Draft Minutes of the Fifth Meeting of Senate Friday, May 12, 2023 3:00 – 5:00 pm Alumni Hall and via Zoom

Present: G. Keefe (Chair), K. Mears (Vice-Chair), P. Bernard, A. Braithwaite, L. Brinklow, O. Brown, A. Campbell, D. Coll, E. Côté, R. Dennis, A. Doyle, N. Etkin, G. Evans, R. Gauthier, H. Hill, B. Linkletter, A. MacKenzie, A. MacLaren, D. MacLellan, T. Mady, N. Mannholland, W. Montelpare, D. Moses, C. Murray, S. Myers, S. Nandlal, G. F. Naterer, T. Ngo, W. Peters, R. Raiswell, S. Reijers, C. Ryan, T. Saunders, J. Sentance, B. Stoughton, D. Sutton, M. Sweeney-Nixon, J. VanLeeuwen, B. Waterman, A. Zinck

Regrets: M. Arfken, M. Buote, T. Carroll, J. Podger

Recorder: S. O'Connor

President Keefe called the meeting to order at 3:04 pm and provided a land acknowledgement.

He recognized the Senate's progress in fostering respectful academic discussions over the past year and expressed hope for a stronger, more harmonious Senate in the fall, emphasizing the need for improved relationships, especially between University faculty and the administration.

President Keefe acknowledged that in the previous Senate meeting he, as Chair, had interrupted a Senator for straying off-topic from the agenda and academic matters. He acknowledged experiencing a moment of frustration and consequently recognizes the importance of incorporating kindness and patience into his communication approach.

Because Senate requires a meeting space that is large enough to comfortably accommodate both Senators and guests, President Keefe shared that the Steering and Nominating Committee has looked for alternative space on the main part of campus.

The Steering and Nominating Committee discussed ways to support a collaborative, healing process. They concluded that it would be best to have a facilitated session in the fall when Senate vacancies are filled.

He concluded his introductory comments with words of appreciation to Senate for the hard work in finding the best paths forward this year, especially getting us through the end of the semester.

President Keefe welcomed Noah Mannholland to Senate, Noah is the new Vice President of Academic and External of the UPEI Student Union.

There was a late agenda item regarding the report from the Emerita(us) Committee submitted. If approved to be added to an amended agenda, it will fall under item #3.

1. <u>Approval of Agenda</u>

a. MOTION (L. Brinklow/B. Waterman) to approve the agenda as amended. CARRIED.

2. <u>Approval of Minutes</u>

a. March 10, 2023

MOTION (N. Mannholland/C. Murray) to approve the minutes of March 10, 2023 as presented. (B. Linkletter, A Braithwaite, voted against) CARRIED.

B. Linkletter inquired as to why his comment was not included in the minutes.

President Keefe responded that the agenda was complete and the meeting was adjourned. B. Linkletter asked this his comment be added to the minutes of the current meeting.

President Keefe stated that the proper process would have been to request that his item be added to the agenda or to exercise the right to vote against the meeting minutes.

b. April 14, 2023

MOTION (/) to approve the minutes of April 14, 2023 as presented. CARRIED

MEETING MOVED TO IN CAMERA

3. <u>Convocation 2023</u>

a. Approval of Certificates, Diplomas and Degrees

The following motions were brought forward by G. Naterer and individually seconded by Senators: the 2023 Winter Semester Certificates and Degrees were approved as identified:

OMNIBUS MOTION (G. Naterer/S. Myers) that Senate approve the credentials for the 113 candidates listed as having completed the requirement for the following degrees and/or certificates with the Faculty of Arts. CARRIED

FACULTY OF ARTS

Bachelor of Integrated Studies	
Bachelor of Applied Arts in Journalism	3
Bachelor of Arts	92
Bachelor of Arts with Honours	12
Bachelor of Music	2
Bachelor of Music Education	1
Master of Arts	2
TOTAL - Faculty of Arts	113

OMNIBUS MOTION (G. Naterer/T. Mady) that Senate approve the credentials for the 192 candidates listed as having completed the requirement for the following degrees and/or certificates with the Faculty of Business. CARRIED

FACULTY OF BUSINESS	1
Certificate in Business	
Certificate in Public Administration	1
Bachelor of Business in Tourism & Hospitality	7
Bachelor of Business Studies	3
Bachelor of Business Administration	166
Bachelor of Business Administration (Co-operative Education)	5
Master of Business Administration	9
TOTAL - Faculty of Business	192

OMNIBUS MOTION (G. Naterer/D. MacLellan) that Senate approve the credentials for the 103 candidates listed as having completed the requirement for the following degrees and/or certificates with the Faculty of Education. CARRIED

TOTAL - Faculty of Education	103
Doctor of Philosophy	3
Master of Education	22
Bachelor of Education	60
Baccalauréat en éducation—français langue seconde	18
FACULTY OF EDUCATION	

OMNIBUS MOTION (G. Naterer/D. Coll) that Senate approve the credentials for the 8 candidates listed as having completed the requirement for the following degrees and/or certificates with the Faculty of Graduate Studies. CARRIED

FACULTY OF GRADUATE STUDIES	
Master in Global Affairs	8
TOTAL - Faculty of Graduate Studies	8

OMNIBUS MOTION (G. Naterer/C. Murray) that Senate approve the credentials for the 57 candidates listed as having completed the requirement for the following degrees and/or certificates with the Faculty of Nursing. CARRIED

FACULTY OF NURSING	
Bachelor of Science in Nursing	56
Master of Nursing	1
TOTAL - Faculty of Nursing	57

OMNIBUS MOTION (G. Naterer/N. Etkin) that Senate approve the credentials for the 229 candidates listed as having completed the requirement for the following degrees and/or certificates with the Faculty of Science. CARRIED

FACULTY OF SCIENCE

Bachelor of Science in Biotechnology	8
Bachelor of Science in Paramedicine	3
Bachelor of Wildlife Conservation	2
Bachelor of Science in Applied Climate Change and Adaptation	3
Bachelor of Applied Science in Radiography	6
Bachelor of Environmental Studies	12
Bachelor of Environmental Studies (Co-operative Education)	2
Bachelor of Science	156
Bachelor of Science (Co-operative Education)	7
Bachelor of Science with Honours	24
Bachelor of Science with Honours (Co-operative Education)	2
Master of Applied Health Services Research	1
Master of Science	2
Doctor of Philosophy	1
TOTAL - Faculty of Science	229

B. Linkletter noted that a student has what looks like a double major, in which case the chairs of both departments should be connected to that student.

D. Sutton expressed intent to investigate the capability to have both departments recognized in this manner.

OMNIBUS MOTION (G. Naterer/W. Peters) that Senate approve the credentials for the 51 candidates listed as having completed the requirement for the following degrees and/or certificates with the Faculty of Sustainable Design Engineering. CARRIED

FACULTY OF SUSTAINABLE DESIGN ENGINEERING	
Bachelor of Science in Sustainable Design Engineering	49
Master of Science in Sustainable Design Engineering	2
TOTAL - Faculty of Sustainable Design Engineering	51

OMNIBUS MOTION (G. Naterer/J. VanLeeuwen) that Senate approve the credentials for the 66 candidates listed as having completed the requirement for the following degrees and/or certificates with the Faculty of Veterinary Medicine. CARRIED

FACULTY OF VETERINARY MEDICINE	
Doctor of Veterinary Medicine	65
Doctor of Philosophy	1
TOTAL - Faculty of Veterinary Medicine	66

ENABLING MOTION (G. Naterer/C. Murray) to empower the President, relevant Dean and Registrar, acting together in full agreement, to approve any degrees, diplomas or certificates that may surface as unexpected cases. CARRIED.

b. Professor Emerita/Emeritus Report

On behalf of the CE-US Committee, G. Naterer presented the names recommended by the committee:

MOTION (G. Naterer/B. Linkletter) to appoint Dr. Russell Kerr to emeritus status. CARRIED

MOTION (G. Naterer/S. Myers) to appoint Dr. Karem Simon to emeritus status. CARRIED

Congratulations to Dr. Kerr and Dr. Simon.

RETURN FROM IN CAMERA

4. President's Report and Question Period

President Keefe congratulated UPEI's Doctor of Psychology program for being granted accreditation by the Canadian Psychological Association for a term of three years. This is a major accomplishment and President Keefe acknowledged all involved in this process. He thanked Dr. Philip Smith for his leadership in this endeavor and invited Dr. Smith to say a few words.

Dr. Smith stated that this was certainly a team effort including colleagues from across campus as well as students.

President Keefe also commented on the recent draft report received from MPHEC regarding the University's quality assurance monitoring and initial feedback is overwhelmingly positive. Congratulations and thank you to Kathy Gottschall-Pass, Charlotte McCardle and Vice President Naterer for their efforts on this. This is another great accomplishment for UPEI and has been years in the making.

President Keefe shared that he recently represented UPEI at a Skills PEI Workforce day and saw an appreciation from the Island community in terms of UPEI's workforce development in the province. He also noted an appreciation for the programs that focus on knowledge development, critical thinking and communications. Employers are increasing recognizing the importance of these areas.

Panther Sport has wrapped up for the season. Many programs have had banner years both on and off the field of play. Our athletes are making a positive impact on our community, which is very important right now.

President Keefe shared statistics from Universities Canada surrounding societal opinions of universities, stating positive opinions of universities has gone from 78 per cent to 52 per cent in the last eight years. Most have moved from positive to neutral, but unfortunately there is an increasing percentage who hold a negative view of universities. Quebec has the highest support, Manitoba and Saskatchewan have the lowest. Atlantic Canada is at the national average. This erosion of support is concerning when we consider that close to 48% of our funding comes from

public dollars. Therefore, it is essential to make it a priority to celebrate our successes as a university.

In closing, President Keefe encouraged Senators to attend the upcoming convocation ceremonies to celebrate our students and their accomplishments.

G. Naterer shared the following items worth celebrating:

Great things happening in our office of Study Abroad as UPEI has reached a record number of 150 students traveling to 18 different countries for Study Abroad this year.

A sample of recently secured research grants includes Dr. Marya Ahmed in Chemistry, \$15,000, Dr. Jessica Strong in Psychology, \$1,500, and Dr. Larry Hammell, \$7,800.

Dr. Libby Osgood has co-edited the book *Teilhard de Chardin: A Book of Hours* an edited volume of Pierre Teilhard de Chardin's most inspirational work.

President Keefe then acknowledged those Senators whose terms end next month: John McIntyre/Jim Sentance, Bill Montelpare, Trung Ngo, Andrew Zinck, Richard Raiswell, Kim Mears, Amy Doyle.

B. Linkletter posed a question regarding an item he had requested be added to the Senate agenda that had been declined. He asked what the procedure is for accessing legal counsel for items deliberated by the Steering and Nominating Committee, who is the lawyer that is called upon, and does it cost the University.

President Keefe responded that in cases where the University Act requires interpretation, as Chair of the Steering and Nominating Committee, he is obligated to seek legal counsel. The University has Stewart McKelvey law firm on retainer for legal advice.

A. Braithwaite referred to the MPHEC quality assurance report mentioned earlier asking if the final report will be made available for everyone to read.

President Keefe responded that yes when final documents are received from MPHEC, these will be made available as per the protocols of MPHEC.

5. <u>Senate Reports</u>

a. Academic Planning and Curriculum Committee

- i. Sixth Curriculum Report
 - 1) MOTION (C. Murray/T. Mady) to withdraw the first motion of the curriculum report. CARRIED.

FACULTY OF ARTS

OMNIBUS MOTION (G. Naterer/S. Myers) that motions 2-13 be approved as noted below: CARRIED

2) To change the PSY 6501 course prerequisite to reflect current program expectations.

(See details in the attached Curriculum Report—Page 6)

3) To change the PSY 7201 course prerequisite to reflect current program expectations.

(See details in the attached Curriculum Report—Pages 7-8)

4) To change the PSY 7202 course prerequisite to reflect current program expectations.

(See details in the attached Curriculum Report—Pages 9-10)

- 5) To change the PSY 7203 course prerequisite to reflect current program expectations.
 (See details in the attached Curriculum Report—Pages 11-12)
- 6) To change the PSY 7204 course prerequisite to reflect current program expectations. (See details in the attached Curriculum Report—Pages 13-14)

(See details in the attached Curriculum Report—Pages 13-14)

- 7) To change the PSY 7501 course prerequisite to reflect current program expectations.
 (See details in the attached Curriculum Report—Page 15)
- 8) To change the PSY 8502 course prerequisite to reflect current program expectations.
 (See details in the attached Curriculum Report—Page 16)

- 9) To change the course prerequisite and course description for PSY 8503 to reflect current program expectations.
 (See details in the attached Curriculum Report—Page 17)
- **10)** To revise the prerequisite for PSY 9000 Predoctoral Internship as proposed. (See details in the attached Curriculum Report—Page 18)
- 11) To change the course sequence and schedule of the PsyD program updated to reflect current and future delivery.
 (See details in the attached Curriculum Report—Pages 19-23)
- 12) To have the change in prerequisite for ACLC 4070: Work Integrated Practicum be approved as proposed. (See details in the attached Curriculum Report—Page 24)
- **13)** That the change in the number of required semester hours for BIS be approved as proposed. (See details in the attached Curriculum Report—Page 24)

FACULTY OF EDUCATION

OMNIBUS MOTION (G. Naterer/D. MacLellan) that motions 14-16 be approved as noted below: CARRIED.

14) To revise the required courses in the Primary/Elementary BEd program as submitted.

(See details in the attached Curriculum Report—Pages 27-29)

15) To revise the required courses in the Primary/Elementary BEd (français langue seconde) program as submitted.

(See details in the attached Curriculum Report—Pages 30-32)

16) To revise the admission requirements and accepted teachables for the BEd (français langue seconde) program as submitted. (See details in the attached Curriculum Report—Pages 33-35)

FACULTY OF SUSTAINABLE DESIGN ENGINEERING

OMNIBUS MOTION (G. Naterer/W. Peters) that motions 17-64 be approved as note below: CARRIED (Opposed, B. Linkletter).

- **17)** That SDE-8230 be deleted as it is no longer needed in the program. (See details in the attached Curriculum Report—Page 38)
- 18) To approve ENGN 4020 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8020.
 (See details in the attached Curriculum Report—Pages 39-42)
- 19) To approve ENGN 4021 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8021. (See details in the attached Curriculum Report—Pages 43-46)
- 20) To approve ENGN 4030 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8030. (See details in the attached Curriculum Report—Pages 47-51)
- 21) To approve ENGN 4031 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8031. (See details in the attached Curriculum Report—Pages 52-55)
- 22) To approve ENGN 4040 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8040.
 (See details in the attached Curriculum Report—Pages 56-59)
- 23) To approve ENGN 4050 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8050.
 (See details in the attached Curriculum Report—Pages 60-63)
- 24) To approve ENGN 4060 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8060.
 (See details in the attached Curriculum Report—Pages 64-67)
- 25) To approve ENGN 4061 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8061. (See details in the attached Curriculum Report—Pages 68-71)
- 26) To approve ENGN 4062 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8062. (See details in the attached Curriculum Report—Pages 72-75)
- 27) To approve ENGN 4063 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8063.
 (See details in the attached Curriculum Report—Pages 76-79)
- 28) To approve capital ENGN 4070 as a new undergraduate course and to cross-level list it with the existing graduate level course, SDE 8070.

(See details in the attached Curriculum Report—Pages 80-83)

- 29) To approve ENGN 4080 as a new undergraduate course and to cross-level list it with the existing graduate level course, SDE 8080. (See details in the attached Curriculum Report—Pages 84-87)
- 30) To approve ENGN 4081 there's a new undergraduate course and to cross-level listed with the existing graduate level course, SDE 8081.
 (See details in the attached Curriculum Report—Pages 88-92)
- 31) To approve ENGN 4100 as a new undergraduate course and to cross-level list it with the existing graduate level course, SDE 8100.
 (See details in the attached Curriculum Report—Pages 93 to 96)
- 32) To approve ENGN 4101 as the new undergraduate course into cross-level listed with the existing graduate level course, SDE 8101.
 (See details in the attached Curriculum Report—Pages 97-100)
- 33) To approve SDE 8840 as a new graduate course and to cross-level listed with the existing undergraduate level course, ENGN 4840.
 (See details in the attached Curriculum Report—Pages 101-105)
- 34) To remove SDE H230 as a cross-level listing to ENGN 3430. (See details in the attached Curriculum Report—Page 106)
- **35) To cross-level list SDE 88402 ENGN 4840.** (See details in the attached Curriculum Report—Page 107)
- **36) To cross-level list ENGN 4022 SDE 8020.** (See details in the attached Curriculum Report—Page 108)
- 37) To cross-level list ENGN 40212 SDE 8021.(See details in the attached Curriculum Report—Page 109)
- 38) To cross-level list ENGN 4030 to SDE-8030. (See details in the attached Curriculum Report—Pages 110-111)
- **39) To cross-level list ENGN 4031 to SDE-8031.** (See details in the attached Curriculum Report—Page 112)
- 40) To cross-level list ENGN 4040 to SDE-8040.(See details in the attached Curriculum Report—Page 113)
- 41) To cross-level list ENGN 4050 to SDE-8050.(See details in the attached Curriculum Report—Page 114)
- 42) To cross-level list ENGN 4060 to SDE-8060. (See details in the attached Curriculum Report—Page 115)
- 43) To cross-level list ENGN 4061 to SDE-8061.(See details in the attached Curriculum Report—Page 116)
- **44) To cross-level list ENGN 4062 to SDE-8062.** (See details in the attached Curriculum Report—Pages 117-118)
- **45) To cross-level list ENGN 4063 to SDE-8063.** (See details in the attached Curriculum Report—Page 119)

- **46) To cross-level list ENGN 4070 to SDE-8070.** (See details in the attached Curriculum Report—Page 120)
- 47) To cross-level list ENGN 4080 to SDE-8080.(See details in the attached Curriculum Report—Page 121)
- 48) To cross-level list ENGN 4081 to SDE-8081. (See details in the attached Curriculum Report—Pages122-123)
- **49) To cross-level list ENGN 4100 to SDE-8100.** (See details in the attached Curriculum Report—Page 124)
- **50) To cross-level list ENGN 4101 to SDE-8101.** (See details in the attached Curriculum Report—Page 125)
- **51)** To add "permission of the instructor" as a pre-requisite for SDE 8310. (See details in the attached Curriculum Report—Page 126)
- **52) To add "permission of the instructor" as a pre-requisite for SDE 8320.** (See details in the attached Curriculum Report—Page 127)
- 53) To add "permission of the instructor" as a pre-requisite for SDE 8330. (See details in the attached Curriculum Report—Pages 128)
- 54) To add "permission of the instructor" as a pre-requisite for SDE 8350. (See details in the attached Curriculum Report—Page 129)
- **55)** To add "permission of the instructor" as a pre-requisite for SDE 8370. (See details in the attached Curriculum Report—Page 130)
- 56) To add "permission of the instructor" as a pre-requisite for SDE 8410. (See details in the attached Curriculum Report—Page 131)
- 57) To add "permission of the instructor" as a pre-requisite for SDE 8440. (See details in the attached Curriculum Report—Page 132)
- **58)** To add "permission of the instructor" as a pre-requisite for SDE 8450. (See details in the attached Curriculum Report—Page 133)
- **59) To add "permission of the instructor" as a pre-requisite for SDE 8470.** (See details in the attached Curriculum Report—Page 134)
- **60)** To add "permission of the instructor" as a pre-requisite for SDE 8510. (See details in the attached Curriculum Report—Page135)
- 61) To add "permission of the instructor" as a pre-requisite for SDE 8530. (See details in the attached Curriculum Report—Pages 136)
- 62) To add "permission of the instructor" as a pre-requisite for SDE 8550. (See details in the attached Curriculum Report—Page 137)
- 63) To add "permission of the instructor" as a pre-requisite for SDE 8830. (See details in the attached Curriculum Report—Pages 138)
- 64) That the Academic Calendar entry for the Doctor of Philosophy in Sustainable Design Engineering be revised to identify which graduate-level courses are eligible for the PhD program.

(See details in the attached Curriculum Report—Pages 139-158)

B. Linkletter raised concerns regarding cross-listing of 4000 and 8000 level courses. Two concerns were the inability of undergraduates who subsequently became graduate students to have sufficient courses available, and maintaining distinctions between student expectations for graduate versus undergraduate courses

B. Linkletter moved to table motions #17-#64 until the course descriptions are substantially changed to reflect the different graduate level courses.

N. Mannholland asked for clarification if the motion is to change the course descriptions in the calendar or to change the content of the courses.

B. Linkletter answered that it is to ensure the course descriptions are different and at a later date working towards students being able to take both the 4000 and 8000 level courses.

President Keefe invited W. Peters to comment on the implications of this for the fall semester.

W. Peters noted that implications would include APCC's proposed changes not applying in the upcoming fall semester, and possibly not the winter semester. He emphasized that, while understanding the intent to table, it's essential to acknowledge that cross-level listing regulations aim to bring students together under one instructor in one classroom at one time.

He highlighted the significance of viewing cross-level listing courses as providing graduate courses to senior undergraduates. He iterated the guidance he received throughout significant preparation for these changes, emphasizing the need for distinct experiences and assessments for undergraduate and graduate students.

Additionally, W. Peters stated that cross-level listing has been passed by Senate many times in the past without issue. He added that motion #64 clarifies which courses are eligible for the PhD program (with additional requirements for graduate level course status) and which are not based on the cross-level listing.

