course is cross-level listed with MCS 4420. Credit cannot be received for both MCS 8420 and MCS 4420.
Cross-Level Listing	MCS 4420
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #48

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8440 Data Science
Description	Data science is an interdisciplinary and emerging field where techniques from several fields are used to solve problems using data. This course provides an overview and hands-on training in data science, where students will learn to combine tools and techniques from computer science, statistics, data visualization and the social sciences. The course will focus on: 1) the process of moving from data collection to product, 2) tools for preparing, manipulating and analyzing data sets (big and small), 3) statistical modelling and machine learning, and 4) real world challenges. Graduate students are required to complete an additional project and report. This will be defined in consultation with the instructor to ensure the scope and assessment are sufficiently advanced to warrant graduate level credit. This course is cross-level listed with CS 4440. Credit cannot be received for both MCS 8440 and CS 4440.
Cross-Level Listing	CS 4440
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

NEW COURSE PROPOSAL

Motion #49

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8520 Measure Theory and Integration
Description	A first course in measure theory, covering measure as a generalization of length, outer measure, sigma-algebras, measurability, construction of measures, Lebesgue measure on the real line, measurable functions and the Lebesgue integral. Additional topics may include convergence theorems, product measures and Fubini Theorem. Graduate students will have more challenging assessments than undergraduates to reflect the higher level of mastery of the material that they are expected to achieve. This course is cross-level listed with MATH 4520. Credit cannot be received for both MCS 8520 and MATH 4520.
Cross-Level Listing	MATH 4520
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	*Date:*
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #50

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8530 Functional Analysis
Description	This first course in functional analysis covers topics like: metric spaces, Banach spaces, function spaces, Hilbert spaces, generalized Fourier series and linear operators. Graduate students will have more challenging assessments than undergraduates to reflect the higher level of mastery of the material that they are expected to achieve. This course is cross-level listed with MATH 4530. Credit cannot be received for both MCS 8530 and MATH 4530.
Cross-Level Listing	MATH 4530
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No .

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #51

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8550 Data Analysis and Inference
Description	This course is an introduction to data analysis with a focus on regression. Topics include: initial examination of data, correlation, and simple and multiple regression models using least squares. Inference for regression parameters, confidence and prediction intervals, diagnostics and remedial measures interactions and dummy variables, variable selection, least squares estimation and inference for non-linear regression will also be discussed. Graduate students will be expected to demonstrate a deep understanding of the course concepts by connecting these topics to ongoing research and developing, assessing, and drawing inference from appropriate models to answer open questions through the analysis of complex data sets. This course is cross- level listed with STAT 4550. Credit cannot be received for both MCS 8550 and STAT 4550.
Cross-Level Listing	STAT 4550
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	*Date:*
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #52

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8560 Advanced Loss Models
Description	This course is a study of the mathematics of survival models and includes some examples of parametric survival models. Topics include: tabular survival models, estimates from complete and incomplete data samples, parametric survival models, and determining the optimal parameters. Maximum likelihood estimators, derivation and properties, product limit estimators, Kaplan-Meier and Nelson-Aalen, credibility theory: limited fluctuation; Bayesian; Buhlmann; Buhlmann-Straub; empirical Bayes parameter estimation; statistical inference for loss models; maximum likelihood estimation; the effect of policy modifications; and model selection will also be discussed. Students will be expected to develop a thorough understanding through additional case study at a graduate level. This course is cross-level listed with AMS 4550. Credit cannot be received for both MCS 8560 and AMS 4550.
Cross-Level Listing	AMS 4550
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #53

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8610 Advanced Predictive Analytics
Description	This course provides students with the ability to employ selected analytic techniques to solve business problems and effectively communicate the solution. A thorough knowledge of probability, mathematical statistics, selected models and methods for analyzing data is assumed. This course covers topics such as predictive model building process in R; problem definition, data visualization, exploratory data analysis, identification of data issues and resolution, and initial model selection; model selection; model validation; communication of results and uncertainties; sample project and report. A particular focus will be placed on communication of technical results for business applications, data exploration and feature selection, and model selection and construction. Graduate students are required to complete an additional project and report. This will be defined in consultation with the instructor to ensure the scope and assessment are sufficiently advanced to warrant graduate level credit. This course is cross-level listed with AMS 4610. Credit cannot be received for both MCS 8610 and AMS 4610.
Cross-Level Listing	AMS 4610
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