N. Etkin shared that if the concern is to stop cross-level listing courses, Senate should be discussing this in the context of the policy, not in the context of one Faculty's submission. She added that cross-level listing has long been a tradition at UPEI, so it is unfortunate to not have the opportunity to debate the implications of such a drastic change in policy.

N. Etkin also shared that in her experience, the motion to table a motion would come after the initial motion was discussed. The Dean of Engineering did not have the opportunity to share with Senators the context of the motions. Senators voted on a motion to table without being given an understanding of the motions they were voting for or against.

President Keefe acknowledged the procedural issue and proposed setting aside the motion to table so that a fulsome discussion of motions 17-64 could be held. B. Linkletter agreed.

M. Sweeney-Nixon reminded Senators that APCC motions go through much consultation and analysis before being presented to Senate.

N. Etkin shared that the issue B. Linkletter raises is an important one, especially in the context of programs that do not have many graduate courses. When you look at motion 64 it encompasses many graduate courses, which speaks to the MPHEC concern.

W. Peters emphasized that MPHEC was a top consideration in their process. Since the PhD program is relatively new, FSDE is still in the early stages of reporting to MPHEC. The challenge lies in balancing course availability for both graduate and undergraduate levels while addressing MPHEC's concerns about course value at the graduate level. Hence motion 64, clarifying that the cross-level listed courses were originally designated as undergraduate, won't be eligible as graduate courses for the PhD program. He added that it is crucial to distinguish between two separate issues: students not being able to take a 4000-level course as an 8000-level course and the Senate's cross-level listing policy.

B. Linkletter stated he has taken the opportunity to highlight the weakness in UPEI's graduate program. For example, every graduate course in Chemistry is cross-level listed with an undergraduate course. This is a weakness because Chemistry does not have the faculty members to separate those out. UPEI Chemistry students, therefore, who want to take graduate levels courses in Chemistry cannot because they have already taken them at the undergraduate level.

President Keefe asked if it would be appropriate for Senate to review the current policy.

B. Linkletter asked that graduate courses be treated with priority and seen as valuable, despite the number of students enrolled in them.

N. Etkin raised an example where Senate recently passed a motion to have two crosslevel listed courses in Environmental Sciences decoupled, which are now being taught separately. She stated that it is up to the programs to make the determinations of what is best for the students, and to utilize the decoupling process where necessary.

M. Sweeney-Nixon stated that this issue will be reviewed by the Senate's Graduate Studies Advisory Committee.

A. Braithwaite shared that she echoes W. Peters enthusiasm in providing the opportunity for undergraduate students to take graduate level courses, but at the same time sees the inefficacy of UPEI students being unable to take graduate level courses due to having taken them at the 4000 level.

President Keefe commented that it is clear that this policy should be reviewed as suggested by M. Sweeney-Nixon.

A. Braithwaite added that the discussion should include what will be done with the existing courses.

B. Linkletter restated that simply changing the course descriptions so that they are no longer identical could be enough to lift the eligibility regulation since we already know that the undergraduates and graduates are having two different experiences in the same course.

N. Etkin shared that according to the cross-level listing policy, students may only take a graduate-level course if they have previously completed the cross-level listed course with the Dean of Graduate Studies' approval. She pointed out that the restriction on taking two cross-listed courses stems from their similarity. Even if the course descriptions differ, duplicating credits for very similar content is discouraged. She concluded by suggesting that instructors determine their course instruction, she also recommended a policy review by academic policy experts.

J. Sentance shared that he was hearing inconsistency in the comparison of the 4000and 8000-level courses. He understood W. Peters to say they are different, and he understood N. Etkin to say they are the same.

W. Peters indicated that the 4000 and 8000 level courses are the same in that they are taught at the same time in the same place by the same instructor to the same students as the academic regulation allows. However, he reported that there are different requirements for the two course levels in terms of assessment and expected outcomes, which are established by the instructor. He supported the concept of a review of the cross-level listing regulation but indicated that the only ability to cross-level list at this time is through the existing academic regulation which is what the FSDE is doing in bringing forward these motions.

A. Hsiao noted that the motions which are in question came about by a very holistic faculty approach and were well prepared by the Graduate Studies Coordinator. She added that it is important that Senators believe in good faith that the individuals behind these decisions are doing their due diligence to ensure regulations are being met and the best interests of students are top of mind.

B. Linkletter announced that he no longer wished to table the FSDE motions but rather, based on discussion, looks forward to an analysis on how UPEI delivers its graduate programs.

FACULTY OF INDIGENOUS KNOWLEDGE EDUCATION & APPLIED STUDIES

OMNIBUS MOTION (G. Naterer/G. Evans) that motions 65-82 be approved as noted below: CARRIED

65) That a new course IKE 2052 Indigenous Resistance and Decolonizing be approved as proposed.

(See details in the attached Curriculum Report—Pages 160-163)

- **66) That a new course IKE 2110 Métis Culture, History and Governance.** (See details in the attached Curriculum Report—Pages 164-166)
- 67) That a new course IKE 2220 Beadwork: The symbols of Indigenous Cultural Resilience and Value be approved as proposed.

(See details in the attached Curriculum Report—Pages 167-169)

68) That a new course IKE 2230 The Mi'Kmaq of Eastern Canada be approved as proposed.

(See details in the attached Curriculum Report—Pages 170-172)

- **69) That a new course IKE 2320 Wabanaki Confederacy be approved as proposed.** (See details in the attached Curriculum Report—Pages 172-175)
- **70)** That a new course IKE 3010 Mi'Kmaw Language II be approved as proposed. (See details in the attached Curriculum Report—Pages 176-178)
- 71) That a new course IKE 3056 Indigenous Peoples and Justice be approved as proposed.

(See details in the attached Curriculum Report—Pages 179-182)

72) That a new course IKE 3066 Introduction to Indigenous Research Methodologies be approved as proposed.

(See details in the attached Curriculum Report—Pages 183-185)

- **73)** That a new course IKE 3221 Mi'Kmaq Spiritualities be approved as proposed. (See details in the attached Curriculum Report—Pages 186-188)
- 74) That a new course IKE 3340 Wabanaki Peace & Friendship Treaties be approved as proposed.

(See details in the attached Curriculum Report—Pages 189-191)

75) That a new course IKE 3350 Storytelling and Wabanaki Legends be approved as proposed.

(See details in the attached Curriculum Report—Pages 192-194)

- 76) That a new course IKE 3410 Canadian Treaties and Self-Government Agreements be approved as proposed. (See details in the attached Curriculum Report—Pages 195-197)
- 77) That a new course IKE 4520 Islands of Indigeneity be approved as proposed. (See details in the attached Curriculum Report—Pages 198-200)
- **78)** That a new course IKE 4096 Applied Indigenous Justice be approved as proposed. (See details in the attached Curriculum Report—Pages 201-204)
- **79) That a new course IKE 4090 Indigenous Special Topics be approved as proposed.** See details in the attached Curriculum Report—Pages 205-208)
- **80)** That a new course IKE 4210 Gijituaqasin: On the Land be approved as proposed. (See details in the attached Curriculum Report—Pages 209-211)
- 81) That a new course IKE 4240 Ika'taquey: Indigenous Gardening & Meditative Practices be approved as proposed.
 (See details in the attached Curriculum Report—Pages 212-214)
- 82) That a new course IKE 4410 Indigenous Territories Use-and-Occupancy Research Methods be approved as proposed.

(See details in the attached Curriculum Report—Pages 215-217)

K. Mears shared that, as more Indigenous Knowledge courses are becoming available at UPEI, she would like to bring to attention the Library requests for

resources. To her knowledge the funding was not received to support this programming.

D. Moses shared that the Library has received the one-time costs as well as the base costs and costs for books. In consultation with the IKERAS faculty, there was one funding element cancelled. A request for more materials could be revisited.

C. Murray took a moment to thank G. Evans and the rest of the IKERAS faculty for what is being accomplished here at UPEI to advance Indigenous Knowledge. She added that these 18 new courses are going to move our university and our students forward in a very positive way.

FACULTY OF SCIENCE

OMNIBUS MOTION (G. Naterer/N. Etkin) that motions 83-88 be approved as noted below: CARRIED

83) That the changes to the calendar entry for the Dietetic Option be approved as proposed.

(See details in the attached Curriculum Report—Pages 219-220)

- 84) To have changes to the calendar entry for the Integrated Dietetic Internship Program approved as proposed.
 (See details in the attached Curriculum Report—Pages 221-226)
- 85) To approve the changes to the "Suggested Course Sequences" for the Biology Major and Biology Honours program.
 (See details in the attached Curriculum Report—Pages 227-228)
- 86) To approve the calendar entry change for the Biology Major "Required Courses from Other Departments" be approved as proposed.
 (See details in the attached Curriculum Report—Pages 229-230)
- 87) To approve the removal of the prerequisite for BIOT 2020 Case Studies in Biotechnology as proposed.
 (See details in the attached Curriculum Report—Page 231)
- 88) To approve the course description change for BIOT 4820 Experiential Learning Project in Biotechnology as proposed.
 (See details in the attached Curriculum Report—Page 232)

OFFICE OF THE REGISTRAR

OMNIBUS MOTION (G. Naterer/C. Ryan) that motions 89-90 be approved as noted below: CARRIED

- **89) To revise Academic Regulation #17 Academic Standing, as proposed.** (See details in the attached Curriculum Report—Pages234-237)
- 90) To update the Terminology and Definitions section to align with the changes to Academic Regulation (#17).

(See details in the attached Curriculum Report—Page 238)

FACULTY OF SCIENCE

91) MOTION (G. Naterer/N. Etkin) to have the calendar entry be revised as proposed. CARRIED

(See details in the Addendum to the attached Curriculum Report).

b. Senate Steering and Nominating Committee

i. Senate and Senate Committee Vacancies for Fall

The SSNC will be seeking nominations to fill remaining Senate vacancies. By extension will be seeking Senators and faculty members to fill Senate committee vacancies.

ii. Senate Policies to be Repealed

Oumah Cuniah has done a great deal of work to identify Senate policies that are outdated or have been moved into academic regulations:

MOTION (T. Mady/N. Etkin) to repeal Degrees with Standing Policy (#admreggnl0003) CARRIED

MOTION (A. MacKenzie/C. Ryan) to repeal Major Area of Study on Transcripts (#admreggnl0006) CARRIED

MOTION (J. Sentance/B. Waterman) to repeal Notation on Honours Degrees Policy (#admreggnl0005) CARRIED

MOTION (L. Brinklow/N. Etkin) to repeal Retention of Scholarships Policy (#admreggnl0004) CARRIED

MOTION (T. Saunders/A. Zinck) to repeal Repeating Passed Course Policy (#admreggnl0011n) CARRIED

MOTION (N. Mannholland/P. Bernard) to repeal Transfer Students Policy (#admreggnl0007) CARRIED

iii. Senate Committee Annual Report Dates

SSNC is recommending reporting dates for committees to keep Senators apprised of what is happening within these committees.

J. Sentance shared that he feels that Board budget reporting should be presented at Senate for information purposes as has been done in the past.

C. Ryan agreed that this was a helpful practice.

President Keefe shared that, while a budget has not yet been approved, it can be shared in the fall.

K. Mears then shared with Senators that the SSNC, in the spirit of Senators seeing what occurs in our committees, will be working on a process whereby all committees capture minutes and post to the Senate website.

MOTION: (G. Naterer/K. Mears) To extend the length of the meeting by 15 minutes. CARRIED.

6. Other Business

a. Campus Update

i. Timetable Scheduling

G. Naterer stated that an Infosilem system has been implemented recently to make more effective use of limited classroom space across campus. As with many new software systems there is a learning curve of initial adoption and issues that need to be resolved. Special thanks to Kathy Gottshall-Pass, Andrea Trowbridge and Katy McDonnel in the Registrar's Office for their extensive work in dealing with issues as they arise. They met recently with Dean's Council to discuss the 2034-24 timetable, they received feedback and are making changes to address concerns raised. There have been sessions made available for training and there are user manuals available as well. Problems can arise when data has been entered incorrectly, so it is important to keep that in mind.

J. Sentance asked if there is a timeline for when the challenges will be addressed.

D. Sutton iterated, as was discussed at the Dean's Council, the importance of departments sharing examples of issues they are having so that the specifics of the mess are known.

J. Sentance asked if a timetabling policy exists.

The answer to the question was yes.

N. Etkin highlighted that software is only as good as the information we enter into it.

C. Murray voiced appreciation to Katy McDonnell who was phenomenal to work with regarding issues being fixed, and she encouraged Senators to reach out with specifics so they can be resolved before registration.

D. Sutton restated the importance of ensuring the Registrar's Office is made aware of issues.

MEETING MOVED TO IN CAMERA

7. Adjournment

MOTION (K. Mears) that the meeting be adjourned at 5:15 pm. CARRIED.

Respectfully Submitted,

Donna Sutton Secretary of Senate



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SUMMARY OF FACULTY OF ARTS MOTION #'S 1-13

- 1. SAN 3121 Race and Whiteness New Course
- 2. PSY 6501 Prerequisite Change
- 3. PSY 7201- Prerequisite Change
- 4. PSY 7202 course prerequisite
- 5. PSY 7203 course prerequisite
- 6. PSY 7204 course prerequisite
- 7. PSY 7501 course prerequisite
- 8. PSY 8502 course prerequisite
- 9. PSY 8503 course prerequisite
- 10. PSY 9000 course prerequisite
- 11. Doctor of Psychology Calendar entry change
- 12. ACLC 4070 Prerequisite change
- 13. Integrated Studies Calendar Entry Change



NEW COURSE PROPOSAL



Faculty/School: Arts

Department/Program(s): Sociology/Anthropology

MOTION: That a new course entitled SAN 3121 Race and Whiteness be approved as a cross-listed course with DSJS 3120 Race and Whiteness as proposed by DSJS.

Course Number and Title	SAN 3121 Race and Whiteness
Description	This course explores how "whiteness" as both an identity and a structure has long been overlooked, denied, and disavowed—and with what consequences. Topics addressed include: the idea of race and definitions of racism; multiple and conflicting ideas about whiteness-es; everyday whiteness, white normativity, and white privilege; "white fragility" and "white guilt"; and white anti-racism and "good white people."
Cross-Listing	DSJS-3120
Prerequisite/Co-Requisite	Anthropology 1050, Sociology 1010, and one 2000-level Anthropology, Sociology, or Sociology/Anthropology course
Credit(s)	3
Notation	Lecture

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 25 to 35

Is there an Enrolment Cap: Yes

If there is an enrolment limit, please explain. Our 300 level courses are capped at 35.

Rationale for New Course: This DSJS course offers an important opportunity to have a course on race which will benefit our students while expanding course options for students.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: N/A

Resources Required: None

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

If yes, please explain. n/a

Authorization

Authorization	Date:
Departmental Approval: Dr. Charles Adeyanju	January 20, 2023
Faculty/School Approval: Arts Curriculum Committee	March 7, 2023
Faculty Dean's Approval: Sharon Myers	March 7, 2023
Graduate Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: January 2022



NEW COURSE PROPOSAL

Motion #1

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

SAN 3121 Race and Whiteness

Library Resource Requirements (to be completed by the liaison and/or collections librarian). The Library already submitted resource requirements for this course, approved by the Senate in September 2022, under its DSJS designation. No further resources are needed beyond those listed in that form.

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:
 - o Monographs
 - o Subscriptions
 - Databases
 - o 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?

Date Received by Liaison/Collections Librarian	December 6, 2022
Name of Librarian to be Contacted for Questions	Melissa Belvadi
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	December 19, 2022



Motion #2

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

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

MOTION: To change the PSY 6501 course prerequisite to reflect current program expectations.

PSY 6501 ASSESSMENT PRACTICUMPSY 6501 ASSESSMENT PRACTICUMStudents are required to complete a minimum of 200 practicum hours focusing on assessment activities at the UPEI Psychology Clinic working about equally with adult and child/adolescent clients. Students also attend clinical teaching sessions and rounds relevant to specific issues relevant to psychology practice within the UPEI Psychology Clinic. Students also are provided with opportunities to engage in community outreach focused on the provision of intervention to under-served communities.PSY 6501 ASSESSMENT PRACTICUM Students are required to complete a minimum of 200 practicum hours focusing on assessment activities at the UPEI Psychology Clinic working about equally with adult and child/adolescent clients. Students also attend clinical teaching sessions and rounds relevant to specific issues relevant to psychology practice within the UPEI Psychology Clinic. Students also are provided with opportunities to engage in community outreach focused on the provision of intervention to under-served communities.PSY 6501 ASSESSMENT PRACTICUM Students are required to complete a minimum of 200 practicum hours focusing on assessment activities at the UPEI Psychology Clinic working about equally with adult and child/adolescent clients. Students also are provided with opportunities to engage in community outreach focused on the provision of intervention to under-served communities. PREREQUISITE: PSY 6204, PSY 6205 Three semester hours This course is graded Pass/FailPSY 6501 ASSESSMENT PRACTICUM Students are required to complete a minimum of 200 practicum hours focusing on assessment activities at the UPEI Psychology Clinic students also are provided with opportunities to engage in community outreach focused on the provision of intervention to under-served commu	Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
PREREQUISITE: PSY 6204, PSY 6205PREREQUISITE: PSY 6204, PSY 6205Three semester hoursThree semester hoursThis course is graded Pass/FailThis course is graded Pass/Fail	PSY 6501 ASSESSMENT PRACTICUM Students are required to complete a minimum of 200 practicum hours focusing on assessment activities at the UPEI Psychology Clinic working about equally with adult and child/adolescent clients. Students also attend clinical teaching sessions and rounds relevant to specific issues relevant to psychology practice within the UPEI Psychology Clinic. Students also are provided with opportunities to engage in community outreach focused on the provision of intervention to under-served communities.	indicated clearly PSY 6501 ASSESSMENT PRACTICUM Students are required to complete a minimum of 200 practicum hours focusing on assessment activities at the UPEI Psychology Clinic working about equally with adult and child/adolescent clients. Students also attend clinical teaching sessions and rounds relevant to specific issues relevant to psychology practice within the UPEI Psychology Clinic. Students also are provided with opportunities to engage in community outreach focused on the provision of intervention to under-served communities.
This course is graded Pass/Fail This course is graded Pass/Fail	Three semester hours	Three semester hours
	This course is graded Pass/Fail	This course is graded Pass/Fail

<u>Rationale for Change</u>: All students in the program take the same courses with their cohort. This change reflects current practice and provides flexibility in the registration system in the event there are modifications on the ordering of courses.

Effective Term: Fall 2023

Implications for Other Programs: NA

Impact on Students Currently Enrolled: No change from current practice.

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #3

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

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

MOTION: To change the PSY 7201 course prerequisite to reflect current program expectations.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
PSY 7201 INTERVENTION WITH ADULTS	PSY 7201 INTERVENTION WITH ADULTS
This course reviews major theoretical approaches to	This course reviews major theoretical approaches to
psychotherapy with adults including approaches from	psychotherapy with adults including approaches from
within the psychodynamic, existential, interpersonal,	within the psychodynamic, existential, interpersonal,
cognitive-behavioural and person centered traditions.	cognitive-behavioural and person centered traditions.
The theoretical foundations of these traditions are	The theoretical foundations of these traditions are
explored along with relevant evidence which speaks to	explored along with relevant evidence which speaks to
their efficacy in the treatment of various psychological	their efficacy in the treatment of various psychological
problems experienced by adults. Students gain	problems experienced by adults. Students gain
experience in case conceptualization and intervention	experience in case conceptualization and intervention
within each of these theoretical traditions. Moreover,	within each of these theoretical traditions. Moreover,
students are encouraged to draw on the conceptual and	students are encouraged to draw on the conceptual and
empirical research base (or lack thereof) that informs	empirical research base (or lack thereof) that informs our
our understanding of the impact of social and cultural	understanding of the impact of social and cultural factors
factors on therapeutic effectiveness. Students are	on therapeutic effectiveness. Students are encouraged,
encouraged, through reflection and attention to theory	through reflection and attention to theory and evolving
and evolving evidence, to consider how clinical	evidence, to consider how clinical psychologists develop
psychologists develop cultural sensitivities and	cultural sensitivities and competence in their ability to
competence in their ability to consider cultural factors	consider cultural factors when developing working
when developing working alliances, conducting	alliances, conducting assessments, and delivering
assessments, and delivering evidence-based	evidence-based interventions. This includes an ability for
interventions. This includes an ability for students of	students of all backgrounds to draw on an awareness of
all backgrounds to draw on an awareness of their own	their own cultural values and group affiliations and how
cultural values and group affiliations and how these	these may influence their clinical practice. Ethical issues
may influence their clinical practice. Ethical issues	which are likely to emerge in clinical work with adults
which are likely to emerge in clinical work with adults	are discussed.
are discussed.	PREREQUISITE: PSY 6208 <u>Acceptance to the Doctor</u>
PREREQUISITE: PSY 6208	<u>of Psychology Program</u>
Three hours a week	Three hours a week
Three semester hours	Three semester hours

<u>Rationale for Change</u>: All students in the program take the same courses with their cohort. This change reflects current practice and provides flexibility in the registration system in the event there are modifications on the ordering of courses.



Motion #3

Effective Term: Fall 2023

Implications for Other Programs: NA

Impact on Students Currently Enrolled: No change from current practice.

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #4

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

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

MOTION:	To change the P	SY 7202 course	prerequisite t	o reflect current	program
expectation	ons.				