NEW COURSE PROPOSAL

Motion #54

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8620 Ring and Field Theory
Description	This course covers advanced algebraic structures. Topics including: polynomial rings, matrix rings, ideals and homomorphisms, quotient rings, Euclidean domains, principal ideal domains, unique factorization domains, introduction to module theory, basic theory of field extensions, splitting fields and algebraic closures, finite fields, introduction to Galois theory. Graduate students will have more challenging assessments than undergraduates to reflect the higher level of mastery of the material that they are expected to achieve. This course is cross-level listed with MATH 4620. Credit cannot be received for both MCS 8620 and MATH 4620.
Cross-Level Listing	MATH 4620
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL Motion #55

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8660 Data Visualization and Mining
Description	This course introduces students to the statistical methods involved in visualization of high dimensional data, including interactive methods directed at exploration and assessment of structure and dependencies in data. Topics include methods for finding groups in data including cluster analysis, dimension reduction methods including multi-dimensional scaling, pattern recognition, and smoothing techniques. Graduate students are required to complete an additional project and report. This will be defined in consultation with the instructor to ensure the scope and assessment are sufficiently advanced to warrant graduate level credit. This course is cross-level listed with STAT 4660. Credit cannot be received for both MCS 8660 and STAT 4660.
Cross-Level Listing	STAT 4660
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #56

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8680 Nonlinear Optimization
Description	This course is a study of unconstrained optimization, optimality conditions (necessary, sufficient and Karush-Kuhn-Tucker), penalty functions, convex functions, and convex programming. Upon completion, students should be able to formulate a variety of advanced continuous optimization problems; determine the appropriate solution technique or algorithm for a given problem; implement relevant algorithms and analyze their effectiveness. In addition, students should demonstrate a deep understanding of the mathematical theory behind algorithms and other solution techniques. This course is cross-level listed with AMS 4680. Credit cannot be received for both MCS 8680 and AMS 4680.
Cross-Level Listing	AMS 4680
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #57

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8710 Partial Differential Equations
Description	This course is an introduction to the theory and application of partial differential equations. Topics include: first-order equations and characteristic curves; classification of second-order equations as parabolic, hyperbolic or elliptic; Laplace, wave and diffusion equations, and their physical origins; solution using Fourier series; and separation of variables. Graduate students are required to complete an additional project and report. This will be defined in consultation with the instructor to ensure the scope and assessment are sufficiently advanced to warrant graduate level credit. This course is cross-level listed with MATH 4710. Credit cannot be received for both MCS 8710 and MATH 4710.
Cross-Level Listing	MATH 4710
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #58

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8720 Dynamical Systems
Description	This course is a study of the long-term qualitative behaviour of solutions of systems of differential or difference equations. Topics include: non-linear systems, linearization, numerical and graphical methods, equilibria, phase space, stability, bifurcations, strange attractors, and chaos. Applications to physics, biology and other sciences are studied. Graduate students are required to complete an additional project and report. This will be defined in consultation with the instructor to ensure the scope and assessment are sufficiently advanced to warrant graduate level credit. This course is cross-level listed with MATH 4720. Credit cannot be received for both MCS 8720 and MATH 4720.
Cross-Level Listing	MATH 4720
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #59

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8740 Multivariate Analysis
Description	This course deals with the statistics of observation and analysis of more than one output variable. Topics include estimation and hypothesis testing for multivariate normal data, principal component analysis and factor analysis, discriminant analysis, cluster analysis, and correspondence analysis. Graduate students will be required to demonstrate mastery of the course topics through appropriate visualization, analysis, and interpretation of complex data sets selected to answer novel questions. This course is cross-level listed with Stat 4740. Credit cannot be received for both MCS 8740 and Stat 4740.
Cross-Level Listing	STAT 4740
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #60

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8810 Software Engineering
Description	This course emphasizes the theory, methods and tools employed in developing medium to large-scale software which is usable, efficient, maintainable, and dependable. Project management is a major focus. Topics include traditional and agile process models, project costing, scheduling, team organization and management, requirements modelling/specification, software design, software verification and testing, and re-engineering. Graduate students are required to complete an additional project and report. This will be defined in consultation with the instructor to ensure the scope and assessment are sufficiently advanced to warrant graduate level credit. This course is cross-level listed with CS 4810. Credit cannot be received for both MCS 8810 and CS 4810.
Cross-Level Listing	CS 4810
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	*Date:*
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	

Form Version: September 2020

NEW COURSE PROPOSAL Motion #61

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8820 Advanced Topics in the Mathematical and Computational Sciences
Description	This course covers current advances and advanced topics in the Mathematical and Computational Sciences and is a thorough study of specific topics. It is offered to graduate students at the discretion of the School and covers areas of specialization not covered in other graduate courses. The course discusses recent advances in an area that is of interest to the students, but not directly related to the students' thesis research.
Cross-Listing	None
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 5

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

NEW COURSE PROPOSAL

Motion #62

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8900 Seminar in the Mathematical and Computational Sciences
Description	Weekly seminars on a broad array of topics in the Mathematical and Computational Sciences, as well as instructional seminars on writing and presentation skills. Students are required to give semi-annual progress reports on their research project. Students are also required to research and present a seminar on a topic within their discipline, but unrelated to their own research project. Students are expected to participate in question-and-answer sessions that follow, and contribute to the general discourse. Students must register for this course each semester and receive a grade of "In Progress" until completion of their MSc program.
Cross-Listing	None
Prerequisite/Co-Requisite	Admission to MSc program in the Mathematical and Computational Sciences
Credit(s)	3
Notation	

This is: A Core Course

Grade Mode: Pass/Fail

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #63

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8910 Directed Studies in Mathematical and Computational Sciences
Description	This course is a thorough study of a selected topic in the Mathematical and Computational Sciences. Entry to the course, and the course outline, are subject to the approval of the Supervisory Committee, and the Dean of Science. The course may include directed reading, directed research, and discussion with the instructor. The student may be required to prepare a written report and/or present a seminar in the area. Topics must not be directly related to the student's research project, although they may be in the same discipline.
Cross-Listing	None
Prerequisite/Co-Requisite	Admission to a graduate program in Science
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 2

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No.

Authorization	*Date:*
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Noła Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #64

Faculty/School: **Science**
Department/Program(s): **School of Mathematical and Computational Sciences**
MOTION: That the following graduate course in the Mathematical and Computational Sciences be approved as proposed.

Course Number and Title	MCS 8920 Advanced Mathematical and Computational Modelling
Description	Students will work in groups to formulate mathematical representations of real-world problems; solve the problems using a variety of advanced techniques from mathematics, statistics and computer science; implement and test their solution using the appropriate software; collect and analyze relevant data. Problems may come from science, business, or other areas depending on class interest. Students will give regular written and oral updates on their progress. A final report and presentation will include a review of relevant literature, analysis and solution of the assigned problems, and appropriate data visualizations.
Cross-Listing	None
Prerequisite/Co-Requisite	Admission to MSc program in the Mathematical and Computational Sciences
Credit(s)	3
Notation	

This is: A Core Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 6

Is there an Enrolment Cap: No

Rationale for New Course: Graduate course offering for the new Mathematical and Computational Sciences stream of the MSc program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

In offering this course will UPEI require facilities or staff at other institutions: No.

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE Motion #65

Revision is for a: **Calendar Entry Change**
Faculty/School/Department: **Graduate Studies**
Department/Program(s)/Academic Regulations: **MSc Program (Faculty of Science)**

MOTION: That the changes to the MSc Program (Faculty of Science) be adopted as proposed to add a Specialization in the Mathematical and Computational Sciences.

MSc Program (Faculty of Science) The graduate students will register in one of the designated areas of specialization listed below: • Molecular and Macromolecular Sciences (MMS) • Environmental Sciences (ESC) • Human Biology (HB) • Sustainable Design Engineering (SDE) Students are required to take a minimum of three graduate level courses, all of which are to be regarded as substantive. A Seminar course (MMS 8900 or ESC 8900 or HB 8900 or SDE 8900) is required. Students may take only one Directed Studies course (MMS 8810 or ESC 8810 or HB 8810 or SDE 8810 or alternatively, VBS 8810 or 8820, VPM 8810 or 8820, VCA 8810 or 8820, VHM 8810 or 8820) for credit. Students lacking an Honours degree or background in one or more area may, at the discretion of the Supervisory Committee, be required to take the appropriate undergraduate level course(s), in addition to the required courses. All graduate students must receive non-credit WHMIS (Workplace Hazardous Materials Information System) training in their first year. When a student is required to register in a seminar or colloquium course in more than one semester, the record will show a grade or a designation of "In Progress" for semesters prior to completion of the course and "Pass" or "Fail" (or a numerical grade in the case of MMS 8900) for the final semester. Enrolment in the Seminar course implies the student will participate as a presenter in at least one Graduate Studies Day. With the consent of the Supervisory Committee, and of the instructor and the Department Chair concerned, a student may register for, and audit, all or part of a course. It is understood that the student will attend lectures as prescribed, but will not write any examination or receive any grade. Such a course may be recorded as an additional course, identified by AUD.	MSc Program (Faculty of Science) The graduate students will register in one of the designated areas of specialization listed below: • Molecular and Macromolecular Sciences (MMS) • Environmental Sciences (ESC) • Human Biology (HB) • Sustainable Design Engineering (SDE) • Mathematical and Computational Sciences (MCS) Students are required to take a minimum of three graduate level courses, all of which are to be regarded as substantive (In the MCS specialization, a minimum of four substantive graduate level courses are required, including MCS 8920 (a requirement)). A Seminar course (MMS 8900 or ESC 8900 or HB 8900 or SDE 8900 or MCS 8900) is required. Students may take only one Directed Studies course (MMS 8810 or ESC 8810 or HB 8810 or SDE 8810 or MCS 8810 or alternatively, VBS 8810 or 8820, VPM 8810 or 8820, VCA 8810 or 8820, VHM 8810 or 8820) for credit. Students lacking an Honours degree or background in one or more area may, at the discretion of the Supervisory Committee, be required to take the appropriate undergraduate level course(s), in addition to the required courses. All graduate students must receive non-credit WHMIS (Workplace Hazardous Materials Information System) training in their first year. When a student is required to register in a seminar or colloquium course in more than one semester, the record will show a grade or a designation of "In Progress" for semesters prior to completion of the course and "Pass" or "Fail" (or a numerical grade in the case of MMS 8900) for the final semester. Enrolment in the Seminar course implies the student