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
PSY 7202 INTERVENTION WITH CHILDREN	PSY 7202 INTERVENTION WITH CHILDREN
AND ADOLESCENTS	AND ADOLESCENTS
This course considers basic approaches to intervention	This course considers basic approaches to intervention
with children and adolescents through the lens of	with children and adolescents through the lens of
developmental psychopathology and evidence-based	developmental psychopathology and evidence-based
practice. Students gain an understanding of the	practice. Students gain an understanding of the
importance of selecting interventions that are	importance of selecting interventions that are
appropriate to what we know about effectiveness for	appropriate to what we know about effectiveness for
specific clinical problems, the developmental level of	specific clinical problems, the developmental level of the
the client, and the wider ecology of risk and protective	client, and the wider ecology of risk and protective
factors that characterize children's and adolescents'	factors that characterize children's and adolescents'
lives. Major approaches to psychotherapeutic	lives. Major approaches to psychotherapeutic
intervention with children and adolescents are	intervention with children and adolescents are reviewed.
reviewed. Students gain experience in the development	Students gain experience in the development of basic
of basic clinical skills that can be applied within a	clinical skills that can be applied within a variety of
variety of clinical interventions. Important ethical	clinical interventions. Important ethical issues that often
issues that often emerge in work with children and	emerge in work with children and adolescents are
adolescents are discussed. The importance of cultural	discussed. The importance of cultural and individual
and individual diversities in key areas that are often	diversities in key areas that are often targeted by
targeted by interventions with children and adolescents	interventions with children and adolescents are
are considered, e.g., parenting values, beliefs and	considered, e.g., parenting values, beliefs and practices
practices or family hierarchies and communication	or family hierarchies and communication patterns.
patterns. Students also are encouraged to draw on the	Students also are encouraged to draw on the conceptual
conceptual and empirical research base (or lack thereof)	and empirical research base (or lack thereof) that informs
that informs our understanding of the impact of social	our understanding of the impact of social and cultural
and cultural factors on therapeutic effectiveness.	factors on therapeutic effectiveness.
PREREQUISITE: PSY 6208	PREREQUISITE: PSY 6208 Acceptance to the Doctor
Three hours a week	of Psychology Program
Three semester hours	Three hours a week
	Three semester hours

<u>Rationale for Change</u>: All students in the program take the same courses with their cohort. This change reflects current practice and provides flexibility in the registration system in the event there are modifications on the ordering of courses.



Motion #4

Effective Term: Fall 2023

Implications for Other Programs: NA

Impact on Students Currently Enrolled: No change from current practice.

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #5

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

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

MOTION:	To change the	PSY 7203 cours	e prerequisite t	o reflect current	program
expectati	ons.				

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
PSY 7203 ADVANCED INTERVENTION WITH	PSY 7203 ADVANCED INTERVENTION WITH
ADULTS: BEHAVIOURAL, COGNITIVE AND	ADULTS: BEHAVIOURAL, COGNITIVE AND
RELATED APPROACHES	RELATED APPROACHES
This course provides students with an opportunity to	This course provides students with an opportunity to
gain advanced understanding of psychotherapy	gain advanced understanding of psychotherapy
approaches that fall within the cognitive and	approaches that fall within the cognitive and behavioural
behavioural paradigms. Students learn to apply	paradigms. Students learn to apply fundamental
fundamental techniques to a range of clinical issues	techniques to a range of clinical issues across the
across the lifespan. The course emphasizes well-	lifespan. The course emphasizes well-established
established approaches as well as	approaches as well as emerging interventions that have
emerging interventions that have gained prominence	gained prominence and research support. Basic skills are
and research support. Basic skills are developed	developed through a range of assigned readings and class
through a range of assigned readings and class	presentations. Basic intervention skills are taught
presentations. Basic intervention skills are taught	didactically and practiced during recorded practice
didactically and practiced during recorded practice	sessions. Students gain experience in interventions
sessions. Students gain experience in interventions	aimed at modifying thinking, beliefs and behaviours.
aimed at modifying thinking, beliefs and behaviours.	Integration of emerging approaches and techniques such
Integration of emerging approaches and techniques	as those that emphasize mindfulness and virtual-reality-
such as those that emphasize mindfulness and virtual-	assisted psychotherapy will be undertaken. Implications
reality-assisted psychotherapy will be undertaken.	of cultural and individual diversities for application of
Implications of cultural and individual diversities for	behavioural, cognitive, and related approaches are
application of behavioural, cognitive, and related	explored.
approaches are explored.	PREREQUISITE: PSY 7201-Acceptance to the Doctor
PREREQUISITE: PSY 7201	of Psychology Program
Three hours a week	Three hours a week
Three semester hours	Three semester hours

<u>Rationale for Change</u>: All students in the program take the same courses with their cohort. This change reflects current practice and provides flexibility in the registration system in the event there are modifications on the ordering of courses.

Effective Term: Fall 2023

Implications for Other Programs: NA



Motion #5

Impact on Students Currently Enrolled: No change from current practice.

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #6

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

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

MOTION: To change the PSY 7204 course prerequisite to reflect current program expectations.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
PSY 7204 ADVANCED INTERVENTION WITH	PSY 7204 ADVANCED INTERVENTION WITH
ADULTS: SPECIFIC CLINICAL APPROACHES	ADULTS: SPECIFIC CLINICAL APPROACHES
The course provides in-depth study of a model—which	The course provides in-depth study of a model—which
can vary year to year—of an intervention or	can vary year to year—of an intervention or
psychotherapeutic approach with adults, examining	psychotherapeutic approach with adults, examining
theory, research findings, historical perspectives, and	theory, research findings, historical perspectives, and
techniques. The goal is an in depth understanding of	techniques. The goal is an in depth understanding of the
the particular approach, and development of	particular approach, and development of foundational
foundational skills in application of the approach,	skills in application of the approach, including its use in
including its use in case formulation and specific	case formulation and specific interventions. Students
interventions. Students have an opportunity to	have an opportunity to practice interventions in
practice interventions in audiovisual recorded practice	audiovisual recorded practice sessions. A rotating series
sessions. A rotating series of intervention models are	of intervention models are considered, e.g.,
considered, e.g., psychodynamic approaches,	psychodynamic approaches, humanistic approaches,
humanistic approaches, "Third Wave" behavioural	"Third Wave" behavioural therapies, treatment of
therapies, treatment of trauma, interventions for	trauma, interventions for specific populations, group
specific populations, group	psychotherapy. Implications of cultural and individual
psychotherapy. Implications of cultural and individual	diversities for application of the approaches are
diversities for application of the approaches are	explored.
explored.	PREREQUISITE: PSY 7201-Acceptance to the Doctor
PREREQUISITE: PSY 7201	of Psychology Program
Three hours a week	Three hours a week
Three semester hours	Three semester hours

<u>Rationale for Change</u>: All students in the program take the same courses with their cohort. This change reflects current practice and provides flexibility in the registration system in the event there are modifications on the ordering of courses.

Effective Term: Fall 2023

Implications for Other Programs: NA

Impact on Students Currently Enrolled: No change from current practice.



Academic Planning and Curriculum Committee March 28, 2023

CALENDAR & CURRICULUM CHANGE

Motion #6

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #7

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

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

MOTION: To change the PSY 7501 course prerequisite to reflect current program expectations.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
PSY 7501 INTERVENTION PRACTICUM	PSY 7501 INTERVENTION PRACTICUM
Students are required to complete a minimum of 200	Students are required to complete a minimum of 200
practicum hours focusing on intervention activities at	practicum hours focusing on intervention activities at the
the UPEI Psychology Clinic working about equally	UPEI Psychology Clinic working about equally with
with adult and child/adolescent clients. Students also	adult and child/adolescent clients. Students also attend
attend clinical teaching sessions relevant to specific	clinical teaching sessions relevant to specific issues
issues relevant to psychology practice within the UPEI	relevant to psychology practice within the UPEI
Psychology Clinic.Students are provided with	Psychology ClinicStudents are provided with
opportunities to engage in community outreach	opportunities to engage in community outreach focused
focused on the provision of intervention services to	on the provision of intervention services to under-served
under-served communities.	communities.
PREREQUISITE: PSY 7201, PSY 7203	PREREQUISITE: <u>PSY 7201, PSY 7203</u> -PSY 6208
Three semester hours	Three semester hours
This course is graded Pass/Fail	This course is graded Pass/Fail

<u>Rationale for Change</u>: All students in the program take the same courses with their cohort. This change reflects current practice and provides flexibility in the registration system in the event there are modifications on the ordering of courses.

Effective Term: Fall 2023

Implications for Other Programs: NA

Impact on Students Currently Enrolled: No change from current practice.

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #8

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

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

MOTION: To change the PSY 8502 course prerequisite to reflect current program expectations.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
PSY 8502 COMMUNITY INTERVENTION	PSY 8502 COMMUNITY INTERVENTION
PRACTICUM	PRACTICUM
Students are required to complete a minimum of 50	Students are required to complete a minimum of 50
practicum hours involving intervention at the group or	practicum hours involving intervention at the group or
community level. This work may involve an	community level. This work may involve an intervention
intervention focused on improving mental health or an	focused on improving mental health or an intervention
intervention aimed at preventing a mental health	aimed at preventing a mental health problem or at health
problem or at health promotion. Students may	promotion. Students may collaborate with other
collaborate with other students, under the direction of a	students, under the direction of a core faculty member,
core faculty member, to work toward community	to work toward community engagement which will
engagement which will allow some form of clinically	allow some form of clinically relevant and empirically
relevant and empirically supported intervention.	supported intervention.
PREREQUISITE: PSY 8201	PREREQUISITE: PSY 8201 Acceptance to the Doctor
Three semester hours	of Psychology Program
This course is graded Pass/Fail	Three semester hours
	This course is graded Pass/Fail

<u>Rationale for Change</u>: All students in the program take the same courses with their cohort. This change reflects current practice and provides flexibility in the registration system in the event there are modifications on the ordering of courses.

Effective Term: Fall 2023

Implications for Other Programs: NA

Impact on Students Currently Enrolled: No change from current practice.

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #9

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

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

MOTION: To change the course prerequisite and course description for PSY 8503 to reflect current program expectations.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
PSY 8503 ADVANCED PRACTICUM II	PSY 8503 ADVANCED PRACTICUM II
Students may complete a second advanced practicum	Students may complete a second advanced practicum consisting
consisting of at least 200 practicum hours. The	of at least 200 practicum hours. The practicum setting may be
practicum setting may be one that has been previously	one that has been previously established or the student may seek
established or the student may seek out their own	out their own clinical placement which must be approved by the
clinical placement which must be approved by the	Associate Director of Clinical Experience Director of Clinical
Associate Director of Clinical Experience.	<u>Training</u> .
PREREQUISITE: PSY 8501	PREREQUISITE: PSY 8501 and permission of the Director of
	<u>Clinical Training</u>

<u>Rationale for Change</u>: Reflects change in Director title. This is an optional offering, and dependent upon availability of suitable placement sites for students, approved by Director of Clinical Training.

Effective Term: Fall 2023

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Implications for Other Programs: NA

Impact on Students Currently Enrolled: No change from current practice.

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #10

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

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

MOTION: To revise the prerequisite for PSY 9000 Predoctoral Internship as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
PSY 9000 PREDOCTORAL INTERNSHIP	PSY 9000 PREDOCTORAL INTERNSHIP
Doctor of Psychology students complete a full-time 12-	Doctor of Psychology students complete a full-time 12-
month internship which consists of full-time clinical	month internship which consists of full-time clinical
practice under the supervision of registered	practice under the supervision of registered
psychologists.	psychologists.
PREREQUISITE: Permission of the Director of	PREREQUISITE: Permission of the Director of <u>Clinical</u>
Training	Training
This course is graded Pass/Fail	This course is graded Pass/Fail

<u>Rationale for Change</u>: Omitted word in existing title of Director of Clinical Training. Added to reflect current title for role.

Effective Term: Fall 2023

Implications for Other Programs: NA

Impact on Students Currently Enrolled: No change from current practice.

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #11

Revision is for a: Calendar Entry Change

Faculty/School/Department: Arts

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

MOTION: To change the course sequence and schedule of the PsyD program updated to reflect current and future delivery.

Indicated clearlyDOCTOR OF PSYCHOLOGY IN CLINICAL PSYCHOLOGYStudents following this degree program must complete 75 semester hours of required courses, 750 hours of clinical practica, and a full-time 12-month clinical internship.REQUIRED LIST OF COURSES• PSY 6201 Critical Historical Perspectives on Clinical Psychology• PSY 6202 Ethics and Professional Issues in Clinical Psychology• PSY 6101 Foundations I: Human Development and Personality• PSY 6203 Psychometrics and Assessment Practices with Adults• PSY 6102 Foundations II: Social Bases of Behaviour	<u>Reproduction of Current Calendar Entry</u>	Proposed revision with changes underlined and deletions
DOCTOR OF PSYCHOLOGY IN CLINICAL PSYCHOLOGYStudents following this degree program must complete 75 semester hours of required courses, 750 hours of clinical practica, and a full-time 12-month clinical internship.DOCTOR OF PSYCHOLOGY IN CLINICAL PSYCHOLOGYREQUIRED LIST OF courses, 750 hours of clinical practica, and a full-time 12-month clinical internship.Students following this degree program must complete 75 semester hours of required courses, 750 hours of clinical practica, and a full-time 12-month clinical internship.REQUIRED LIST OF COURSES•PSY 6201 Critical Historical Perspectives on Clinical Psychology•PSY 6202 Ethics and Professional Issues in Clinical Psychology•PSY 6101 Foundations I: Human Development and Personality•PSY 6203 Psychopathology and Diagnosis Across the Lifespan•PSY 6204 Psychometrics and Assessment Practices with Adults•PSY 6102 Foundations II: Social Bases of Behaviour		indicated clearly
DOCTOR OF PSYCHOLOGY IN CLINICAL PSYCHOLOGYDOCTOR OF PSYCHOLOGY IN CLINICAL PSYCHOLOGYStudents following this degree program must complete 75 semester hours of required courses, 750 hours of clinical practica, and a full-time 12-month clinical internship.Students following this degree program must complete 75 semester hours of required courses, 750 hours of clinical practica, and a full-time 12-month clinical internship.REQUIRED LIST OF COURSES• PSY 6201 Critical Historical Perspectives on Clinical Psychology• PSY 6202 Ethics and Professional Issues in Clinical Psychology• PSY 6203 Psychopathology and Diagnosis Across the Lifespan• PSY 6204 Psychometrics and Assessment Practices with Adults• PSY 6102 Foundations II: Social Bases of Behaviour		
PSYCHOLOGY PSYCHOLOGY Students following this degree program must complete 75 75 semester hours of required courses, 750 hours of Students following this degree program must complete 75 semester hours of required courses, 750 hours of Clinical practica, and a full-time 12-month clinical internship. REQUIRED LIST OF COURSES • PSY 6201 Critical Historical Perspectives on Clinical Psychology • • PSY 6202 Ethics and Professional Issues in Clinical Psychology • • PSY 6203 Psychopathology and Diagnosis Across the Lifespan • • PSY 6204 Psychometrics and Assessment Practices with Adults • • PSY 6102 Foundations II: Social Bases of Behaviour	DOCTOR OF PSYCHOLOGY IN CLINICAL	DOCTOR OF PSYCHOLOGY IN CLINICAL
 Students following this degree program must complete 75 semester hours of required courses, 750 hours of clinical practica, and a full-time 12-month clinical internship. REQUIRED LIST OF COURSES PSY 6201 Critical Historical Perspectives on Clinical Psychology PSY 6202 Ethics and Professional Issues in Clinical Psychology PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 	PSYCHOLOGY	PSYCHOLOGY
 75 semester hours of required courses, 750 hours of clinical practica, and a full-time 12-month clinical internship. REQUIRED LIST OF COURSES PSY 6201 Critical Historical Perspectives on Clinical Psychology PSY 6202 Ethics and Professional Issues in Clinical Psychology PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 	Students following this degree program must complete	Students following this degree program must complete 75
 clinical practica, and a full-time 12-month clinical internship. PSY 6201 Critical Historical Perspectives on Clinical Psychology PSY 6202 Ethics and Professional Issues in Clinical Psychology PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 	75 semester hours of required courses, 750 hours of	semester hours of required courses, 750 hours of clinical
Internship. REQUIRED LIST OF COURSES • PSY 6201 Critical Historical Perspectives on Clinical Psychology • PSY 6202 Ethics and Professional Issues in Clinical Psychology • PSY 6101 Foundations I: Human Development and Personality • PSY 6101 Foundations I: Human Development and Personality • PSY 6203 Psychopathology and Diagnosis Across the Lifespan • PSY 6204 Psychometrics and Assessment Practices with Adults • PSY 6102 Foundations II: Social Bases of Behaviour • PSY 6102 Foundations II: Social Bases of Behaviour	clinical practica, and a full-time 12-month clinical	practica, and a full-time 12-month clinical internship.
 PSY 6201 Critical Historical Perspectives on Clinical Psychology PSY 6202 Ethics and Professional Issues in Clinical Psychology PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 	internship.	
 PSY 6201 Critical Historical Perspectives on Clinical Psychology PSY 6202 Ethics and Professional Issues in Clinical Psychology PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 		<u>REQUIRED LIST OF COURSES</u>
 PSY 6202 Ethics and Professional Issues in Clinical Psychology PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 		 PSV 6201 Critical Historical Perspectives on Clinical
 PSY 6202 Ethics and Professional Issues in Clinical Psychology PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 		Psychology
 PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 		 PSV 6202 Ethics and Professional Issues in Clinical
 PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 		Psychology
 PSY 6101 Foundations I. Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 		 DSV 6101 Foundations I: Human Development and
 PSY 6203 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 		Personality
 PSY 6204 Psychopathology and Diagnosis Across the Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour 		 DSV 6203 Psychonathology and Diagnosis Agross the
PSY 6204 Psychometrics and Assessment Practices with Adults PSY 6102 Foundations II: Social Bases of Behaviour		• <u>FST 0205 FSychopathology and Diagnosis Across the</u> Lifespan
 PSY 6102 Foundations II: Social Bases of Behaviour 		 DSV 6204 Descebornetrics and Assessment Practices
PSY 6102 Foundations II: Social Bases of Behaviour		with Adults
		 PSV 6102 Foundations II: Social Bases of Behaviour
BSV 6103 Foundations III: Cognitive and Affective		 DSV 6103 Foundations III: Cognitive and Affective
Bases of Behaviour		Bases of Behaviour
PSV 6206 Quantitative Approaches to Research in		• PSV 6206 Quantitative Approaches to Research in
Clinical Psychology		Clinical Psychology
• PSY 6207 Qualitative Research in Clinical		• PSY 6207 Qualitative Research in Clinical
Psychology		Psychology
• PSY 6205 Psychometrics and Assessment Practices		 PSY 6205 Psychometrics and Assessment Practices
with Children and Adolescents		with Children and Adolescents
PSY 6501 Assessment Practicum		PSY 6501 Assessment Practicum
PSY 6208 Introduction to Psychotherapy: Common		PSY 6208 Introduction to Psychotherapy: Common
Factors		Factors
PSY 7101 Foundations IV: Biological Bases of		PSY 7101 Foundations IV: Biological Bases of
Behaviour		Behaviour
PSY 7202 Intervention with Children and		PSY 7202 Intervention with Children and
Adolescents		Adolescents
PSY 7201 Intervention with Adults		<u>PSY 7201 Intervention with Adults</u>


Dance duction of Current Color day Entry	Dranges d revision with shanges up derlined and deletions
Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
YEAR 1 Semester 1 (Fall) PSY 6201 Critical Historical Perspectives on Clinical Psychology	 PSY 7801 Clinical Dissertation: Research Proposal I PSY 7203 Advanced Intervention with Adults: Behavioural, Cognitive & Related Approaches PSY 7204 Advanced Intervention with Adults: Specific Clinical Approaches PSY 7205 Advanced Intervention with Children and Adolescents PSY 7802 Clinical Dissertation: Research Proposal II PSY 7501 Intervention Practicum PSY 8801 Clinical Dissertation: Project I PSY 8202 Clinical Psychology in the Community PSY 8202 Clinical Psychology for Organizational and Systems Change PSY 8501 Advanced Practicum I PSY 8502 Community Intervention Practicum PSY 8203 Clinical Dissertation: Project II PSY 8203 Clinical Supervision and Teaching PSY 8204 Psychology Practice PSY 8501 Advanced Practicum I PSY 8501 Advanced Practicum I PSY 8503 Advanced Practicum I PSY 8503 Advanced Practicum II SUGGESTED COURSE SEQUENCE The order in which courses are offered may vary year to year. YEAR 1 Semester 1 (Fall) PSY 6201 Critical Historical Perspectives on Clinical
Psychology PSY 6202 Ethics and Professional Issues in Clinical Psychology	Psychology PSY 6202 Ethics and Professional Issues in Clinical Psychology
PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the	PSY 6101 Foundations I: Human Development and Personality PSY 6203 Psychopathology and Diagnosis Across the
Lifespan PSY 6204 Psychometrics and Assessment Practices	Lifespan PSY 6204 Psychometrics and Assessment Practices with Adults
	PSY 6207 Qualitative Research in Clinical Psychology



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
Semester 2 (Winter) PSY 6102 Foundations II: Social Bases of Behaviour PSY 6103 Foundations III: Cognitive and Affective Bases of Behaviour PSY 6206 Quantitative Approaches to Research in Clinical Psychology PSY 6207 Qualitative Research in Clinical Psychology PSY 6205 Psychometrics and Assessment Practices with Children and Adolescents	Semester 2 (Winter)PSY 6102 Foundations II: Social Bases of BehaviourORPSY 7101 Foundations IV: Biological Bases of BehaviourPSY 6103 Foundations III: Cognitive and Affective Basesof BehaviourPSY 6205 Psychometrics and Assessment Practices withChildren and AdolescentsPSY 6206 Quantitative Approaches to Research inClinical PsychologyPSY 6207 Qualitative Research in Clinical PsychologyPSY 6208 Introduction to Psychotherapy: CommonFactorsPSY 6501 Assessment Practicum
Semester 3 (Summer) PSY 6501 Assessment Practicum PSY 6208 Introduction to Psychotherapy: Common Factors	Semester 3 (Summer) PSY 6101 Foundations I: Human Development and Personality OR PSY 6103 Foundations III: Cognitive and Affective Bases of Behaviour PSY 6501 Assessment Practicum (con't) PSY 6208 Introduction to Psychotherapy: Common Factors
YEAR 2 Semester 1 (Fall) PSY 7101 Foundations IV: Biological Bases of Behaviour PSY 7202 Intervention with Children and Adolescents PSY 7201 Intervention with Adults PSY 7801 Clinical Dissertation: Research Proposal I PSY 6501 Assessment Practicum (con't)	YEAR 2 Semester 1 (Fall) PSY 7101 Foundations IV: Biological Bases of Behaviour PSY 7202 Intervention with Children and Adolescents PSY 7201 Intervention with Adults PSY 7203 Advanced Intervention with Adults: Behavioural, Cognitive & Related Approaches PSY 7501 Intervention Practicum PSY 7801 Clinical Dissertation: Research Proposal I PSY 8202 Clinical Psychology for Organizational and Systems Change PSY 6501 Assessment Practicum (con't)
Semester 2 (Winter) PSY 7203 Advanced Intervention with Adults: Behavioural, Cognitive & Related Approaches PSY 7204 Advanced Intervention with Adults: Specific Clinical Approaches PSY 7205 Advanced Intervention with Children and Adolescents PSY 7802 Clinical Dissertation: Research Proposal II PSY 7501 Intervention Practicum	Semester 2 (Winter) PSY 6102 Foundations II: Social Bases of Behaviour OR PSY 7101 Foundations IV: Biological Bases of Behaviour PSY 7201 Intervention with Adults PSY 7203 Advanced Intervention with Adults: Behavioural, Cognitive & Related Approaches PSY 7204 Advanced Intervention with Adults: Specific Clinical Approaches



Motion #11

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
	PSY 7205 Advanced Intervention with Children and
	Adolescents
	PSY 7501 Intervention Practicum (con't)
	PSY 7802 Clinical Dissertation: Research Proposal II
Semester 3 (Summer)	
PSY 7501 Intervention Practicum (cont.)	Semester 3 (Summer)
101 7001 intervention 1 fuerieum (cont.)	PSY 7501 Intervention Practicum (cont.)
	<u>PSY 6101 Foundations I: Human Development and</u>
	Personality
	DSV 6102 Foundations III: Cognitive and Affective Passa
	of Behaviour
	PSY 8501 Advanced Practicum I
YEAR 3	YEAR 3
Semester 1 (Fall)	Semester 1 (Fall)
PSY 8801 Clinical Dissertation: Project I	PSY 8203 Clinical Supervision and Teaching
PSY 8201 Clinical Psychology in the Community	PSY 8204 Psychology Practice
PSY 8202 Clinical Psychology for Organizational and	PSY 8801 Clinical Dissertation: Project I
Systems Change	PSY 8201 Clinical Psychology in the Community
PSY 8501 Advanced Practicum I	PSY 8202 Clinical Psychology for Organizational and
	Systems Change
	PSY 8501 Advanced Practicum I (con't)
Somester ? (Winter)	
PSY 8502 Community Intervention Practicum	Semester 2 (Winter)
PSY 8802 Clinical Dissertation: Project II	<u>PST 7204 Advanced Intervention with Adults: Specific</u>
PSY 8203 Clinical Supervision and Teaching	PSV 8201 Clinical Psychology in the Community
PSY 8204 Psychology Practice	PSY 8502 Community Intervention Practicum
PSY 8501 Advanced Practicum I	PSY 8503 Advanced Practicum II (optional)
	PSY 8802 Clinical Dissertation: Project II
	PSY 8203 Clinical Supervision and Teaching
	PSY 8204 Psychology Practice
	PSY 8501 Advanced Practicum I
Semester 3 (Summer)	
PSY 8503 Advanced Practicum II (optional)	Semester 3 (Summer)
	PSY 8503 Advanced Practicum II (optional) (con't)
	PSY 8802 Clinical Dissertation: Project II (con't)

<u>Rationale for Change</u>: This sequencing and scheduling structure reflects current expectations of the PsyD student progress and supports a continuous registration requirement into the summer of Year 3 of the program.

Effective Term: Fall 2023

Implications for Other Programs: NA



Motion #11

Impact on Students Currently Enrolled: Will reflect current ordering of courses.

Authorization	Date:
Departmental Approval: Dr. Nia Phillips, Chair	March 1 2023
Faculty/School Approval: Arts Curriculum Committee	March 7 2023
Faculty Dean's Approval: Sharon Myers	March 7 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	March 7 2023
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: September 2022



Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Arts

Department/Program(s)/Academic Regulations: **Applied Communication, Leadership, and Culture**

<u>MOTION:</u> To have the change in prerequisite for ACLC 4070: Work Integrated Practicum be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
4070 WORK INTEGRATED PRACTICUM	4070 WORK INTEGRATED PRACTICUM
In this course theory and professional practice are	In this course theory and professional practice are
combined. Students work in an approved agency or	combined. Students work in an approved agency or
professional workplace for a total of 40 hours. This	professional workplace for a total of 40 hours. This
capstone experience provides students with an	capstone experience provides students with an
opportunity to integrate essential and advanced skills	opportunity to integrate essential and advanced skills in
in a field related to their future career interests. While	a field related to their future career interests. While
students engage this practicum/workplace project on	students engage this practicum/workplace project on
their own, all projects are presented in a public forum.	their own, all projects are presented in a public forum.
PREREQUISITE: ACLC/UNIV 3030 and	PREREQUISITE: <u>ACLC 3060 or</u> ACLC/UNIV 3030
permission of the instructor	and permission of the instructor
3 credit hours	3 credit hours

Rationale for Change: This course involves work placements which need to be organized well ahead of the beginning of the semester. Permission of the instructor will mean that the student and the instructor will interact concerning the work placement prior to the start of the course.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Lisa Chilton	February 9, 2023
Faculty/School Approval: Arts Curriculum Committee	March 7, 2023
Faculty Dean's Approval: Sharon Myers	March 7, 2023
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: September 2021



Motion #13

Revision is for a: Calendar Entry Change

Faculty/School/Department: Arts

Department/Program(s)/Academic Regulations: Integrated Studies

<u>MOTION:</u> That the change in the number of required semester hours for BIS be approved as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
 SUMMARY The Bachelor of Integrated Studies requirements include: 33 semester-hours (11 courses) at the senior level: nine 3000-4000 level courses in any subject, one 3000 level course in the concentration, and one 4000 level course in the concentration. A grade of 65% in at least 7 of the 11 courses completed at this senior level Not more than 36 semester-hours (12 courses) at the preparatory (1000) level 6 semester-hours in One of UPEI 1010, UPEI 1020, or UPEI 1030 and a writing intensive course Integrated Studies 1930: Creating a Career and Learning Portfolio 	 SUMMARY The Bachelor of Integrated Studies requirements include: 33 semester hours (11 courses) 24 semester hours (8 courses) at the senior level: mine six 3000-4000 level courses in any subject, one 3000 level course in the concentration, and one 4000 level course in the concentration. A grade of 65% in at least 7 of the 11 5 of the 8 courses completed at this senior level Not more than 36 semester-hours (12 courses) at the preparatory (1000) level 6 semester-hours in One of UPEI 1010, UPEI 1020, or UPEI 1030 and a writing intensive course Integrated Studies 1930: Creating a Career and Learning Portfolio IKE 1040 – Indigenous Teaching of Turtle Island

Rationale for Change: The BIS QAR review process (fall 2021) indicated that students find it challenging to meet the 9 courses at 3000 & 4000 level (any subject). The BIS Program Advisory Committee has examined this requirement in relation to other UPEI degree programs and regional comparators and determined it is consistently higher (proportionally) than other programs/degrees. The BIS Program Advisory Committee recommends reducing the 9 courses to 6, allowing for students to still have 8/30 at the 3000 & 4000 levels, when you include their 2-concentration subject course requirements. This would not change the total number of courses/credits required but would allow more course selection at the 2000 level.

Effective Term: FALL 2023

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	Date:
Departmental Approval: Inge Dorsey	January 31, 2023
Faculty/School Approval: Arts Curriculum Committee	March 7, 2023
Faculty Dean's Approval: Sharon Myers	March 7, 2023
Grad. Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	March 22, 2023



SUMMARY OF FACULTY OF EDUCATION MOTION #'S 14-16

1	Calendar Entry Change	MOTION: To revise the required courses in the	
		Primary/Elementary BEd program as submitted.	
2	Calendar Entry Change	MOTION: To revise the required courses in the	
		Primary/Elementary BEd (français langue seconde)	
		program as submitted	
3	Calendar Entry Change	MOTION: To revise the admission requirements	
		and accepted teachables for the BEd (français	
		langue seconde) program as submitted.	



Motion #14

Revision is for a: Calendar Entry Change

Faculty/School/Department: Education

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

<u>MOTION:</u> To revise the required courses in the Primary/Elementary BEd program as submitted.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
	deterioris indicated elearry
Twelve-Month Post-Degree Bachelor of Education	Twelve-Month Post-Degree Bachelor of Education
The Bachelor of Education (BEd) is a 12-month post- degree program consisting of 20 three-hour credit courses in education. This program is designed to provide the variety of courses and extended field experiences through which students can develop the knowledge and skills needed to teach in the modern classroom. It is the opportunity for students to focus their studies in Primary/Elementary (K – 6) or Intermediate/Senior (7-12) and in International, Indigenous, or Adult and Workplace Education.	The Bachelor of Education (BEd) is a 12-month post- degree program consisting of 20 three-hour credit courses in education. This program is designed to provide the variety of courses and extended field experiences through which students can develop the knowledge and skills needed to teach in the modern classroom. It is the opportunity for students to focus their studies in Primary/Elementary (K – 6) or Intermediate/Senior (7-12) and in International, Indigenous, or Adult and Workplace Education.
REQUIRED COURSES:	REQUIRED COURSES:
PRIMARY/ELEMENTARY CONCENTRATION (K – 6) INTERMEDIATE/SENIOR CONCENTRATION (7 – 12)	PRIMARY/ELEMENTARY CONCENTRATION (K – 6) INTERMEDIATE/SENIOR CONCENTRATION (7 – 12)
ED 4030 The Arts and Social Transformation ED 4110 Learners and Learning ED 4150 The Diverse and Inclusive Classroom ED 4200 Teaching for Science, Technology, Math, and Engineering (STEM) ED 4490 Introduction to Indigenous Education ED 4630 Perspectives on Culture and Society in Education ED 4640 Educating for Global Citizenship ED 4660 Principles and Practices of Teaching English as Another Language ED 4820 Assessment and Evaluation ED 4961 Preparation for the Teaching Profession I ED 4971 Preparation for the Teaching Profession II ED 4972 Practicum II	ED 4030 The Arts and Social Transformation ED 4110 Learners and Learning ED 4150 The Diverse and Inclusive Classroom ED 4200 Teaching for Science, Technology, Math, and Engineering (STEM) ED 4490 Introduction to Indigenous Education ED 4630 Perspectives on Culture and Society in Education ED 4640 Educating for Global Citizenship ED 4660 Principles and Practices of Teaching English as Another Language ED 4820 Assessment and Evaluation ED 4961 Preparation for the Teaching Profession I ED 4971 Preparation for the Teaching Profession II ED 4972 Practicum II



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
PRIMARY/ELEMENTARY CONCENTRATION (K - 6) ED 4220 Mathematics for Teachers ED 4230 Primary/Elementary Mathematics I ED 4245 Inquiry-Based Methods in Science and Social Studies ED 4280 Primary/Elementary Mathematics II ED 4320 Primary/Elementary language and Literacies and Multiliteracies I ED 4330 Literacy and Multiliteracies in the Early Years II ED 4480 Social Emotional Learning and Children's Mental Health	PRIMARY/ELEMENTARY CONCENTRATION (K - 6) ED 4220 Mathematics for Teachers ED 4230 Primary/Elementary Mathematics I ED 4245 Inquiry-Based Methods in Science and Social Studies ED 4280 Primary/Elementary Mathematics II ED 4320 Primary/Elementary language and Literacies and Multiliteracies I ED 4330 Literacy and Multiliteracies in the Early Years II ED 4336 Developing Learning and Play in the Early Years (Ages 0-8) ED 4480 Social Emotional Learning and Children's Mental Health
INTERMEDIATE/SENIOR CONCENTRATION (7 – 12) ED 4130 Multiliteracies Across the Curriculum ED 4420 Adolescent Social & Emotional Health ED 4530 Curriculum and Pedagogy	INTERMEDIATE/SENIOR CONCENTRATION (7 – 12) ED 4130 Multiliteracies Across the Curriculum ED 4420 Adolescent Social & Emotional Health ED 4530 Curriculum and Pedagogy ED 4630 Perspectives on Culture and Society in Education
Students take 4 of: ED 4260 Intermediate/Senior Mathematics I ED 4270 Intermediate/Senior Mathematics II ED 4360 Intermediate/Senior English I ED 4370 Intermediate/Senior English II ED 4460 Intermediate/Senior Science I ED 4470 Intermediate/Senior Social Studies I ED 4560 Intermediate/Senior Social Studies I ED 4570 Intermediate/Senior Social Studies II STUDY FOCI Students may complete a study focus in International, Indigenous, Early Learning or Adult Education by completing a six-week practicum in the specified area and one course beyond the 20 required for the BEd as outlined below:	Students take 4 of: ED 4260 Intermediate/Senior Mathematics I ED 4270 Intermediate/Senior Mathematics II ED 4360 Intermediate/Senior English I ED 4370 Intermediate/Senior English II ED 4460 Intermediate/Senior Science I ED 4470 Intermediate/Senior Science II ED 4560 Intermediate/Senior Social Studies I ED 4570 Intermediate/Senior Social Studies II STUDY FOCI Students may complete a study focus in International, Indigenous, Early Learning or Adult Education by completing a six-week practicum in the specified area and one course beyond the 20 required for the BEd as outlined below:
INTERNATIONAL EDUCATION ED 4620 International Education	INTERNATIONAL EDUCATION ED 4620 International Education
INDIGENOUS EDUCATION ED 4510 Integrating Indigenous Themes in the Curriculum K-12	



Motion #14

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
 ADULT EDUCATION One of the following: ED 3630 The Adult Learner ED 3640 Assessment of Adult Learning 	INDIGENOUS EDUCATION ED 4510 Integrating Indigenous Themes in the Curriculum K-12
 ED 3680 Curriculum Development ED 3730 Inclusion and Differentiation in Adult Learning 	 ADULT EDUCATION One of the following: ED 3630 The Adult Learner ED 3640 Assessment of Adult Learning
EARLY LEARNING ED 4336 – Developing Learning and Play in the Early Years (Ages 0-8)	 ED 3680 Curriculum Development ED 3730 Inclusion and Differentiation in Adult Learning
	EARLY LEARNING ED 4336—Developing Learning and Play in the Early Years (Ages 0-8)

Rationale for Change: Developing Learning and Play in the Early Years is a priority as recognized by early childhood researchers and school boards across the country, including the local educational authorities (a major employer of UPEI BEd graduates). BEd students entering the professional workforce with the teachings and understandings of ED 4336–Developing Learning and Play in the Early Years (Ages 0-8) will be better prepared for the teaching profession and will have a deeper understanding of different philosophical approaches to early childhood education. The research contributing to the addition ED-4336 is pedagogically strong and widely accepted across multiple education paradigms. This eliminates the Early Learning Study Focus. ED 4630 – Perspectives on Culture and Society will be removed from the Primary cohort as overlap has been identified in ED 4630 within the Primary cohort courses. ED 4630 will remain for the Intermediate/Secondary cohort.

Effective Term: SUMMER 2023

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	Date:
Departmental Approval: Bachelor of Education Committee	February 10, 2023
Faculty/School Approval: Faculty of Education Council	February 24, 2023
Faculty Dean's Approval: Dr. Debbie MacLellan, Dean (Interim)	February 24, 2023
Grad. Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #15

Revision is for a: Calendar Entry Change

Faculty/School/Department: Education

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

<u>MOTION:</u> To revise the required courses in the Primary/Elementary BEd (français langue seconde) program as submitted.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
Bachelor of Education—francais langue seconde	Bachelor of Education—francais langue seconde
This unique program will provide the variety of	This unique program will provide the variety of courses,
courses, French language and cultural experiences and	French language and cultural experiences and extended
extended field experiences through which students can	field experiences through which students can develop
develop the knowledge and skills needed to teach in	the knowledge and skills needed to teach in modern
modern French Second Language classrooms. This	French Second Language classrooms. This program
program also provides students an opportunity to	also provides students an opportunity to focus their
focus their studies in the primary/elementary or	studies in the primary/elementary or
intermediate/senior cohorts.	intermediate/senior cohorts.
Students must pass all courses to graduate with a	Students must pass all courses to graduate with a
Bachelor of Education-français langue seconde.	Bachelor of Education-francais langue seconde.
5 0	, 0
REOUIRED COURSES:	REOUIRED COURSES:
PRIMARY/ELEMENTARY CONCENTRATION	PRIMARY/ELEMENTARY CONCENTRATION
ED 4030 Intégration des arts	ED 4030 Intégration des arts
ED 4060 Comprendre la santé sociale et émotionnelle	ED 4060 Comprendre la santé sociale et émotionnelle
chez les élèves	chez les élèves
ED 4110 Learners and Learning	ED 4110 Learners and Learning
ED 4150 Inclusion en salle de classe	ED 4150 Inclusion en salle de classe
ED 4200 Teaching for Science, Technology,	ED 4200 Teaching for Science, Technology,
Engineering and Math (STEM)	Engineering and Math (STEM)
ED 4220 Mathematics for Teachers	ED 4220 Mathematics for Teachers
ED 4230 Primary/Elementary Mathematics I	ED 4230 Primary/Elementary Mathematics I
ED 4245 Inquiry-Based Methods in Science and	ED 4245 Inquiry-Based Methods in Science and Social
Social Studies	Studies
ED 4280 Primary/Elementary Mathematics II	ED 4280 Primary/Elementary Mathematics II
ED 4490 Introduction to Indigenous Education	ED 4336 Developing Learning and Play in the Early
ED 4630 Culture et société	<u>Years (Ages 0-8)</u>
ED 4800 Teaching in a Core French, Immersion and	ED 4490 Introduction to Indigenous Education
French First Language in a Minority Context Setting	ED 4630 Culture et société
ED 4820 Évaluation en salle de classe	ED 4800 Teaching in a Core French, Immersion and
ED 4880 Littératie I	French First Language in a Minority Context Setting
ED 4890 Littératie II (primaire-élémentaire)	ED 4820 Evaluation en salle de classe
ED 4900 Intégration de la langue au contenu	ED 4880 Littératie I
ED 4961 Préparation pour le professionnel de	ED 4890 Littératie II (primaire-élémentaire)
l'enseignement I	ED 4900 Intégration de la langue au contenu
ED 4962 Stage I	ED 4961 Préparation pour le professionnel de
ED 4971 Préparation pour le professionnel de	l'enseignement I
l'enseignement II	