CALENDAR & CURRICULUM CHANGE — Motion #65

The Master's Examination Committee normally consists of five members as follows: i. three members of the Supervisory Committee, including the Supervisor of the candidate's research; ii. one member of the area of specialization but from a department other than that of the student's supervisor. This external examiner may be from the University of Prince Edward Island, or from another University or Research Institute, as is deemed appropriate; iii. the Coordinator of Graduate Studies (or designate), who will Chair the Master's Examination Committee. **Graduate Courses** ***Faculty of Science*** Master of Science—Environmental Sciences (ESC) Master of Science—Human Biology (HB) Master of Science—Molecular and Macromolecular Sciences (MMS)	will participate as a presenter in at least one Graduate Studies Day. With the consent of the Supervisory Committee, and of the instructor and the Department Chair concerned, a student may register for, and audit, all or part of a course. It is understood that the student will attend lectures as prescribed, but will not write any examination or receive any grade. Such a course may be recorded as an additional course, identified by AUD. The Master's Examination Committee normally consists of five members as follows: i. three members of the Supervisory Committee, including the Supervisor of the candidate's research; ii. one member of the area of specialization but from a department other than that of the student's supervisor. This external examiner may be from the University of Prince Edward Island, or from another University or Research Institute, as is deemed appropriate; iii. the Coordinator of Graduate Studies (or designate), who will Chair the Master's Examination Committee. **Graduate Courses** ***Faculty of Science*** Master of Science—Environmental Sciences (ESC) Master of Science—Human Biology (HB) Master of Science—Molecular and Macromolecular Sciences (MMS) Master of Science —Mathematical and Computational Sciences (MCS)

Rationale for Change: To add a Mathematical and Computational Sciences stream to the existing MSc. Program.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

CALENDAR & CURRICULUM CHANGE — Motion #65

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE — Motion #66

Revision is for a: Calendar Entry Change

Faculty/School/Department: Science

Department/Program(s)/Academic Regulations: **School of Mathematical and Computational Sciences**

MOTION: To have the requirements changed in the Actuarial Science Major to make STAT 4330 Time Series a required course.

Reproduction of Current Calendar Entry			Proposed revision with changes underlined and deletions indicated clearly		
REQUIREMENTS FOR A MAJOR IN ACTUARIAL SCIENCE The Major in Actuarial Science requires a total of 120 semester hours of credit, as described below:			**REQUIREMENTS FOR A MAJOR IN ACTUARIAL SCIENCE** The Major in Actuarial Science requires a total of 120 semester hours of credit, as described below:		
		Credits			Credits
The Common Core		23	The Common Core		23
MATH 2910	Multivariable and Vector Calculus	4	MATH 2910	Multivariable and Vector Calculus	4
STAT 2910	Probability and Mathematical Statistics I	3	STAT 2910	Probability and Mathematical Statistics I	3
STAT 3910	Probability and Mathematical Statistics II	3	STAT 3910	Probability and Mathematical Statistics II	3
STAT 3240	Applied Regression Analysis	3	STAT 3240	Applied Regression Analysis	3
MATH 3010	Differential Equations	3	MATH 3010	Differential Equations	3
At least one of…	MCS 2040 Visual Basic in Excel Technology Lab **OR** AMS 3040 Introduction to GGY Axis Lab	1	At least one of…	MCS 2040 Visual Basic in Excel Technology Lab **OR** AMS 3040 Introduction to GGY Axis Lab	1
			MCS 2030	R Technology Lab	1