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
ED 4972 Stage II	ED 4962 Stage I
	ED 4971 Préparation pour le professionnel de
	l'enseignement II
	ED 4972 Stage II
	INTERMEDIATE/SENIOR CONCENTRATION
INTERMEDIATE/SENIOR CONCENTRATION	(7-12)
(7-12)	ED 4030 Intégration des arts
ED 4030 Intégration des arts	ED 4060 Comprendre la santé sociale et émotionnelle
ED 4060 Comprendre la santé sociale et émotionnelle	chez les élèves
chez les élèves	ED 4110 Learners and Learning
ED 4110 Learners and Learning	ED 4150 Inclusion en salle de classe
ED 4150 Inclusion en salle de classe	ED 4200 Teaching for Science, Technology,
ED 4200 Teaching for Science, Technology,	Engineering and Main (51 EM)
Engineering and Math (STEM)	ED 4470 Introduction to indigenous Education ED 4620 Culture et acciété
ED 4490 Introduction to Indigenous Education	ED 4630 Culture et societe
ED 4630 Culture et societe	ED 4040 Educating for Global Chizenship ED 4820 Évaluation on calla de classe
ED 4640 Educating for Global Chizenship ED 4820 Évelvetion en calle de closes	ED 4820 Evaluation en sane de classe
ED 4820 Evaluation en salle de classe	ED 4888 Litteratie II $-$ Education en français II
ED 4880 Lilleratie II Education en français II	(Intermédiaire/Secondaire)
(Intermédiaire/Secondaire)	ED 4900 Intégration de la langue au contenu
ED 4900 Intégration de la langue au contenu	ED 4961 Préparation pour le profession d'enseignement
FD 4961 Préparation pour le profession	I
d'enseignement I	ED 4962 Stage I
ED 4962 Stage I	ED 4971 Préparation pour le profession d'enseignement
ED 4971 Préparation pour le profession	II
d'enseignement II	ED 4972 Stage II
ED 4972 Stage II	
	INTERMEDIATE/SENIOR CONCENTRATION
INTERMEDIATE/SENIOR CONCENTRATION	(7-12) will take 4 of the following:
(7-12) will take 4 of the following:	ED 4560 Sciences Humaines 1
ED 4560 Sciences Humaines 1	ED 4570 Sciences Humaines 2
ED 4570 Sciences Humaines 2	ED 4200 Intermediate/Senior Mathematics I
ED 4260 Intermediate/Senior Mathematics I	ED 42/0 Matnes 2 ED 4460 Sciences 1
ED 42/0 Mathes 2	ED 4400 Sciences 1 ED 4470 Sciences 2
ED 4400 Sciences 1 ED 4470 Sciences 2	ED 4760 French Methods
ED 44/0 Sciences 2 ED 4760 Eranah Mathada	FD 4800 Teaching in a Core French Immersion and
ED 4700 Fielden Methods	French First Language in a Minority Context Setting
French First Language in a Minority Context Setting	The first Punguage in a minority context octining
Trenen Filst Language in a Willotity Context Setting	STUDY FOCI:
STUDY FOCI	Students may complete a study focus in International.
Students may complete a study focus in	Indigenous, Early Learning or Adult Education by
International, Indigenous, Early Learning or Adult	completing a six-week practicum in the specified area
Education by completing a six-week practicum in the	and one course beyond the 20 required for the BEd as
specified area and one course beyond the 20 required	outlined below:
for the BEd as outlined below:	



Motion #15

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
	deletions indicated cleanly
INTERNATIONAL EDUCATION	INTERNATIONAL EDUCATION
ED 4620 International Education	ED 4620 International Education
INDIGENOUS EDUCATION	INDIGENOUS EDUCATION
ED 4510 Integrating Indigenous Themes in the	ED 4510 Integrating Indigenous Themes in the
Curriculum K-12	Curriculum K 12
Currentum K-12	Curriculum K-12
ADULTEDUCATION	ADULTEDUCATION
One of the following:	One of the following:
• ED 3630 The Adult Learner	• ED 3630 The Adult Learner
• ED 3640 Assessment of Adult Learning	• ED 3640 Assessment of Adult Learning
• ED 3680 Curriculum Development	• ED 3680 Curriculum Development
• ED 3730 Inclusion and Differentiation in Adult	• ED 3730 Inclusion and Differentiation in Adult
Leorning	Learning
Leanning	
EAKLY LEAKNING	EAKLY LEAKNING
Ed 4336 – Developing Learning and Play in the Early	Ed 4336 – Developing Learning and Play in the Early
Years (Ages 0-8)	Years (Ages 0-8)

Rationale for Change: Developing Learning and Play in the Early Years is a priority as recognized by early childhood researchers and school boards across the country, including the local educational authorities (a major employer of UPEI BEd graduates). BEd students entering the professional workforce with the teachings and understandings of ED 4336–Developing Learning and Play in the Early Years (Ages 0-8) will be better prepared for the teaching profession and will have a deeper understanding of different philosophical approaches to early childhood education. The research contributing to the addition ED-4336 is pedagogically strong and widely accepted across multiple education paradigms. This eliminates the Early Learning Study Foci. ED 4800 – L'enseignement dans les contextes de l'immersion en français, du français de base et du français langue première en milieu minoritaire will be removed from the Primary cohort as overlap has been identified in ED 4800 within the Primary cohort courses. ED 4800 will remain for the Intermediate/Secondary cohort.

Effective Term: SUMMER 2023

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	Date:
Departmental Approval: Bachelor of Education Committee	February 10, 2023
Faculty/School Approval: Faculty of Education Council	February 24, 2023
Faculty Dean's Approval: Dr. Debbie MacLellan, Dean (Interim)	February 24, 2023
Grad. Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #16

Revision is for a: Calendar Entry Change

Faculty/School/Department: Education

Department/Program(s)/Academic Regulations: Bachelor of Education (français langue seconde)

MOTION: To revise the admission requirements and accepted teachables for the BEd (français langue seconde) program as submitted.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
Bachelor of Education—français langue seconde	Bachelor of Education—français langue seconde
NOTE: EFFECTIVE FOR SUMMER 2023 INTAKE	NOTE: EFFECTIVE FOR SUMMER 2023 INTAKE
(i) Introduction	(i) Introduction
The Bachelor of Education–français langue seconde is	The Bachelor of Education-français langue seconde is
a 12-month post-degree program consisting of 60	a 12-month post-degree program consisting of 60 credit
credit hours in Education with the program	hours in Education with the program commencing in
commencing in May of each year. This program is	May of each year. This program is designed to provide
designed to provide the variety of courses and	the variety of courses and extended field experiences
extended field experiences through which students	through which students can develop the knowledge
can develop the knowledge and skills needed to teach	and skills needed to teach in the modern classroom. It
in the modern classroom. It provides the opportunity	provides the opportunity for students to focus their
Drimary/Flementary (grades K 6), or	Studies in Prinary/ Elementary (grades K-0), of International
Intermediate/Senior (grades 7-12) and International	Indigenous or Adult Education
Indigenous or Adult Education	mulgenous, of Mult Education.
indigenous, of Fidult Eudenfold.	(ii) Admission Requirements
(ii) Admission Requirements	
	Applicants must have completed the requirements for
Applicants must have completed the requirements for	their undergraduate degree from an approved
their undergraduate degree from an approved	registered university and have the degree conferred
registered university and have the degree conferred	before June 30.
before June 30.	
	Applicants must have an overall average of not less
Applicants must have an overall average of not less	than 70% (at least between C+ and B-) computed on
than 70% (at least between C+ and B-) computed on	the 20 highest grades of the last 22 courses (3 semester
the 20 highest grades of the last 22 courses (3 semester	hours of credit each). Applicants who have an average
nours of credit each). Applicants who have an average	of less than 10% may be considered on a case-by-case
basis Graduate study may be taken into	for admission requirements
consideration for admission requirements	tor admission requirements.
consideration for admission requirements.	Applicants who have completed a degree where the
Applicants who have completed a degree where the	language of instruction was not French must have at
language of instruction was not French must have at	least 6 semester hours in French (at least 3 semester
least 6 semester hours in French (at least 3 semester	hours in a writing-intensive course in any
hours in a writing-intensive course in any	discipline). However, applicants who receive, in the
discipline). However, applicants who receive, in the	last year, a level B2 (at least 70% in all categories) on
last year, a level B2 (at least 70% in all categories) on	DELF are not required to complete 6 semester hours in
DELF are not required to complete 6 semester hours	French.
in French.	



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
Applicants whose first language is not English must also satisfy the UPEI English Language Proficiency requirements.	Applicants whose first language is not English must also satisfy the UPEI English Language Proficiency requirements.
Applicants must pass an oral and written proficiency test in French before admission to the specialization is confirmed.	Applicants must pass an oral and written proficiency test in French before admission to the specialization is confirmed.
Applicants must have completed academic courses in subjects taught in the school system which satisfy the requirements for the program level (Primary/Elementary or Intermediate/Senior) into which they seek admission, as follows:	Applicants must have completed academic courses in subjects taught in the school system which satisfy the requirements for the program level (Primary/Elementary or Intermediate/Senior) into which they seek admission, as follows:
Primary/Elementary (grades K-6)	Primary/Elementary (grades K-6)
3 credit hours in Math 6 credit hours in Social Studies (as listed below); 6 credit hours in Science (as listed below) (3 of which must be a lab-based science); and a course in Developmental Psychology or equivalent.	 3 credit hours in Math 6 credit hours in Social Studies (as listed below); 6 credit hours in Science (as listed below) (3 of which must be a lab-based science); and a course in Developmental Psychology or equivalent.
Note 1: Applicants are strongly encouraged to take Education 2130 (Introduction to Education) at UPEI (or equivalent at other universities) prior to beginning the BEd program. Courses in Fine Arts or Music will	Note 1: Applicants are strongly encouraged to take Education 2130 (Introduction to Education) at UPEI (or equivalent at other universities) prior to beginning the BEd program. Courses in Fine Arts or Music will
also be considered assets.	also be considered assets.
 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. 	 Intermediate \Senior (grades 7-12) At least 6 <u>3</u> 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);	The following courses* relate to teachable areas: English (includes Communications, Creative Writing, Drama, Journalism, linguistic, Media Studies, and Theatre);



Motion #16

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
Social Studies (includes Acadian Studies,	Social Studies (includes Acadian Studies,
Anthropology, Canadian Studies, Economics,	Anthropology, Canadian Studies, Economics,
Environmental Studies, Family Science, Geography,	Environmental Studies, Family Science, Geography,
Global Studies, History, Indigenous Studies, Law,	Global Studies, History, Indigenous Studies, Law,
Philosophy, Political Science, Religious Studies,	Philosophy, Political Science, Religious Studies,
Sociology, and Diversity and Social Justice Studies);	Sociology, and Diversity and Social Justice Studies);
Science (includes Chemistry, Biology, Foods and	Science (includes Chemistry, Biology, Foods and
Nutrition, Forestry, Geology/Earth Sciences, Health	Nutrition, Forestry, Geology/Earth Sciences, Health
Sciences, Kinesiology, Oceanography, Environmental	Sciences, Kinesiology, Oceanography, Environmental
Science, Agriculture, and Physics);	Science, Agriculture, and Physics);
Mathematics (includes Mathematics, Physics,	Mathematics (includes Mathematics, Physics,
Statistics, and Computer Science);	Statistics, and Computer Science);
French; and Music (offered through the Bachelor of	French; and Music (offered through the Bachelor of
Music Education program in the Faculty of Arts).	Music Education program in the Faculty of Arts).
*Courses not listed may be evaluated on a case-by-	*Courses not listed may be evaluated on a case-by-case
case basis.	basis.

<u>Rationale for Change</u>: 1. The Credit Hours Change: Applicants to the English Bachelor of Education program only require 3 semester hours in Mathematics. For fairness across the BEd programs, the BEd (français langue seconde) admission requirements should be amended to the same math requirement.

2. The Removing English as a Teachable Change: As Intermediate/Senior BEd (français langue seconde) students are not being trained to teach in English settings, and as they are not offered English methods within their required courses, English is not a relevant teachable for the program and should be removed from the list of accepted teachables.

Effective Term: SUMMER 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Bachelor of Education Committee	February 10, 2023
Faculty/School Approval: Faculty of Education Council	February 24, 2023
Faculty Dean's Approval: Dr. Debbie MacLellan, Dean (Interim)	February 24, 2023
Grad. Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: September 2022



SUMMARY OF FACULTY OF ENGINEERING MOTION #'S 17-63

Faculty of Sustainable Design Engineering April 2023 Senate Submission Summary of changes

- 1. Course Deletion: SDE-8230 Tech Management, Entrepreneurship
- 2. New Course: ENGN-4020 Quality Control/Project Management
- 3. New Course: ENGN-4021 Engineering Management
- 4. New Course: ENGN-4030 Contemporary Topics in Sustainable Design Engineering
- 5. New Course: ENGN-4031 User Centred Engineering Design
- 6. New Course: ENGN-4040 Design of Experiments
- 7. New Course: ENGN-4050 Engineering Research Methods
- 8. New Course: ENGN-4060 Design of Energy Systems
- 9. New Course: ENGN-4061 Optimization Energy Infrastructure
- 10. New Course: ENGN-4062 Solar Buildings/Neighbourhood
- 11. New Course: ENGN-4063 Contemporary Topics in Sustainable Energy
- 12. New Course: ENGN-4070 Novel Engineered Materials
- 13. New Course: ENGN-4080 Industrial Machine Vision
- 14. New Course: ENGN-4081 Modern Mechatronic Systems
- 15. New Course: ENGN-4100 Biofuel and Biomass Technology
- 16. New Course: ENGN-4101 Advanced Bioresource Engineering
- 17. New Course: SDE-8840 Sustainable Tech Dev & Commercialization
- 18. Course Revision: ENGN-3430 Tech Management, Entrepreneurship
- 19. Course Revision: ENGN-4840 Sustainable Tech Dev & Commercialization
- 20. Course Revision: SDE-8020 Quality Control/Project Management
- 21. Course Revision: SDE-8021 Engineering Management
- 22. Course Revision: SDE-8030 Contemporary Topics in Sustainable Design Engineering
- 23. Course Revision: SDE-8031 User Centred Engineering Design
- 24. Course Revision: SDE-8040 Design of Experiments
- 25. Course Revision: SDE-8050 Engineering Research Methods
- 26. Course Revision: SDE-8060 Design of Energy Systems
- 27. Course Revision: SDE-8061 Optimization Energy Infrastructure
- 28. Course Revision: SDE-8062 Solar Buildings/Neighbourhood
- 29. Course Revision: SDE-8063 Contemporary Topics in Sustainable Energy
- 30. Course Revision: SDE-8070 Novel Engineered Materials
- 31. Course Revision: SDE-8080 Industrial Machine Vision
- 32. Course Revision: SDE-8081 Modern Mechatronic Systems
- 33. Course Revision: SDE-8100 Biofuel and Biomass Technology
- 34. Course Revision: SDE-8101 Advanced Bioresource Engineering
- 35. Course Revision: SDE-8310 Advanced Fabrication Techniques
- 36. Course Revision: SDE-8320 Control System Design
- 37. Course Revision: SDE-8330 Innovations in Biomedical Engineering
- 38. Course Revision: SDE-8350 Advanced Robotic Dynamic & Control
- 39. Course Revision: SDE-8370 Fluid Power Control
- 40. Course Revision: SDE-8410 Macro Energy Systems
- 41. Course Revision: SDE-8440 Advanced Energy Storage
- 42. Course Revision: SDE-8450 Fluid Load on Energy Structures
- 43. Course Revision: SDE-8470 Micro Grids
- 44. Course Revision: SDE-8510 Geoinformatics in Bioresource
- 45. Course Revision: SDE-8530 Fundamentals Agri Machinery



SUMMARY OF FACULTY OF ENGINEERING MOTION #'S 17-63

- 46. Course Revision: SDE-8550 Chemical/Biological Processes
- 47. Course Revision: SDE-8830 Biomedical Signal Processing
- 48. Revised Calendar Entry Doctor of Philosophy in Sustainable Design Engineering

Description of changes:

All changes are associated with *Graduate Academic Regulation 14: Cross-level Listing* to allow for the cross-level listing of courses between the FSDE's undergraduate and graduate programs.

• New Course Proposals (2-16) and Course Revisions (20-34)

New ENGN 4000-level courses (2-16) are being created as cross-level listings to existing graduate courses (20-34) so that an undergraduate and a graduate level version of each course can be delivered as per Graduate Academic Regulation 14. The existing graduate level courses are being revised to recognize the cross-level listing.

• Course Revisions (35-47)

Existing SDE 8000-level courses (35-47) are being revised to include "permission of the instructor" as a prerequisite requirement so that the instructor can ensure that the student has the required prerequisite knowledge. They are also being revised to confirm that the courses are not eligible for the PhD-SDE program; they are only eligible for the MSc-SDE program.

• <u>New Course Proposal (17)</u> and <u>Course Revision (19)</u>

A new SDE 8840 course (17) is being created as a cross-level listing to an existing undergraduate course, ENGN 4840 (19), so that an undergraduate and a graduate level version of the course can be delivered as per Graduate Academic Regulation 14. The existing undergraduate level course is being revised to recognize the cross-level listing.

• <u>Course Revision (18)</u> and <u>Course Deletion (1)</u>

ENGN 3430 (18) is being revised to remove the existing cross-level listing with SDE 8230. At the time the original cross-level listing was created, ENGN 3430 was a 4000-level course (ENGN 4230). This cross-level listing is now not appropriate and is no longer consistent with Graduate Academic Regulation 14. Consequently, this cross-level listing between these courses is now being removed. Without this cross-level listing, SDE 8230 is then no longer needed so it is being deleted.

<u>Revised Calendar Entry (48)</u>

The calendar entry for the PhD-SDE program is being revised to confirm which courses are not eligible as courses for PhD-SDE students.



Motion #17

Revision is for a: **Course Deletion**

Faculty/School/Department: Engineering

Department/Program(s)/Academic Regulations: Faculty of Sustainable Design Engineering <u>MOTION:</u> That SDE-8230 be deleted as it is no longer needed in the program.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8230: Technology Management &	SDE-8230: Technology Management &
Entrepreneurship	Entrepreneurship
This course provides an overview on how to start and	This course provides an overview on how to start and
sustain a technology-oriented company. Topics	sustain a technology-oriented company. Topics
discussed will include the role of technology in society,	discussed will include the role of technology in society,
intellectual property, patents, business plans, financial	intellectual property, patents, business plans, financial
planning, sources of capital, business structure,	planning, sources of capital, business structure,
liability, tax implications, sales, marketing, operational	liability, tax implications, sales, marketing, operational
and human resource management. This course will be	and human resource management. This course will be
taught using problem-based and experiential learning	taught using problem based and experiential learning
strategies with involvement from real life entrepreneurs	strategies with involvement from real life entrepreneurs
as motivators and facilitators. Graduate-level project	as motivators and facilitators. Graduate-level project
will be defined. Cross-listed with Engineering 3430;	will be defined. Cross-listed with Engineering 3430;
credit cannot be received for both courses.	credit cannot be received for both courses.
PREREQUISITE: Admission to the graduate program	PREREQUISITE: Admission to the graduate program
in Faculty of Sustainable Design Engineering	in Faculty of Sustainable Design Engineering
HOURS OF CREDIT: 3	HOURS OF CREDIT: 3

Rationale for Change: The cross-level listing of SDE-8230 was originally to a 4000-level course (ENGN 4230) which has since been changed to a 3000-level course (ENGN 3430). The cross-level listing between SDE 8230 and ENGN 3430 is now not appropriate and is also no longer consistent with Graduate Academic Regulation 14. Consequently, this cross-level listing between these courses is now being removed. Without this cross-level listing, SDE 8230 is then no longer needed so it is being deleted.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: This course will no longer be available in the graduate program.

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #18

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering

MOTION: To approve ENGN 4020 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8020.

Course Number and Title	ENGN 4020 Quality Control/Project Management
Description	This course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers.
Cross-Level Listing	SDE 8020. Objectives, assessment and outcomes will be commensurate with the undergraduate level.
Prerequisite/Co-Requisite	Permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course

Anticipated Enrolment: 10

Grade Mode: Numeric (Standard)

If there is an enrolment limit, please explain.

Is there an Enrolment Cap: No

Rationale for New Course: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8020) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

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: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #18

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4020 Quality Control/Project Management

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - Over 600 results under the topic "Project Management"
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - o CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - over 21,000 results searching
 - "project management" OR "quality control"
 - IEEE/IET IEL Electronic Library (Xplore)
 - over 91,000 results for
 - "project management" OR "quality control"
 - published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
 - licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Academic Search Complete
 - over 16,000 peer reviewed results searching engineer* AND ("project management" OR "quality control") from within the last 10 years
 - Subject terms search of (Project management OR Quality control) AND Engineering,



with all three subject terms exploded to include narrower terms, returned over 2000 peer-reviewed results published in the last 10 years

- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 24,000 results searching
 - (engineer OR engineers OR engineering) AND ("project management" OR "quality control"),
 - filtered to the last 10 years and the Engineering and Energy subject fields.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - over 5000 results using keywords
 - engineer* AND ("project management" OR "quality control") published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - Canadian Business & Current Affairs
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as:
 - Canadian Patent Database
 - United States Patent and Trademark Office database
 - MEDLINE
 - SCOAP³

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



Motion #18

- Library Administrative/Research Support
 - Engineering Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: _____For each of _____ consecutive years
- Annual: <u>n/a</u>____
 - Per-year percentage increase in annual: <u>n/a</u>

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

While there is no request for new financial resources and therefore no new budget allocation to make for library resources, our existing holdings can support this course so long as the library is able to maintain its subscriptions with its ongoing budget.

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #19

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4021 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8021.

Course Number and Title	ENGN 4021 Engineering Management	
Description	This course is an introduction to the most widely accepted engineering management practices in the workforce today. Through lectures, case studies, guest speakers, and facilitated discussion, students will develop managerial knowledge and skills and be exposed to a spectrum of corporate activities in the engineering environment. Topics presented in this course include strategic management of research and development, organizational management, knowledge, risk and IP management, new product development, globalization, ethics, project management in a technology-based organization. This course will focus on "management for future engineering leaders" and examine national guidelines, practice engineering team dynamics, apply quantitative quality and supply chain concepts, and present financial/accounting basics for engineers.	
Cross-Level Listing	SDE 8021. Objectives, assessment and outcomes will be commensurate with the undergraduate level.	
Prerequisite/Co-Requisite	Permission of the instructor	
Credit(s)	3	
Notation	Three lecture hours per week	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Is there an Enrolment Cap: No

Anticipated Enrolment: 10

Rationale for New Course: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8021) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

In offering this course will UPEI require

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None. facilities or staff at other institutions: No

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #19

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4021 Engineering Management

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - 7339 results when searching keywords "engineering AND (leadership OR management)", filtering on the topics "Team Management", "Leadership and Management", "Organizational Leadership", "Governance, Risk Management and Compliance", "Project Management", "Product Management", "Project & Product Management", "Executive Coaching", and "Engineering" along with subfields such as Data, Chemical, Electrical, Civil, Materials, Systems, and Mechanical Engineering
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - o CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - over 15,000 results searching
 - "leader* OR manage*"
 - IEEE/IET IEL Electronic Library (Xplore)
 - over 214,000 results for
 - engineer* AND (manage* OR leader*)
 - published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
 - licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:



- EBSCO Discovery Service (OneSearch)
- Academic Search Complete
 - over 251,000 peer reviewed results searching engineer* AND (leader* OR manage*) from within the last 10 years
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 272,000 results searching
 - (engineer OR engineers OR engineering) AND (leader OR leadership OR manage OR manager OR management), filtered to the last 10 years and the Engineering, Energy, and Chemical Engineering subject fields.
 - Wilev
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - over 168,000 results using keyword search
 - ((manag* OR lead*) AND engineer*)
 - published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- o Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - Canadian Business & Current Affairs
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as:
 - Canadian Patent Database
 - United States Patent and Trademark Office database
 - MEDLINE
 - SCOAP³



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 <u>https://library.upei.ca/databases_all</u>.

- Physical Space in Library (other than holdings, explain) none
- Library Administrative/Research Support
- Engineering Liaison librarian: Mackenzie Johnson
- Summary of additional budget allocation required:
 - One-time: <u>n/a</u> For each of <u>n/a</u> consecutive years
 - Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

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

While there is no request for new financial resources and therefore no new budget allocation to make for library resources, our existing holdings can support this course so long as the library is able to maintain its subscriptions with its ongoing budget.

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #20

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4030 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8030.

Course Number and Title	ENGN 4030 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 engineer design process which considers not only the key performance indicators an 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 fu consideration of sustainability. In order to develop sustainable solutions, engineers and researchers must be able to critically evaluate their work in t context. To this end, students will examine case studies and relevant readin 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 pa critically examining the student's research topic from the perspective of sustainable design engineering.	
Cross-Level Listing	SDE 8030. Objectives, assessment and outcomes will be commensurate with the undergraduate level.	
Prerequisite/Co-Requisite	Permission of the instructor	
Credit(s)	3	
Notation	Three lecture hours per week	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8030) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students Resources Required: None.



Motion #20

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

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle.	February 15, 2023



Motion #20

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4030 Contemporary Topics in Sustainable Design Engineering

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - Over 1100 results when searching keywords
 "sustainable design engineering" OR "sustainability" OR "life cycle assessment" OR "stakeholder engagement" OR "engineering justice", filtering on the topics "Engineering", "Electrical Engineering",
 "Economics", "Materials Engineering", "Chemical Engineering", "Civil Engineering", "Mechanical Engineering", and "Systems Engineering"
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - Over 112,000 results when searching keywords "sustainable design engineering" OR "sustainability" OR "life cycle assessment" OR "stakeholder engagement" OR "engineering justice"
 - IEEE/IET IEL Electronic Library (Xplore)
 - Over 47,000 results when searching the keyword sustainab*
 - from the last 10 years
 - Over 400 results when searching the keywords (engineering justice) from the last 10 years



0

- Over 300 results when searching the key phrase "life cycle assessment"
 - from the last 10 years
- various engineering standards maintained through the MADCAD platform
- licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Academic Search Complete
 - Over 299,000 peer reviewed results when searching (("sustainable design" OR "stakeholder engagement") AND engineer*) OR sustainab* OR "techno-economic assessment" OR engineering W5 justice OR "life cycle assessment" from the past 10 years
 - Gale OneFile Academic
 - Sage Research Methods
 - Sage Rest
 Scopus
 - full-text of many engineering journals and content of relevance to the engineering
- programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - Over 246,000 results searching
 - (engineer OR engineering) AND ((sustainable OR sustainability OR "sustainable design") OR "life cycle assessment" OR "techno-economic assessment" OR "stakeholder engagement") filtered to the last 10 years and the Engineering. Energy, and Chemical
 - filtered to the last 10 years and the Engineering, Energy, and Chemical Engineering subject areas.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - Over 185,000 results searching
 - (("sustainable design" OR "stakeholder engagement") AND engineer*) OR sustainab* OR "techno-economic assessment" OR engineering W5 justice OR "life cycle assessment" from the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- o Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - Canadian Business & Current Affairs



Motion #20

- CAB Abstracts (index with full-text ebooks, proceedings)
- Statistics Canada data through NESSTAR and CHASS
- New York Times, as well as many more regional, national, and international newspapers and news services
- Additionally, we organize and provide guidance on several tools that are open access to the public, such as:
 - Canadian Patent Database
 - United States Patent and Trademark Office database
 - MEDLINE
 - SCOAP³

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 <u>https://library.upei.ca/databases_all</u>.

- Physical Space in Library (other than holdings, explain) none
- Library Administrative/Research Support
 - Engineering Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: ______ For each of _____ consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

Does the budget allocation for library resources in this proposal meet the requirement? While there is no request for new financial resources and therefore no new budget allocation to make for library resources, our existing holdings can support this course so long as the library is able to maintain its subscriptions with its ongoing budget.

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #21

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4031 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8031.

Course Number and Title	ENGN 4031 User Centred Engineering Design
Description	User-centred design offers a powerful and systematic approach to understanding users and their needs and delivering effective design solutions in many domains including engineering, technology and health sciences. This course will introduce students to a variety of principles, practices and research methods for designing, developing and evaluating products, systems and solutions based on the users' needs, and context. Students will learn human factors, ergonomics, cognitive and perceptual psychology principles for designing products, information displays and complex systems. Students will be exposed to various subjective and objective metrics and methods for evaluations and usability studies. Students will also be introduced to apply user-centred design for developing sustainable products and systems.
Cross-Level Listing	SDE 8031. Objectives, assessment and outcomes will be commensurate with the undergraduate level.
Prerequisite/Co-Requisite	Permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8031) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

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

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #21

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4031 User Centred Engineering Design

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - 617 results when searching key phrase
 - "user-centered design",

filtering on subfields of engineering and related key phrases such as "User Experience (UX)", "Product Design", "Design Thinking" and "Interface Design"

- EBSCO
- Elsevier
- Wiley
- Springer
- Sage
- ProQuest
- Taylor & Francis
- DesLibris
- JSTOR
- o CRC Handbook of Chemistry & Physics (maintained through subscription)
- licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - over 3600 results searching
 - "user-centered design"
 - over 7300 results searching "human factors"
 - over 5000 results searching
 - "user experience"
 - IEEE/IET IEL Electronic Library (Xplore)
 - over 18,000 results for
 - "user-centered design" OR "human factors" OR "user experience" published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
- licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:



- EBSCO Discovery Service (OneSearch)
- Academic Search Complete
 - over 4100 peer reviewed results searching
 - ("user centered design" OR "user experience" OR "human factors") AND engineer*
 - from within the last 10 years
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 13,000 results searching (engineer OR engineers OR engineering) AND ("user centered design" OR "user experience" OR "human factors"), filtered to the last 10 years and the Engineering and Chemical
 - Engineering subject fields.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - over 25,000 results using keyword search engineer* AND ("user centered design" OR "user experience" OR "human factors")
 - published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- o Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - PsycInfo
 - OED Online
 - Business Source Complete (journal articles and index)
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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 <u>https://library.upei.ca/databases_all</u>.



Motion #21

- Physical Space in Library (other than holdings, explain) none
- Library Administrative/Research Support
 - Engineering Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: <u>n/a</u> For each of <u>n/a</u> consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

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

While there is no request for new financial resources and therefore no new budget allocation to make for library resources, our existing holdings can support this course so long as the library is able to maintain its subscriptions with its ongoing budget.

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023


Motion #22

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4040 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8040.

Course Number and Title	ENGN 4040 Design of Experiments
Description	This course focuses on the design, implementation, and analysis of engineering, scientific, and computer-based experiments. The course will examine the proper and scientific approach to experimentation, modeling, simulation, and analysis of data. Various designs are discussed, and their respective advantages and disadvantages are noted. Factorial designs and sensitivity analysis will be studied in detail because of its relevance to various industries. Use of software for designing and analyzing experiments will also be used. For experiments that involved mainly physical quantities and natural phenomena, techniques of dimensional analysis will also be introduced.
Cross-Level Listing	SDE 8040. Objectives, assessment and outcomes will be commensurate with the undergraduate level.
Prerequisite/Co-Requisite	Permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8040) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #22

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4040 Design of Experiments

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - EBSCÓ
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - o CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - Nearly 1000 results searching
 - "experimental design" OR "factorial design" OR "sensitivity analysis"
 - IEEE/IET IEL Electronic Library (Xplore)
 - over 16,000 results for
 - (experiment* NEAR/2 design) OR "factorial design" OR "sensitivity analysis"
 - published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
 - licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Academic Search Complete
 - Subject terms search using
 - (Experimental design [exploded] OR Sensitivity analysis) AND Engineering [exploded]
 - returned over 1700 peer-reviewed results from within the last 10 years
 - Exploded here means including both subject term and narrower terms below it, all separated by OR



Motion #22

- Factorial design is a narrower term under Experimental design in ASC's subject terms controlled vocabulary
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 107,000 results searching (engineer OR engineers OR engineering) AND (("experimental design" OR "experiment design" OR "design of experiments") OR "factorial design" OR "sensitivity analysis"),
 - filtered to the last 10 years and the Engineering, Energy and Chemical Engineering subject fields.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - over 184,000 results using keyword search engineer* AND ((experiment* design) OR "factorial design" OR "sensitivity analysis")
 - published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - PsycInfo
 - OED Online
 - Business Source Complete (journal articles and index)
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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



Motion #22

Library Administrative/Research Support
 Engineering Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: <u>n/a</u> For each of <u>n/a</u> consecutive years
- Annual: ____<u>n/a</u>
 O Per-year percentage increase in annual: ___<u>n/a</u>____

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

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #23

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4050 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8050.

Course Number and Title	ENGN 4050 Engineering Research Methods	
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-Level Listing	SDE 8050. Objectives, assessment and outcomes will be commensurate with the undergraduate level.	
Prerequisite/Co-Requisite	Permission of the instructor	
Credit(s)	3	
Notation	Three lecture hours per week	

This is: An Elective Course

Anticipated Enrolment: 10

<u>Grade Mode</u>: Numeric (Standard) Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8050) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #23

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4050: Engineering Research Methods

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - o CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - Over 97,000 results when searching keywords
 - "research methods" OR "experimental design" OR "technical presentation" OR ethics OR "intellectual property"
 - IEEE/IET IEL Electronic Library (Xplore)
 - Over 463,000 results for
 - engineer* AND ("research methods" OR experiment* OR "technical presentation" OR ethic* OR "intellectual property") filtered to the past 10 years
 - various engineering standards maintained through the MADCAD platform
 - licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Academic Search Complete
 - Over 723,000 peer reviewed results when searching engineer* AND ("research methods" OR experiment* OR "technical presentation" OR ethic* OR "intellectual property") from the past 10 years



Motion #23

Subject search of

(Research methodology [exploded] OR Experimental design [exploded] OR Engineering ethics OR Intellectual property [exploded]) AND Engineering [exploded]

returned over 2700 peer reviewed results from the past 10 years

- Exploded here means that Subject term and all narrower terms were added to search, divided by OR
- Gale OneFile Academic
- Sage Research Methods
- Scopus

• full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:

- Elsevier (ScienceDirect)
 - Nearly 647,000 results searching
 - (engineer OR engineering) AND ("research methods" OR (experiment OR experimentation) OR "technical presentation" OR (ethics OR ethical) OR "intellectual property")
 - filtered to the last 10 years and the Engineering, Energy, and Chemical Engineering subject areas.
- Wiley
- Springer
- Sage
- Association of Computing Machinery (ACM Digital Library)
 - Over 137,000 results searching
 - engineer* AND ("research methods" OR experiment* OR "technical presentation" OR ethic* OR "intellectual property") from the past 10 years
- Institute of Physics (IOP)
- American Chemical Society (ACS Web Editions and SciFinder)
- Royal Society of Chemistry
- American Geosciences Institute (GeoRef and GeoScienceWorld)
- American Mathematical Society (MathSciNet)
- o Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - Canadian Business & Current Affairs
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as:
 - Canadian Patent Database



Motion #23

- United States Patent and Trademark Office database
- MEDLINE
- SCOAP³

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 Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: ______ For each of __n/a____ consecutive years
- Annual: ____n/a__
 - Per-year percentage increase in annual: <u>n/a</u>

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

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #24

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4060 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8060.

Course Number and Title	ENGN 4060: Design of Energy Systems	
Description	This course focuses on the understanding of the physical processes underlying the energy conversion process from wind and solar energy. Students will have an advanced knowledge of aerodynamics and structural dynamics, and they will understand the main strategies used for controlling these machines over their complete operating range. A specific goal of the course is to provide students with a multidisciplinary vision on the physics of energy systems, and an understanding of the methods used for their modeling and simulation. A particular emphasis will be placed on design, and on the effects of design choices on the cost of energy.	
Cross-Level Listing	SDE-8060. Objectives, assessment and outcomes will be commensurate with the undergraduate level.	
Prerequisite/Co-Requisite	Permission of the instructor	
Credit(s)	3	
Notation	Three lecture hours per week	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8020) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

Authorization	Date:	
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023	
Faculty/School Approval: FSDE Faculty	Jan 18 2023	
Faculty Dean's Approval: Wayne Peters	Jan 18 2023	
Graduate Studies Dean's Approval: N/a	N/A	
Registrar's Office Approval: Darcy McCardle	February 15, 2023	



Motion #24

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4060: Design of Energy Systems

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - Nearly 300 results from searching key phrase "energy systems" filtering on "Engineering", "Electrical Engineering", "Materials Engineering", "Civil Engineering", "Chemical Engineering", "Mechanical Engineering", and "Systems Engineering"
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - o CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - Over 6400 results when searching keywords "energy systems" AND design
 - Over 15,000 results when searching
 - "structural dynamics" OR aerodynamics
 - Over 3200 results when searching (wind OR solar) AND energy
 - IEEE/IET IEL Electronic Library (Xplore)
 - Over 5200 results for
 - "energy systems" AND design
 - filtered to the past 10 years
 - various engineering standards maintained through the MADCAD platform
 - licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:



Motion #24

- EBSCO Discovery Service (OneSearch)
- Academic Search Complete
 - Over 6100 peer-reviewed results searching "energy systems" AND design
 - from the last 10 years
 - Over 200 peer-reviewed results searching
 "AND ("structured shares" of the series" of the series" of the series of th
 - "energy systems" AND ("structural dynamics" OR aerodynamics)
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 42,000 results searching
 - (engineer OR engineers OR engineering) AND ("energy systems" AND design)
 - filtered to the last 10 years and the Engineering, and Energy
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - Over 1000 results searching
 engineer* AND ("energy systems" AND
 - engineer* AND ("energy systems" AND design) from the past 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - Canadian Business & Current Affairs
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as:
 - Canadian Patent Database
 - United States Patent and Trademark Office database
 - MEDLINE
 - SCOAP³



Motion #24

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 Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: ______ For each of _____ consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

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

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #25

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4061 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8061.

Course Number and Title	ENGN 4061: Optimization Energy Infrastructure
Description	The course aims to provide the knowledge about the application of various optimization methods in designing energy infrastructure. The course starts with the introduction to various optimization algorithms. Thereafter, the integration of energy modeling and simulation with optimization algorithms will be demonstrated. This course will also cover the optimization of distributed energy systems using single and multi-objective optimization methods. Several minor projects will be introduced to formulate the energy system optimization problem deciding design variables, objectives, and constraints.
Cross-Level Listing	SDE-8061. Objectives, assessment and outcomes will be commensurate with the undergraduate level.
Prerequisite/Co-Requisite	Permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8061) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None. facilities or staff at other institutions: No

In offering this course will UPEI require

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle.	February 15, 2023



Motion #25

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4061: Optimization Energy Infrastructure

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - 993 results searching
 - energy AND (system OR infrastructure) AND optimization and filtering to include the different subfields of engineering
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex

- AccessEngineering
 - over 300 results searching
 - energy AND (system OR infrastructure) AND optimiz*
- IEEE/IET IEL Electronic Library (Xplore)
 - over 60,000 results for
 - energy AND (system OR infrastructure) AND optimiz* published in the last 10 years
- various engineering standards maintained through the MADCAD platform
- licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Academic Search Complete
 - over 61,000 peer reviewed results searching
 - energy AND (system OR infrastructure) AND optimiz*
 - from within the last 10 years



Motion #25

- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 348,000 results searching (engineer OR engineers OR engineering) AND (energy AND (system OR infrastructure) AND (optimize OR optimization OR optimizing)), filtered to the last 10 years and the Engineering, Chemical Engineering, and Energy subject fields.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - over 27,000 results using keyword search
 - engineer* AND energy AND (system OR infrastructure) AND optimiz* published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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 Liaison librarian: Mackenzie Johnson



Motion #25

Summary of additional budget allocation required:

- One-time: <u>n/a</u> For each of <u>n/a</u> consecutive years
- Annual: <u>____n/a_____</u>
 - Per-year percentage increase in annual: <u>n/a</u>

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

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #26

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE MOTION: To approve ENGN 4062 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8062.

Course Number and Title	ENGN 4062: Solar Buildings/Neighbourhood	
Description	The course is aimed to discuss the design considerations in designing solar buildings and neighborhoods. The course will start with the historical background of solar neighborhoods in modern and ancient history. Thereafter, passive solar design considerations in various small and large scale buildings will be discussed. Principles of solar design such as building site setting, building shape, building envelopes, active and passive based heating and cooling techniques will be introduced. The active electrical and thermal energy generation and storage strategies will be discussed. Energy modeling and simulation tools used for the assessment of solar access of various building will be demonstrated. Various case studies related to solar buildings and neighborhood will be taken for assignments. For the term project, incorporation of solar strategies for modifying existing Canadian buildings and neighborhoods will be assigned to groups of students.	
Cross-Level Listing	SDE-8062. Objectives, assessment and outcomes will be commensurate with the undergraduate level.	
Prerequisite/Co-Requisite	Permission of the instructor	
Credit(s)	3	
Notation	Three lecture hours per week	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8062) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #26

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4062: Solar Buildings/Neighbourhood

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - 660 results searching
 - solar AND (building OR neighborhood OR design)
 - and filtering for the topics "Engineering", "Electrical Engineering",
 - "Materials Engineering", "Civil Engineering", "Systems Engineering" and "Mechanical Engineering"
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - over 2200 results searching
 - solar AND (building OR neighborhood OR design)
 - IEEE/IET IEL Electronic Library (Xplore)
 - over 14,000 results for
 - solar AND (buildings OR neighborhood OR design) published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
 - licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Academic Search Complete



Motion #26

- almost 34,000 peer reviewed results searching solar AND (buildings OR neighborhood OR design) from within the last 10 years
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 98,000 results searching (engineer OR engineers OR engineering) AND solar AND (buildings OR neighborhood OR neighborhoods OR design), filtered to the last 10 years and the Engineering and Energy subject fields.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - over 3,300 results using keyword search engineer* AND solar AND (buildings OR neighborhood OR design) published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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 <u>https://library.upei.ca/databases_all</u>.
- Physical Space in Library (other than holdings, explain) none
- Library Administrative/Research Support



Motion #26

• Engineering Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: ______ For each of _____ consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

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

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #27

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4063 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8063.

Course Number and Title	ENGN 4063: Contemporary Topics in Sustainable Energy
Description	This broadly applicable course discusses global energy usage and exposes students to current trends in local and global sustainable energy initiatives (i.e., energy generation and storage) and applications. Present and future global energy consumption and related CO2 emissions are considered and discussed. Students will be exposed to and analyze case studies as well as develop and design their own globally relevant solution concepts. Students will ultimately gain an enhanced, quantitative appreciation for the challenges and opportunities related to global energy system decarbonization.
Cross-Level Listing	SDE-8063. Objectives, assessment and outcomes will be commensurate with the undergraduate level.
Prerequisite/Co-Requisite	Permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8063) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

Authorization	Date:	
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023	
Faculty/School Approval: FSDE Faculty	Jan 18 2023	
Faculty Dean's Approval: Wayne Peters	Jan 18 2023	
Graduate Studies Dean's Approval: N/A	N/A	
Registrar's Office Approval: Darcy McCardle	February 15, 2023	



Motion #27

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4063: Contemporary Topics in Sustainable Energy

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - 1134 results searching
 - energy AND (sustainable OR sustainability OR consume OR consumption OR use OR usage OR renewable) and filtering for the topics "Engineering", "Electrical Engineering", "Materials Engineering", "Civil Engineering", "Chemical Engineering", "Systems Engineering" and "Mechanical Engineering" 813 results searching
 - ("carbon emissions" OR "carbon dioxide" emissions OR "CO2 emissions") OR decarbonization
 - with the same filters
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - over 6200 results searching
 - energy AND (sustainab* OR renew* OR consum*)
 - over 30,000 results searching
 - ("carbon emissions" OR "carbon dioxide emissions" OR "CO2 emissions" OR decarboniz*)
 - IEEE/IET IEL Electronic Library (Xplore)



Motion #27

- over 146,000 results for energy AND (sustainab* OR renew* OR consum*) published in the last 10 years
- over 2000 results for
- ("carbon emissions" OR "carbon dioxide emissions" OR "CO2 emissions") published in the last 10 years
- various engineering standards maintained through the MADCAD platform
- licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Academic Search Complete
 - over 156,000 peer reviewed results searching energy AND (sustain* OR renew* OR consum*) AND engineer* from within the last 10 years
 - over 9,000 peer reviewed results searching ("carbon emissions" OR "carbon dioxide emissions" OR "CO2 emissions") AND engineer*
 - from within the last 10 years
 - Gale OneFile Academic
 - Sage Research Methods
 - Scopus

• full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:

- Elsevier (ScienceDirect)
 - over 573,000 results searching energy AND (sustain OR sustainable OR sustainability OR renew OR renewable OR renewability OR consume OR consumption), filtered to the last 10 years and the Engineering, Chemical Engineering and Energy subject fields.
 - over 41,000 results searching (engineer OR engineering) AND ("carbon emissions" OR "carbon dioxide emissions" OR "CO2 emissions") with the same parameters
- Wiley
- Springer
- Sage
- Association of Computing Machinery (ACM Digital Library)
 - nearly 31,000 results using keyword search engineer* AND energy AND (sustainab* OR renew* OR consum*) published in the last 10 years
- Institute of Physics (IOP)
- American Chemical Society (ACS Web Editions and SciFinder)
- Royal Society of Chemistry
- American Geosciences Institute (GeoRef and GeoScienceWorld)
- American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)



Motion #27

- Audio Cine Films
- Criterion on Demand
- JoVE
- NFB Campus
- OED Online
- Business Source Complete (journal articles and index)
- CAB Abstracts (index with full-text ebooks, proceedings)
- Statistics Canada data through NESSTAR and CHASS
- New York Times, as well as many more regional, national, and international newspapers and news services
- Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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 Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: ____n/a____ For each of __n/a___ consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

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

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #28

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4070 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8070.