CALENDAR & CURRICULUM CHANGE

Motion #66

Reproduction of Current Calendar Entry			Proposed revision with changes underlined and deletions indicated clearly		
MCS 2030	R Technology Lab	1	AMS 2160	Financial Mathematics	3
AMS 2160	Financial Mathematics	3	AMS 2410	Financial Economics I	3
AMS 2410	Financial Economics I	3	AMS 3410	Financial Economics II	3
AMS 3410	Financial Economics II	3	AMS 2510	Long Term Actuarial Mathematics I	3
AMS 2510	Long Term Actuarial Mathematics I	3	AMS 3510	Long Term Actuarial Mathematics II	3
AMS 3510	Long Term Actuarial Mathematics II	3	AMS 3310	Advanced Corporate Finance	3
AMS 3310	Advanced Corporate Finance	3	AMS 4540	Loss Models I	3
AMS 4540	Loss Models I	3	AMS 4550	Loss Models II	3
AMS 4550	Loss Models II	3	AMS 4700	Short-term Insurance Pricing and Reserving	3
AMS 4700	Short-term Insurance Pricing and Reserving	3	AMS 4580	Credibility Theory	3
AMS 4580	Credibility Theory	3	~~At least one of...~~ STAT 4330	~~STAT 4110 Statistical Simulation **OR** STAT 4330~~ Time Series I	3
At least one of...	STAT 4110 Statistical Simulation **OR** STAT 4330 Time Series I	3	At least one of...	STAT 4410 – Stochastic Processes **OR** STAT 4280 – Generalized Linear Models	3
At least one of...	STAT 4410 – Stochastic Processes **OR** STAT 4280 – Generalized Linear Models	3	AMS 2030	Intermediate Microeconomics I	3
AMS 2030	Intermediate Microeconomics I	3	AMS 2040	Intermediate	3

CALENDAR & CURRICULUM CHANGE

Motion #66

Reproduction of Current Calendar Entry			Proposed revision with changes underlined and deletions indicated clearly		
AMS 2040	Intermediate Macroeconomics I	3		Macroeconomics I	
ACCT 1010	Introduction to Accounting	3	ACCT 1010	Introduction to Accounting	3
BUS 2310	Corporate Finance	3	BUS 2310	Corporate Finance	3
MCS 3050	Tutoring in Mathematical and Computational Sciences	1	MCS 3050	Tutoring in Mathematical and Computational Sciences	1
MCS 4210	Professional Communication and Practice	3	MCS 4210	Professional Communication and Practice	3
Additional general electives		27	Additional general electives		27
Total Semester Hours of Credit		**120**	**Total Semester Hours of Credit**		**120**

Rationale for Change: This was a requirement from the Society of Actuaries in order to have our program recognized in their listing. Topics from Stat 4330 are included in their professional exams, while topics from Stat 4110 are not.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

CALENDAR & CURRICULUM CHANGE Motion #67

Revision is for a: Calendar Entry Change

Faculty/School/Department: Science

Department/Program(s)/Academic Regulations: **School of Mathematical and Computational Sciences**

MOTION: To have the requirements changed in the Actuarial Science Major Pre-Professional Specialization to make STAT 4330 Time Series a required course.

MAJOR IN ACTUARIAL SCIENCE WITH PRE-PROFESSIONAL SPECIALIZATION STREAM

This specialization is designed for those students who plan to complete the full suite of exams required to apply for Associate status from the Canadian Institute of Actuaries or the Society of Actuaries. The specialization contains six additional courses compared with the major. Students enrolled in the specialization would receive all courses related to the exams needed to obtain the designation of Associate from the Canadian Institute of Actuaries (CIA), as well as the Society of Actuaries (SOA).

		Credits
The Common Core		23
MATH 2910	Multivariable and Vector Calculus	4
STAT 2910	Probability and Mathematical Statistics I	3
STAT 3910	Probability and Mathematical Statistics II	3
STAT 3240	Applied Regression Analysis	3
MATH 2620	Linear Algebra II	3
MATH 3010	Differential Equations	3
At least one of…	MCS 2040 Visual Basic in Excel Technology Lab **OR** AMS 3040 Introduction to GGY Axis Lab	1
MCS 2030	R Technology Lab	1

MAJOR IN ACTUARIAL SCIENCE WITH PRE-PROFESSIONAL SPECIALIZATION STREAM

This specialization is designed for those students who plan to complete the full suite of exams required to apply for Associate status from the Canadian Institute of Actuaries or the Society of Actuaries. The specialization contains six additional courses compared with the major. Students enrolled in the specialization would receive all courses related to the exams needed to obtain the designation of Associate from the Canadian Institute of Actuaries (CIA), as well as the Society of Actuaries (SOA).

		Credits
The Common Core		23
MATH 2910	Multivariable and Vector Calculus	4
STAT 2910	Probability and Mathematical Statistics I	3
STAT 3910	Probability and Mathematical Statistics II	3
STAT 3240	Applied Regression Analysis	3
MATH 2620	Linear Algebra II	3
MATH 3010	Differential Equations	3
At least one of…	MCS 2040 Visual Basic in Excel Technology Lab **OR** AMS 3040 Introduction to GGY Axis Lab	1

CALENDAR & CURRICULUM CHANGE

Motion #67

AMS 2160	Financial Mathematics I	3
AMS 2410	Financial Economics I	3
AMS 3410	Financial Economics II	3
AMS 2510	Long Term Actuarial Mathematics I	3
AMS 3510	Long Term Actuarial Mathematics II	3
AMS 3310	Advanced Corporate Finance	3
AMS 4540	Loss Models I	3
AMS 4550	Loss Models II	3
STAT 3250	Statistical Learning and Modelling	3
AMS 4600	Predictive Analytics	3
AMS 4610	Predictive Analytics for Actuaries	3
AMS 4700	Short-term Insurance Pricing and Reserving	3
AMS 4580	Credibility Theory	3
At least one of…	STAT 4110 Statistical Simulation **OR** STAT 4330 Time Series I	3
STAT 4410	Stochastic Processes	3
STAT 4280	Generalized Linear Models	3
MCS 3920	Numerical Analysis	3
AMS 2030	Intermediate Microeconomics I	3
AMS 2040	Intermediate Macroeconomics I	3
ACCT 1010	Introduction to Accounting	3
BUS 2310	Corporate Finance	3

MCS 2030	R Technology Lab	1
AMS 2160	Financial Mathematics I	3
AMS 2410	Financial Economics I	3
AMS 3410	Financial Economics II	3
AMS 2510	Long Term Actuarial Mathematics I	3
AMS 3510	Long Term Actuarial Mathematics II	3
AMS 3310	Advanced Corporate Finance	3
AMS 4540	Loss Models I	3
AMS 4550	Loss Models II	3
STAT 3250	Statistical Learning and Modelling	3
AMS 4600	Predictive Analytics	3
AMS 4610	Predictive Analytics for Actuaries	3
AMS 4700	Short-term Insurance Pricing and Reserving	3
AMS 4580	Credibility Theory	3
~~At least one of…~~ STAT 4330	~~STAT 4110 Statistical Simulation **OR** STAT 4330~~ Time Series I	3
STAT 4410	Stochastic Processes	3
STAT 4280	Generalized Linear Models	3
MCS 3920	Numerical Analysis	3

CALENDAR & CURRICULUM CHANGE

Motion #67

MCS 3050	Tutoring in Mathematical and Computational Sciences	1
MCS 4210	Professional Communication and Practice	3
Additional general electives		9
	Total Semester Hours of Credit	**120**

AMS 2030	Intermediate Microeconomics I	3
AMS 2040	Intermediate Macroeconomics I	3
ACCT 1010	Introduction to Accounting	3
BUS 2310	Corporate Finance	3
MCS 3050	Tutoring in Mathematical and Computational Sciences	1
MCS 4210	Professional Communication and Practice	3
Additional general electives		9
	Total Semester Hours of Credit	**120**

Rationale for Change: This was a requirement from the Society of Actuaries in order to have our program recognized in their listing. Topics from Stat 4330 are included in their professional exams, while topics from Stat 4110 are not.

Effective Term: FALL 2021

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	***Date:***
Departmental Approval: Shannon Fitzpatrick	January 29, 2021
Faculty/School Approval: Science Council	February 17, 2021
Faculty Dean's Approval: Nola Etkin, Dean of Science	February 17, 2021
Graduate Studies Dean's Approval: Rabin Bissessur	January 27, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

FACULTY OF ENGINEERING MOTION #'S 68-69

New Course Proposals: SDE 8030 and SDE 8050

NEW COURSE PROPOSAL Motion #68

Faculty/School: **Sustainable Design Engineering**

Department/Program(s): **Engineering**

MOTION: That a new course entitled SDE 8030 Contemporary Topics in Sustainable Design Engineering be approved as proposed.