Course Number and Title	ENGN 4070: Novel Engineered Materials	
Description	This course is an examination of the properties and processing of novel, engineered materials for sustainable applications. Fundamental concepts of solid-state diffusion, phase transformations, amorphous-to-crystalline kinetics, rapid solidification - for nuclear energy, more electric generation, renewable energy systems, additive manufacturing, modeling and simulation of the nanoscale will be discussed. As well, the relationships between the performance of electrical, optical, and magnetic devices and the microstructural and defect characteristics of the materials from which they are constructed will be explored. Focusing on functional materials for emerging technologies and emphasizing a device-design approach, applications will center around current research in the Faculty of Sustainable Design Engineering.	
Cross-Level Listing	SDE 8070. Objectives, assessment and outcomes will be commensurate with the undergraduate level.	
Prerequisite/Co-Requisite	Permission of the instructor	
Credit(s)	3	
Notation	Three lecture hours per week	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8070) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #28

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4070 Novel Engineered Materials

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - 1214 results searching
 - "sustainable OR sustainability OR functional"
 - and filtering for the topics "Engineering" and "Materials Engineering"
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - over 2800 results searching
 - "sustainab*"
 - filtering on the subject "Materials engineering"
 - IEEE/IET IEL Electronic Library (Xplore)
 - over 94,000 results for
 - "engineered materials"
 - published in the last 10 years
 - over 4800 results for
 - ("solid-state diffusion" OR "phase transformations" OR "amorphous-tocrystalline kinetics" OR "rapid solidification") published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
 - licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:



Motion #28

- EBSCO Discovery Service (OneSearch)
- Academic Search Complete
 - over 600 peer reviewed results for (engineer* AND "engineered materials") from the last 10 years
 - over 17,000 peer reviewed results for engineer* AND ("solid-state diffusion" OR "phase transformations" OR "amorphous-to-crystalline kinetics" OR "rapid solidification") from the last 10 years
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 2500 results searching (engineer OR engineering) AND ("engineered materials") AND (sustainable OR sustainability OR application OR applications), filtered to the last 10 years and the Engineering, Chemical Engineering, and Materials Science subject fields.
 - over 57,000 results searching (engineer OR engineering) AND ("solid-state diffusion" OR "phase transformations" OR "amorphous-to-crystalline kinetics" OR "rapid solidification")
 - filtered to the last 10 years and the Engineering, Chemical Engineering, and Materials Science subject fields
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS



- New York Times, as well as many more regional, national, and international newspapers and news services
- Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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 Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: ____n/a____ For each of __n/a___ consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

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

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #29

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4080 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8080.

Course Number and Title	ENGN 4080: Industrial Machine Vision
Description	This course focuses on computer vision with an emphasis on techniques for automated inspection, object recognition, mechanical metrology, and robotics. Image processing courses typically focus for image enhancement, restoration, filtering, smoothing, etc. These topics will be covered to a certain degree but the main focus will be on image segmentation, feature extraction, morphological operators, recognition and photogrammetry. Issues related to the efficient software implementation of these techniques for real-time applications will also be addressed
Cross-Level Listing	SDE-8080. Objectives, assessment and outcomes will be commensurate with the undergraduate level.
Prerequisite/Co-Requisite	Permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8080) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #29

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4080 Industrial Machine Vision

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

Existing resources:

- Aside from various monographs included in the library's physical collection including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):
 - substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - Over 2600 results searching key phrase
 - "computer vision"
 - with no sorting for specific topics
 - 88 results listed under the topic "Computer Vision"
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
 - CRC Handbook of Chemistry & Physics (maintained through subscription)
 - licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - IEEE/IET IEL Electronic Library (Xplore)
 - Over 61,000 results searching
 - "computer vision"
 - within the last 10 years
 - various engineering standards maintained through the MADCAD platform
 - licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Over 1000 results for books (physical and digital) available in the library collection and published in the last 10 years, searching key phrase "computer vision"
 - Academic Search Complete



Motion #29

- Over 14,000 peer-reviewed results searching engineer* AND "computer vision" published within the past 10 years
- Over 700 peer-reviewed results published in the last 10 years with subject terms search using terms Computer vision AND Engineering with both subject terms exploded (incorporating the narrower terms under each subject term)
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - Over 27,000 results searching
 - (engineer OR engineers OR engineering) AND "computer vision" published within the past 10 years and filtered on the subject areas "Engineering" and "Computer Science"
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - Over 19,000 result searching
 - engineer* AND "computer vision"
 - published within the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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 <u>https://library.upei.ca/databases_all</u>.



Motion #29

- Physical Space in Library (other than holdings, explain) none
- Library Administrative/Research Support
 - Engineering Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: ______ For each of __n/a____ consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

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

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #30

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4081 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8081.

Course Number and Title	ENGN 4081: Modern Mechatronic Systems
Description	This course emphasizes how the abstract concepts of control theory and advanced design tools are used pragmatically in engineering practice in the mechatronics field. This course explores current topics of modern mechatronics, from the application of complex systems through dimensionality reduction, machine learning, and dynamical systems modelling to innovative methods and algorithms such as augmented reality, medical image analysis, and automated mapping of environments. Above all, this course is designed to entice students to think, ask questions of existing theory, and understand the essence of mechatronics systems. To this end, students will develop and implement practical, hands-on-with-hardware applications of the control system analysis and design principles that are the subject matter of their research. The findings and results of this project will be presented in the format of a manuscript that incorporates the research methodology, their final product, and critical thinking over the mechatronic topic.
Cross-Level Listing	SDE 8081. Objectives, assessment and outcomes will be commensurate with the undergraduate level.
Prerequisite/Co-Requisite	Permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8081) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.



Motion #30

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #30

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4081: Modern Mechatronic Systems

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

Existing resources:

Aside from various monographs included in the library's physical collection – including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):

- substantial ebook collections available through a range of license models, some of which require annual payments to continue access. The library has ebook access deals with the following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - EBSCÓ
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
- CRC Handbook of Chemistry & Physics (maintained through subscription)
- licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - over 1500 results searching with the keyword mechatronics
 - IEEE/IET IEL Electronic Library (Xplore)
 - over 45,000 results for
 - mechatronic*
 - published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
- licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Almost 300,000 results searching keyword mechatronic*
 - from within the last 10 years
 - Academic Search Complete
 - over 30,000 peer reviewed results searching keyword mechatronic*
 - from within the last 10 years
 - Gale OneFile Academic



- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 20,000 results searching the keyword mechatronics,
 - filtered to the last 10 years and the Engineering subject field.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - over 1,200 results using keyword search mechatronic*
 - published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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 <u>https://library.upei.ca/databases_all</u>.
- Physical Space in Library (other than holdings, explain) none
- Library Administrative/Research Support
 - Engineering Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

One-time: <u>n/a</u> For each of <u>n/a</u> consecutive years


Motion #30

Annual: <u>n/a</u>

Per-year percentage increase in annual: <u>n/a</u>

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

While there is no request for new financial resources and therefore no new budget allocation to make for library resources, our existing holdings can support this course so long as the library is able to maintain its subscriptions with its ongoing budget.

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #31

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4100 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8100.

Course Number and Title	ENGN 4100: Biofuel and Biomass Technology
Description	This course focuses on advanced concepts in understanding biofuels and bioenergy systems, renewable feedstocks, their production, availability and attributes for biofuel/bioenergy production, types of biomass derived fuels and energy, thermochemical conversion of biomass to heat, power and fuel, biochemical conversion of biomass to fuel environmental aspects of biofuel production, economics and life-cycle analysis of biofuel, and value adding of biofuel residues. Students will analyze, as well as prepare, case studies on biofuel production.
Cross-Level Listing	SDE 8100. Objectives, assessment and outcomes will be commensurate with the undergraduate level.
Prerequisite/Co-Requisite	Permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 10

Is there an Enrolment Cap: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8100) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

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

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #31

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4100: Biofuel and Biomass Technology

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

Existing resources:

Aside from various monographs included in the library's physical collection – including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):

- substantial ebook collections available through a range of license models, some of which
 require annual payments to continue access. The library has ebook access deals with the
 following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - Over 200 results searching
 - biofuel OR "biomass technology" OR bioenergy filtering on "Engineering", "Science", "Fuel Cells", "Electrical Engineering", "Materials Engineering", "Biology", "Chemical Engineering", "Green Business Practices", "Control Systems", and "Systems Engineering"
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
- CRC Handbook of Chemistry & Physics (maintained through subscription)
- licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - Over 1900 results searching
 - biofuel OR "biomass technology" OR bioenergy
 - IEEE/IET IEL Electronic Library (Xplore)
 - Over 2000 results searching
 - biofuel OR "biomass technology" OR bioenergy
 - published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
- licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Academic Search Complete



Motion #31

- over 23,000 peer-reviewed results searching biofuel OR "biomass technology" OR bioenergy from within the last 10 years
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - Over 45,000 results searching (engineer OR engineers OR engineering) AND (biofuel OR "biomass technology" OR bioenergy) filtered to the last 10 years and the Engineering, Energy, Chemical Engineering, Environmental Science, and Agricultural and Biological Sciences subject fields.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - Over 160 results searching engineer* AND (biofuel OR "biomass technology" OR bioenergy) published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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.



Motion #31

- Physical Space in Library (other than holdings, explain) none
- Library Administrative/Research Support
 - Engineering Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: <u>n/a</u> For each of <u>n/a</u> consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: __n/a_

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

While there is no request for new financial resources and therefore no new budget allocation to make for library resources, our existing holdings can support this course so long as the library is able to maintain its subscriptions with its ongoing budget.

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #32

Faculty/School: Sustainable Design Engineering

Department/Program(s): Faculty of Sustainable Design Engineering, BScSDE

MOTION: To approve ENGN 4101 as a new undergraduate course and to cross-level list it with the existing graduate-level course, SDE 8101.

Course Number and Title	ENGN 4101: Advanced Bioresource Engineering
Description	The quest for food security, renewable energy, climate change and demand for sustainable fuels has increased focus on biomass conversion and technological interventions to cope with these challenges. This course covers advanced topics in bioresource engineering to acquire an understanding of sustainability challenges in bioresource sector and propose optimal climate smart solutions by implementing technologies and processes. The course is delivered in three complementary modules: i) deep learning and artificial intelligence for sustainable food production, ii) biofuels and biomaterials, and iii) the design of biomass conversion reactors.
Cross-Level Listing	SDE 8101. Objectives, assessment and outcomes will be commensurate with the undergraduate level.
Prerequisite/Co-Requisite	Permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course Anticipated Enrolment: 10

<u>Grade Mode</u>: Numeric (Standard) <u>Is there an Enrolment Cap</u>: No

<u>Rationale for New Course</u>: This undergraduate course is being created as a cross-level listing to an existing graduate level course (SDE 8101) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides additional course choices to students

Resources Required: None.

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

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #32

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ENGN 4101: Advanced Bioresource Engineering

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

Existing resources:

Aside from various monographs included in the library's physical collection – including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):

- substantial ebook collections available through a range of license models, some of which
 require annual payments to continue access. The library has ebook access deals with the
 following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - 1888 results for
 - (bioresource OR biofuel OR biomaterial OR "biomass conversion"), filtered on the topics Engineering, Materials Engineering, Fuel Cells, Chemical Engineering, Civil Engineering, Biology, Innovation, Electrical Engineering, Mechanical Engineering, and Science
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
- CRC Handbook of Chemistry & Physics (maintained through subscription)
- licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - over 17,000 results searching
 - (bioresource OR biofuel OR biomaterials OR "biomass conversion")
 - IEEE/IET IEL Electronic Library (Xplore)
 - over 3200 results for
 - (bioresource OR biofuel OR biomaterials OR "biomass conversion") published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
- licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Academic Search Complete



Motion #32

- over 70,000 peer-reviewed results searching engineer* AND (bioresource OR biofuel OR biomaterials OR "biomass conversion") from within the last 10 years
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 88,000 results searching (engineer OR engineers OR engineering) AND (bioresource OR biofuel OR biomaterials OR "biomass conversion"), filtered to the last 10 years and the Engineering, Materials Science, Chemical Engineering, Energy, and Agriculture and Biological Sciences subject fields.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - over 200 results using keyword search
 - engineer* AND (bioresource OR biofuel OR biomaterials OR "biomass conversion")
 - published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - CAB Abstracts (index with full-text ebooks, proceedings)
 - Statistics Canada data through NESSTAR and CHASS
 - New York Times, as well as many more regional, national, and international newspapers and news services
 - Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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 <u>https://library.upei.ca/databases_all</u>.



Motion #32

- Physical Space in Library (other than holdings, explain) none
- Library Administrative/Research Support
 - Engineering Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: <u>n/a</u> For each of <u>n/a</u> consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

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

While there is no request for new financial resources and therefore no new budget allocation to make for library resources, our existing holdings can support this course so long as the library is able to maintain its subscriptions with its ongoing budget.

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan. 11, forms provided Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #33

Faculty/School: Sustainable Design Engineering

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

<u>MOTION:</u> To approve SDE 8840 as a new graduate course and to cross-level list it with the existing undergraduate-level course, ENGN 4840.

Course Number and Title	SDE 8840: Sustainable Technology Development and Commercialization
Description	This course engages students in technology development and commercialization. Teams of students work closely as startup companies to develop innovative and sustainable solutions to meet global challenges. Teams will be supported by instructors and industry mentors and will have access to dedicated incubator space, lab equipment and manufacturing facilities to complete their projects. Students further develop their entrepreneurial, professional and technical skills through completing the necessary steps to commercialize their new innovative technologies and products. The course will focus on learning and applying various aspects of validation, incubation and business strategy development including lean startup, design for commercialization, design for certification, manufacturing and distribution planning, investor relations, business growth planning and corporate sustainability. Graduate-level project will be required as defined in consultation with the instructor. This course is not eligible for the PhD-SDE program.
Cross-Level Listing	ENGN 4840; credit cannot be received for both courses
Prerequisite/Co-Requisite	Admission to the MSc SDE graduate program and permission of the instructor
Credit(s)	3
Notation	Three lecture hours per week

This is: An Elective Course

Grade Mode: Numeric (Standard)

Is there an Enrolment Cap: No

Anticipated Enrolment: 10

<u>Rationale for New Course</u>: This graduate course is being created as a cross-level listing to an existing undergraduate level course (ENGN 4840) to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: Provides an additional elective choice to students

Resources Required: None.

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



Motion #33

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #33

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

SDE 8840: Sustainable Technology Development and Commercialization

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

Existing resources:

Aside from various monographs included in the library's physical collection – including a copy of the Machinery's Handbook – the library has access to these resources (search results from select resources have been provided as examples):

- substantial ebook collections available through a range of license models, some of which
 require annual payments to continue access. The library has ebook access deals with the
 following publishers:
 - O'Reilly Higher Education (formerly known as Safari)
 - Over 8000 results searching sustainable technology development commercialization filtering on "Business", "Business Strategy", "Engineering", "Project & Product Management", "Product Management", "Project Management", "Innovation", "Product Design", "Electrical Engineering, "Materials Engineering", "Chemical Engineering", "Civil Engineering", "Mechanical Engineering", "Systems Engineering"
 - EBSCO
 - Elsevier
 - Wiley
 - Springer
 - Sage
 - ProQuest
 - Taylor & Francis
 - DesLibris
 - JSTOR
- CRC Handbook of Chemistry & Physics (maintained through subscription)
- licensed access to Engineering-specific packages that may contain a combination of publication types, such as books, journals, and conference proceedings, and may include a mix of full text and abstract-only indexing:
 - INSPEC
 - El Compendex
 - AccessEngineering
 - IEEE/IET IEL Electronic Library (Xplore)
 - Over 13,000 results searching
 - ((sustainab* development commercializ*) OR (startup OR new) business) AND tech*
 - published in the last 10 years
 - various engineering standards maintained through the MADCAD platform
- licensed packages of widely multidisciplinary content that include substantial engineeringrelated materials:
 - EBSCO Discovery Service (OneSearch)
 - Over 7000 results for
 - (((sustainab* development commercializ*) OR ((startup OR new)



Motion #33

business)) AND tech*) NOT financ* invest*

filtered to books available in the library collection (physically or digitally) published in the past 10 years classed as "Engineering" or "Business & Management"

- Academic Search Complete
 - over 22,000 peer-reviewed results searching ((sustainab* development commercializ* OR (startup OR new) business) AND (tech* OR engineer*)) NOT financ* invest* from within the last 10 years
- Gale OneFile Academic
- Sage Research Methods
- Scopus
- full-text of many engineering journals and content of relevance to the engineering programs provided through annual subscriptions to publisher-specific packages:
 - Elsevier (ScienceDirect)
 - over 220,000 results searching
 - ((sustainable OR sustainability) development (commercialize OR commercialization) OR ((startup OR new) business)) AND ((tech OR technology OR technological) OR engineering)
 filtered to the last 10 years and the Engineering, Chemical Engineering, and Energy subject fields.
 - Wiley
 - Springer
 - Sage
 - Association of Computing Machinery (ACM Digital Library)
 - over 182,000 results searching
 - ((sustainab* development commercializ*) OR ((startup OR new) business)) AND tech* AND engineer* published in the last 10 years
 - Institute of Physics (IOP)
 - American Chemical Society (ACS Web Editions and SciFinder)
 - Royal Society of Chemistry
 - American Geosciences Institute (GeoRef and GeoScienceWorld)
 - American Mathematical Society (MathSciNet)
- Other resources:
 - Streaming Video collections including:
 - Academic Videos Online (Proquest)
 - Audio Cine Films
 - Criterion on Demand
 - JoVE
 - NFB Campus
 - OED Online
 - Business Source Complete (journal articles and index)
 - Over 4000 full-text peer-reviewed results returned searching engineer* AND ((sustainab* development commercializ*) OR ((startup OR new) business)) AND tech* NOT financ* invest* published in the last 10 years



Motion #33

- Subject heading search using
 - (New business enterprises [exploded] OR New business enterprises Management OR Business incubators OR New product development) AND Sustainable development [exploded] AND (Technology [exploded] OR Engineering [exploded]

returned over 10,000 full-text peer-reviewed results published in the last 10 years

- Exploded here means also searching on the narrower terms listed under each of the subject headings listed, separated by the OR Boolean beside the parent heading.
- Canadian Business & Current Affairs Database
 - Over 1100 peer-reviewed results searching engineer* AND ((sustainab* development commercializ*) OR ((startup OR new) business)) AND tech* NOT (financ* invest*) published in the last 10 years
- CAB Abstracts (index with full-text ebooks, proceedings)
- Statistics Canada data through NESSTAR and CHASS
- New York Times, as well as many more regional, national, and international newspapers and news services
- Additionally, we organize and provide guidance on several tools that are open access to the public, such as MEDLINE and SCOAP³. 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 Liaison librarian: Mackenzie Johnson

Summary of additional budget allocation required:

- One-time: <u>n/a</u> For each of <u>n/a</u> consecutive years
- Annual: <u>n/a</u>
 - Per-year percentage increase in annual: <u>n/a</u>

Does the budget allocation for library resources in this proposal meet the requirement? While there is no request for new financial resources and therefore no new budget allocation to make for library resources, our existing holdings can support this course so long as the library is able to maintain its subscriptions with its ongoing budget.