Course Number and Title	SDE 8030 CONTEMPORARY TOPICS IN SUSTAINABLE DESIGN ENGINEERING
Description	In this course students will be exposed to and examine the concepts underlying sustainable design engineering as they pertain to engineering practice and in particular engineering research and the development of new technologies. Sustainable design engineering can be defined as an engineering design process which considers not only the key performance indicators and functional characteristics of the system being developed but also the environmental, social and economic context and impacts of the system. Recent advances in sustainability research have focused on the complex interactions between these areas, evolving from "green engineering" to a full consideration of sustainability. In order to develop sustainable solutions, engineers and researchers must be able to critically evaluate their work in this context. To this end, students will examine case studies and relevant readings on such topics as sustainability indicators, techno-economic and life cycle assessment, stakeholder engagement, real time technology assessment, engineering justice, and design for sustainability. While approaches for addressing the specific areas of environmental, social and economic sustainability will be covered, the focus of the course will be on the interactions between these areas. A key outcome of this course will be a paper critically examining the student's research topic from the perspective of sustainable design engineering.
Cross-Listing	N/A
Prerequisite/Co-Requisite	Admission to the graduate program in Faculty of Sustainable Design Engineering
Credit(s)	3
Notation	N/A

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

If there is an enrolment limit, please explain. N/A

Rationale for New Course: Complementing the graduate-level course offering in FSDE.

Effective Term: FALL 2021

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: N/A

Resources Required: N/A

In offering this course will UPEI require facilities or staff at other institutions: No

If yes, please explain. N/A

NEW COURSE PROPOSAL

Motion #68

Authorization	***Date:***
Departmental Approval: N/A	N/A
Faculty/School Approval: Faculty of Engineering	February 24, 2021
Faculty Dean's Approval: N/A	N/A
Graduate Studies Dean's Approval: Dr. Rabin Bissessur	March 8, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

Form Version: September 2020

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

SDE 8030 Contemporary Topics in Sustainable Design Engineering

Library Resource Requirements *(to be completed by the liaison and/or collections librarian)*

Existing resources:

- Collections - Holdings, Subscriptions, Other
  - INSPEC (indexing database - subscription)
  - EI Compendex (indexing database - subscription)
  - AccessEngineering (handbooks, subscription)
  - CRC Handbook of Chemistry & Physics (subscription)
  - IEEE/IET IEL Electronic Library (Journals, subscription)
  - O'Reilly Safari Higher Education e-books (Books, subscription)
  - various standards, annual license fee
  - Elsevier EBS (Books, user-driven purchase)
  - Wiley books (Books, user-driven purchase)
  - Machinery's Handbook (handbook, physical copy)
  - Various Monographs (one-time purchase)
  - ACM Digital Library
  - ASME Digital Collection

- Subscription Dependencies (in interdisciplinary packages)
  - Academic Ebook Collections that include interdisciplinary content:
    - Proquest Academic Complete Collection
    - Wiley
    - Springer
    - Sage Premier
    - Ebsco Ebook Academic Collection.
  - SciFinder (advanced chemistry searching)
  - IOP Journals
  - MathSciNet
  - OED Online
  - ACS Web Editions (American Chemical Society)
  - OneSearch
  - ScienceDirect, wiley, Springer (journals)
  - Academic OneFile (journal articles and index)
  - Academic Search Complete (index)
  - Streaming Video collections including:
    - Academic videos online (Proquest)
    - Audio Cine Films
    - Criterion on Demand
    - Jarvis
    - JoVE
    - Kanopy (limited)
    - NFB Campus
  - Annual Reviews (interdisciplinary)

- Business Source Complete (index)
- CAB Abstracts and e-books
- Statistics Canada data through NESSTAR
- New York Times
- Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP[3]. We also collect extensively on PEI materials, which are accessed through the Special Collections services of the library and online on islandarchives.ca. Full list of resources is available at https://library.upei.ca/databases_all.

- Physical Space in Library (other than holdings, explain) - none
- Library Administrative/Research Support
  - *Engineering Subject specialist librarian: Rosie Le Faive*

Summary of additional budget allocation required:

- One-time: _____ For each of _____ consecutive years
- Annual: _____
  - Per-year percentage increase in annual: _____

Does the budget allocation for library resources in this proposal meet the requirement?

Our existing holdings (as long as subscriptions are maintained) can support this course so no new budget allocation is required.

Date Received by Liaison/Collections Librarian	March 1, 2021
Name of Librarian to be Contacted for Questions	Rosie Le Faive
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	March 4, 2021

Form Version: September 2020

NEW COURSE PROPOSAL

Motion #69

Faculty/School: **Sustainable Design Engineering**

Department/Program(s): **Engineering**

MOTION: That a new course entitled SDE 8050 Engineering Research Methods & Experiment Design be approved as proposed.

Course Number and Title	SDE 8050 ENGINEERING RESEARCH METHODS & EXPERIMENT DESIGN
Description	This course will introduce students to the elements of a research project and will focus on quantitative research methodologies. Students will practice the planning, implementation, analysis, and documentation for a research project of their own design. Topics will include: performing a literature review, developing a hypothesis, creating a research plan, collecting data, analyzing the results, and compiling a research report. Students will use tools for quantitative data analysis and will explore reliability, validation, and verification concepts. Students will report findings in a technical presentation. The course encourages students to develop their research question and perform a sample experiment to apply lessons learned to their main research topic. Intellectual property rights and engineering ethics topics will be explored.
Cross-Listing	N/A
Prerequisite/Co-Requisite	Admission to the graduate program in Faculty of Sustainable Design Engineering
Credit(s)	3
Notation	N/A

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

Rationale for New Course: Complementing the graduate-level course offering in FSDE.

Effective Term: FALL 2021

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: N/A

Resources Required: N/A

In offering this course will UPEI require facilities or staff at other institutions: No

Authorization	*Date:*
Departmental Approval: N/A	N/A
Faculty/School Approval: Faculty of Engineering	February 24, 2021
Faculty Dean's Approval: N/A	N/A
Graduate Studies Dean's Approval: Dr. Rabin Bissessur	March 8, 2021
Registrar's Office Approval: Darcy McCardle	March 16, 2021

NEW COURSE PROPOSAL Motion #69

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

SDE 8050 Engineering Research Methods & Experiment Design

Library Resource Requirements *(to be completed by the liaison and/or collections librarian)*

Existing resources:

- Collections - Holdings, Subscriptions, Other
  - INSPEC (indexing database - subscription)
  - EI Compendex (indexing database - subscription)
  - AccessEngineering (handbooks, subscription)
  - CRC Handbook of Chemistry & Physics (subscription)
  - IEEE/IET IEL Electronic Library (Journals, subscription)
  - O'Reilly Safari Higher Education e-books (Books, subscription)
  - various standards, annual license fee
  - Elsevier EBS (Books, user-driven purchase)
  - Wiley books (Books, user-driven purchase)
  - Machinery's Handbook (handbook, physical copy)
  - Various Monographs (one-time purchase)
  - ACM Digital Library
  - ASME Digital Collection

- Subscription Dependencies (in interdisciplinary packages)
  - Academic Ebook Collections that include interdisciplinary content:
    - Proquest Academic Complete Collection
    - Wiley
    - Springer
    - Sage Premier
    - Ebsco Ebook Academic Collection.
  - SciFinder (advanced chemistry searching)
  - IOP Journals
  - MathSciNet
  - OED Online
  - ACS Web Editions (American Chemical Society)
  - OneSearch
  - ScienceDirect, wiley, Springer (journals)
  - Academic OneFile (journal articles and index)
  - Academic Search Complete (index)
  - Streaming Video collections including:
    - Academic videos online (Proquest)
    - Audio Cine Films
    - Criterion on Demand
    - Jarvis
    - JoVE
    - Kanopy (limited)
    - NFB Campus

- Annual Reviews (interdisciplinary)
- Business Source Complete (index)
- CAB Abstracts and e-books
- Statistics Canada data through NESSTAR
- New York Times
- Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP[3]. We also collect extensively on PEI materials, which are accessed through the Special Collections services of the library and online on islandarchives.ca. Full list of resources is available at https://library.upei.ca/databases_all.

- Physical Space in Library (other than holdings, explain) - none
- Library Administrative/Research Support
  - *Engineering Subject specialist librarian: Rosie Le Faive*

Summary of additional budget allocation required:

- One-time: _____ For each of _____ consecutive years
- Annual: _____
  - Per-year percentage increase in annual: _____

Does the budget allocation for library resources in this proposal meet the requirement?

Our existing holdings (as long as subscriptions are maintained) can support this course so no new budget allocation is required.

Date Received by Liaison/Collections Librarian	March 1, 2021
Name of Librarian to be Contacted for Questions	Rosie Le Faive
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	March 4, 2021

Form Version: September 2020