Date Received by Liaison/Collections Librarian	notice and draft list provided Jan/11, forms Jan 22
Name of Librarian to be Contacted for Questions	Mackenzie Johnson
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #34

Revision is for a: Cross-listing Change Faculty/School/Department: Sustainable Design Engineering Department/Program(s)/Academic Regulations: BScSDE <u>MOTION:</u> To remove SDE-8230 as a cross-level listing to ENGN-3430

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
ENGN-3430 Technology Management &	ENGN-3430 Technology Management &
Entrepreneurshin	Entrepreneurshin
This course provides an overview on how to start and	This course provides an overview on how to start and
sustain a technology-oriented company. Topics	sustain a technology-oriented company. Topics discussed
discussed will include the role of technology in society,	will include the role of technology in society, intellectual
intellectual property, business feasibility studies,	property, business feasibility studies, financial planning,
financial planning, sources of capital, business	sources of capital, business structure, marketing,
structure, marketing, operational and human resource	operational and human resource management. The focus
management. The focus will be on students as	will be on students as engineers-entrepreneurs with
engineers-entrepreneurs with involvement from real life	involvement from real life entrepreneurs as motivators
entrepreneurs as motivators and facilitators. This course	and facilitators. This course will use problem-based and
will use problem-based and experiential learning	experiential learning strategies to develop new ventures.
strategies to develop new ventures. Students who	Students who produce a well-developed business idea
produce a well-developed business idea from this course	from this course may be considered for approval to use
may be considered for approval to use this as the basis	this as the basis for their final year engineering design
for their final year engineering design project. Cross-	project.
listed with Computer Science 3840.	Cross-listed with Computer Science 3840
Cross-level listed with SDE 8230 (Graduate-level project will be defined).	Cross-level listed with SDE 8230 (Graduate level project will be defined).
PREREQUISITE: Engineering 3710	PREREQUISITE: Engineering 3710
Three lecture hours per week.	Three lecture hours per week.

Rationale for Change: SDE-8230 was originally cross-level listed to a 4000-level course (ENGN 4230) which has since been changed to a 3000-level course (ENGN 3430). The cross-level listing between SDE 8230 and ENGN 3430 is now not appropriate and is also no longer consistent with Graduate Academic Regulation 14. Consequently, the cross-level listing between these courses is now being removed.

Effective Term: FALL 2023

Implications for Other Programs: With the removal of this cross-level listing, the existing SDE 8230 will no longer be required. It is proposed to be deleted under a separate motion.

Impact on Students Currently Enrolled: None

Authorization

Date:

Departmental Approval: FSDE Curriculum Committee	Jan 11 2023
Faculty/School Approval: FSDE Faculty	Jan 18 2023
Faculty Dean's Approval: Wayne Peters	Jan 18 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #35

Revision is for a: Cross-listing Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: BScSDE

MOTION: To cross-level list SDE-8840 to ENGN-4840.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
ENGN-4840 Sustainable Technology Development	ENGN-4840 Sustainable Technology Development and
and Commercialization	Commercialization
This course engages students in technology	This course engages students in technology development
development and commercialization. Teams of students	and commercialization. Teams of students work closely as
work closely as startup companies to develop	startup companies to develop innovative and sustainable
innovative and sustainable solutions to meet global	solutions to meet global challenges. Teams will be
challenges. Teams will be supported by instructors and	supported by instructors and industry mentors and will
industry mentors and will have access to dedicated	have access to dedicated incubator space, lab equipment
incubator space, lab equipment and manufacturing	and manufacturing facilities to complete their projects.
facilities to complete their projects. Students further	Students further develop their entrepreneurial,
develop their entrepreneurial, professional and technical	professional and technical skills through completing the
skills through completing the necessary steps to	necessary steps to commercialize their new innovative
commercialize their new innovative technologies and	technologies and products. The course will focus on
products. The course will focus on learning and	learning and applying various aspects of validation,
applying various aspects of validation, incubation and	incubation and business strategy development including
business strategy development including lean startup,	lean startup, design for commercialization, design for
design for commercialization, design for certification,	certification, manufacturing and distribution planning,
manufacturing and distribution planning, investor	investor relations, business growth planning and corporate
relations, business growth planning and corporate	sustainability.
sustainability.	<u>Cross-level listed with SDE 8840. (Graduate level project</u>
PREREQUISITE: Engineering 3220	will be defined).
Three lecture hours and three lab hours per week.	PREREQUISITE: Engineering 3220
	Three lecture hours and three lab hours per week

Rationale for Change: This existing undergraduate course is being revised to include a cross-level listing to a new graduate course (SDE 8840), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: N/A

Impact on Students Currently Enrolled: To provide additional course choices to students

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	January 11, 2023
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023

Form Version: September 2022



Motion #36

Revision is for a: Cross-listing Change Faculty/School/Department: Sustainable Design Engineering Department/Program(s)/Academic Regulations: MScSDE MOTION: To cross-level list ENGN 4020 to SDE-8020

Reproduction of Current Calendar Entrydeletions indicated clearlySDE-8020 Quality Control and Project Management This course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers. PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3SDE-8020 Quality Control and Project Management this course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers. PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3Beletions indicated clearly SUB and SUB		Proposed revision with changes underlined and
SDE-8020 Quality Control and Project Management This course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers. PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3SDE-8020 Quality Control and Project Management This course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers. Graduate-level project will be required as defined in consultation with the instructor Cross-level listed with ENGN-4020; credit cannot be received for both courses PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering	Reproduction of Current Calendar Entry	deletions indicated clearly
SDE-8020 Quality Control and Project Management This course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers. PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3		
HOURS OF CREDIT: 3	SDE-8020 Quality Control and Project Management This course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers. PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3	SDE-8020 Quality Control and Project Management This course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers. <u>Graduate-level project will be required as defined in consultation with the instructor</u> <u>Cross-level listed with ENGN-4020; credit cannot be received for both courses</u> PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3

Rationale for Change: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4020), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion # 37

Revision is for a: Cross-listing Change Faculty/School/Department: Sustainable Design Engineering Department/Program(s)/Academic Regulations: MScSDE MOTION: To cross-level list ENGN 4021 to SDE-8021

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
SDE 8021 Contemporary Topics in Engineering	SDE 8021 Contemporary Topics in Engineering
Management	Management
This graduate-level course is an introduction to the	This graduate-level course is an introduction to the most
most widely accepted engineering management	widely accepted engineering management practices in the
practices in the workforce today. Through lectures,	workforce today. Through lectures, case studies, guest
case studies, guest speakers, and facilitated discussion,	speakers, and facilitated discussion, students will develop
students will develop managerial knowledge and skills	managerial knowledge and skills and be exposed to a
and be exposed to a spectrum of corporate activities in	spectrum of corporate activities in the engineering
the engineering environment. Topics presented in this	environment. Topics presented in this course include
course include strategic management of research and	strategic management of research and development,
development, organizational management, knowledge,	organizational management, knowledge, risk and IP
risk and IP management, new product development,	management, new product development, globalization,
globalization, ethics, project management in a	ethics, project management in a technology-based
technology-based organization. I his course will focus	organization. This course will focus on "management for
on "management for future engineering leaders" and	future engineering leaders" and examine national
examine national guidelines, practice engineering team	guadelines, practice engineering team dynamics, apply
agrammes, apply quantitative quanty and supply chain	quantitative quality and supply chain concepts, and
concepts, and present infancial/ accounting basics for	Graduate level project will be required as defined in
DEPENIUSITES: Admission to the graduate	<u>Graduate-level project will be required as defined in</u>
program in Faculty of Sustainable Design Engineering	Cross level listed with ENGN 4021: credit cannot be
HOURS OF CREDIT. 3	received for both courses
	PREREOUIISITES: Admission to the graduate program
	in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3
Detionale for Change. This evicting graduate equira	his being revised to include a gross level listing to a

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4021), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCarville	February 15, 2023



Motion #48

Revision is for a: Cross-listing Change Faculty/School/Department: Sustainable Design Engineering Department/Program(s)/Academic Regulations: MScSDE MOTION: To cross-level list ENGN 4030 to SDE-8030

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8030 Contemporary Topics in Sustainable	SDE-8030 Contemporary Topics in Sustainable
Design Engineering	Design Engineering
In this course students will be exposed to and examine	In this course students will be exposed to and examine
the concepts underlying sustainable design engineering	the concepts underlying sustainable design engineering
as they pertain to engineering practice and in particular	as they pertain to engineering practice and in particular
technologies. Susteinable design engineering can be	engineering research and the development of new
defined as an engineering design process which	technologies. Sustainable design engineering can be
considers not only the key performance indicators and	defined as an engineering design process which
functional characteristics of the system being	considers not only the key performance indicators and
developed but also the environmental, social and	functional characteristics of the system being
economic context and impacts of the system. Recent	developed but also the environmental social and
advances in sustainability research have focused on the	economic context and impacts of the system Recent
complex interactions between these areas, evolving	advances in sustainability research have focused on the
from "green engineering" to a full consideration of	advances in sustainability research have rocused on the
sustainability. In order to develop sustainable	form "grann an sin serie all the shear fail and identified of
critically evaluate their work in this context. To this	from green engineering to a full consideration of
end, students will examine case studies and relevant	sustainability. In order to develop sustainable
readings on such topics as sustainability indicators,	solutions, engineers and researchers must be able to
techno-economic and life cycle assessment, stakeholder	critically evaluate their work in this context. To this
engagement, real time technology assessment,	end, students will examine case studies and relevant
engineering justice, and design for sustainability. While	readings on such topics as sustainability indicators,
approaches for addressing the specific areas of	techno-economic and life cycle assessment, stakeholder
environmental, social and economic sustainability will	engagement, real time technology assessment,
be covered, the focus of the course will be on the	engineering justice, and design for sustainability. While
course will be a paper critically examining the student's	approaches for addressing the specific areas of
research topic from the perspective of sustainable	environmental, social and economic sustainability will
design engineering.	be covered, the focus of the course will be on the
PREREQUISITES: Admission to the graduate	interactions between these areas. A key outcome of this
program in School of Sustainable Design Engineering	course will be a paper critically examining the student's
HOURS OF CREDIT: 3	research topic from the perspective of sustainable
	design engineering. Graduate-level project will be
	required as defined in consultation with the instructor.
	Cross-level listed with ENGN-4030; credit cannot be
	received for both courses.
	PREREOUISITES: Admission to the graduate



Motion #48

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
	program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4030), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Provides additional course choices to students

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023

Form Version: September 2022



Motion #39

Revision is for a: Cross-listing Change Faculty/School/Department: Sustainable Design Engineering Department/Program(s)/Academic Regulations: MScSDE MOTION: To cross-level list ENGN 4031 to SDE-8031

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8031 User Centred Engineering Design	SDE-8031 User Centred Engineering Design
User-centred design offers a powerful and systematic	User-centred design offers a powerful and systematic
approach to understanding users and their needs and	approach to understanding users and their needs and
delivering effective design solutions in many domains	delivering effective design solutions in many domains
including engineering, technology and health sciences.	including engineering, technology and health sciences.
This course will introduce students to a variety of	This course will introduce students to a variety of
principles, practices and research methods for	principles, practices and research methods for
designing, developing and evaluating products, systems	designing, developing and evaluating products, systems
and solutions based on the users' needs, and context.	and solutions based on the users' needs, and context.
Students will learn human factors, ergonomics,	Students will learn human factors, ergonomics,
cognitive and perceptual psychology principles for	cognitive and perceptual psychology principles for
designing products, information displays and complex	designing products, information displays and complex
systems. Students will be exposed to various subjective	systems. Students will be exposed to various subjective
and objective metrics and methods for evaluations and	and objective metrics and methods for evaluations and
usability studies. Students will also be introduced to	usability studies. Students will also be introduced to
apply user-centred design for developing sustainable	apply user-centred design for developing sustainable
products and systems.	products and systems. <u>Graduate-level project will be</u>
PREREQUISITES: Admission to the graduate	required as defined in consultation with the instructor.
program in School of Sustainable Design Engineering	Cross-level listed with ENGN-4031; credit cannot be
HOURS OF CREDIT: 5	DEEDEOLUSITES: Admission to the graduate
	r NENEQUISTIES. Authission to the graduate
	HOURS OF CREDIT: 3

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4031), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #40

Revision is for a: Cross-listing Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To cross-level list ENGN 4040 to SDE-8040

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8040 Design of Experiments	SDE-8040 Design of Experiments
This course focuses on the design, implementation,	This course focuses on the design, implementation,
and analysis of engineering, scientific, and computer-	and analysis of engineering, scientific, and computer-
based experiments. The course will examine the proper	based experiments. The course will examine the proper
and scientific approach to experimentation, modeling,	and scientific approach to experimentation, modeling,
simulation, and analysis of data. Various designs are	simulation, and analysis of data. Various designs are
discussed and their respective advantages and	discussed and their respective advantages and
disadvantages are noted. Factorial designs and	disadvantages are noted. Factorial designs and
sensitivity analysis will be studied in detail because of	sensitivity analysis will be studied in detail because of
its relevance to various industries. Use of software for	its relevance to various industries. Use of software for
designing and analyzing experiments will also be used.	designing and analyzing experiments will also be used.
For experiments that involved mainly physical	For experiments that involved mainly physical
quantities and natural phenomena, techniques of	quantities and natural phenomena, techniques of
dimensional analysis will also be introduced.	dimensional analysis will also be introduced.
PREREQUISITES: Admission to the graduate	Graduate-level project will be required as defined in
program in School of Sustainable Design Engineering	consultation with the instructor.
HOURS OF CREDIT: 3	Cross-level listed with ENGN-4040; credit cannot be
	received for both courses.
	PREREQUISITES: Admission to the graduate
	program in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4040), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Provides additional course choices to students

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023

Form Version: September 2022



Motion #41

Revision is for a: Cross-listing Change Faculty/School/Department: Sustainable Design Engineering

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

MOTION: To cross-level list ENGN 4050 to SDE-8050

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8050 Engineering Research Methods	SDE-8050 Engineering Research Methods
This course will introduce students to the elements of a	This course will introduce students to the elements of a
research project and will focus on quantitative research	research project and will focus on quantitative research
methodologies. Students will practice the planning,	methodologies. Students will practice the planning,
implementation, analysis, and documentation for a	implementation, analysis, and documentation for a
research project of their own design. Topics will	research project of their own design. Topics will
include: performing a literature review, developing a	include: performing a literature review, developing a
hypothesis, creating a research plan, collecting data,	hypothesis, creating a research plan, collecting data,
analyzing the results, and compiling a research report.	analyzing the results, and compiling a research report.
Students will use tools for quantitative data analysis	Students will use tools for quantitative data analysis
and will explore reliability, validation, and verification	and will explore reliability, validation, and verification
concepts. Students will report findings in a technical	concepts. Students will report findings in a technical
presentation. The course encourages students to	presentation. The course encourages students to
develop their research question and perform a sample	develop their research question and perform a sample
experiment to apply lessons learned to their main	experiment to apply lessons learned to their main
research topic. Intellectual property rights and	research topic. Intellectual property rights and
engineering ethics topics will be explored.	engineering ethics topics will be explored. Graduate-
PREREQUISITES: Admission to the graduate	level project will be required as defined in consultation
program in School of Sustainable Design Engineering	with the instructor.
HOURS OF CREDIT: 3	Cross-level listed with ENGN-4050; credit cannot be
	received for both courses.
	PREREQUISITES: Admission to the graduate
	program in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3

Rationale for Change: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4050), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #42

Revision is for a: Cross-listing Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To cross-level list ENGN 4060 to SDE-8060

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8060 Design of Energy Systems	SDE-8060 Design of Energy Systems
This course focuses on the understanding of the	This course focuses on the understanding of the
physical processes underlying the energy conversion	physical processes underlying the energy conversion
process from wind and solar energy. Students will have	process from wind and solar energy. Students will have
an advanced knowledge of aerodynamics and	an advanced knowledge of aerodynamics and
structural dynamics, and they will understand the main	structural dynamics, and they will understand the main
strategies used for controlling these machines over their	strategies used for controlling these machines over their
complete operating range. A specific goal of the course	complete operating range. A specific goal of the course
is to provide students with a multidisciplinary vision	is to provide students with a multidisciplinary vision
on the physics of energy systems, and an	on the physics of energy systems, and an
understanding of the methods used for their modeling	understanding of the methods used for their modeling
and simulation. A particular emphasis will be placed	and simulation. A particular emphasis will be placed
on design, and on the effects of design choices on the	on design, and on the effects of design choices on the
cost of energy.	cost of energy. Graduate-level project will be required
PREREQUISITES: Admission to the graduate	as defined in consultation with the instructor.
program in School of Sustainable Design Engineering	Cross-level listed with ENGN-4060; credit cannot be
HOURS OF CREDIT: 3	received for both courses.
	PREREQUISITES: Admission to the graduate
	program in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3

Rationale for Change: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4060), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Provides additional course choices to students

Authorization

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023

Form Version: September 2022



Motion #43

Revision is for a: Cross-listing Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To cross-level list ENGN 4061 to SDE-8061

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
SDE-8061 Optimization Energy Infrastructure The course aims to provide the knowledge about the application of various optimization methods in designing energy infrastructure. The course starts with the introduction to various optimization algorithms. Thereafter, the integration of energy modeling and simulation with optimization algorithms will be demonstrated. This course will also cover the optimization of distributed energy systems using single and multi-objective optimization methods. Several minor projects will be introduced to formulate the energy system optimization problem deciding design variables, objectives, and constraints. PREREQUISITES: Admission to the graduate program in School of Sustainable Design Engineering HOURS OF CREDIT: 3	SDE-8061 Optimization Energy Infrastructure The course aims to provide the knowledge about the application of various optimization methods in designing energy infrastructure. The course starts with the introduction to various optimization algorithms. Thereafter, the integration of energy modeling and simulation with optimization algorithms will be demonstrated. This course will also cover the optimization of distributed energy systems using single and multi-objective optimization methods. Several minor projects will be introduced to formulate the energy system optimization problem deciding design variables, objectives, and constraints. <u>Graduate-level project will be required as defined in consultation with the instructor.</u> <u>Cross-level listed with ENGN-4061; credit cannot be received for both courses.</u> PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4061), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Date:

Authorization		
	Departmental	Approval

Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #44

Revision is for a: Cross-listing Change Faculty/School/Department: Sustainable Design Engineering

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

MOTION: To cross-level list ENGN 4062 to SDE-8062

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8062 Solar Buildings/Neighbourhood	SDE-8062 Solar Buildings/Neighbourhood
The course is aimed to discuss the design	The course is aimed to discuss the design
considerations in designing solar buildings and	considerations in designing solar buildings and
neighborhoods. The course will start with the historical	neighborhoods. The course will start with the historical
background of solar neighborhoods in modern and	background of solar neighborhoods in modern and
ancient history. Thereafter, passive solar design	ancient history. Thereafter, passive solar design
considerations in various small and large scale	considerations in various small and large scale
buildings will be discussed. Principles of solar design	buildings will be discussed. Principles of solar design
such as building site setting, building shape, building	such as building site setting, building shape, building
envelopes, active and passive based heating and	envelopes, active and passive based heating and
cooling techniques will be introduced. The active	cooling techniques will be introduced. The active
electrical and thermal energy generation and storage	electrical and thermal energy generation and storage
strategies will be discussed. Energy modeling and	strategies will be discussed. Energy modeling and
simulation tools used for the assessment of solar access	simulation tools used for the assessment of solar access
of various building will be demonstrated. Various case	of various building will be demonstrated. Various case
be taken for assignments. For the term project	be taken for assignments. For the term project
incorporation of solar strategies for modifying existing	incorporation of solar strategies for modifying existing
Canadian buildings and neighborhoods will be	Canadian buildings and neighborhoods will be
assigned to groups of students	assigned to groups of students. Graduate-level project
PREREQUISITES: Admission to the graduate	will be required as defined in consultation with the
program in School of Sustainable Design Engineering	instructor.
HOURS OF CREDIT: 3	Cross-level listed with ENGN-4062; credit cannot be
	received for both courses.
	PREREQUISITES: Admission to the graduate
	program in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4062), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None



Motion #48

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #45

Revision is for a: Cross-listing Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To cross-level list ENGN 4063 to SDE-8063

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
	-
SDE-8063 Contemporary Topics in Sustainable	SDE-8063 Contemporary Topics in Sustainable
Energy	Energy
This broadly applicable course discusses global energy	This broadly applicable course discusses global energy
usage and exposes students to current trends in local	usage and exposes students to current trends in local
and global sustainable energy initiatives (i.e., energy	and global sustainable energy initiatives (i.e., energy
generation and storage) and applications. Present and	generation and storage) and applications. Present and
future global energy consumption and related CO2	future global energy consumption and related CO2
emissions are considered and discussed. Students will	emissions are considered and discussed. Students will
be exposed to and analyze case studies as well as	be exposed to and analyze case studies as well as
develop and design their own globally relevant solution	develop and design their own globally relevant solution
concepts. Students will ultimately gain an enhanced,	concepts. Students will ultimately gain an enhanced,
quantitative appreciation for the challenges and	quantitative appreciation for the challenges and
opportunities related to global energy system	opportunities related to global energy system
decarbonization.	decarbonization. <u>Graduate-level project will be</u>
PREREQUISITES: Admission to the graduate	required as defined in consultation with the instructor.
program in School of Sustainable Design Engineering	Cross-level listed with ENGN-4063; credit cannot be
HOURS OF CREDIT: 3	received for both courses.
	PREREQUISITES: Admission to the graduate
	program in Faculty of Sustainable Design Engineering
	HOUKS OF CREDIT: 3

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4063), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Provides additional course choices to students

AuthorizationDate:Departmental Approval: Graduate Studies CommitteeDecember 12, 2022Faculty/School Approval: FSDE FacultyJanuary 18, 2023Faculty Dean's Approval: Wayne PetersJanuary 18, 2023Grad. Studies Dean's Approval: Marva Sweeney-NixonFebruary 3, 2023Registrar's Office Approval: Darcy McCardleFebruary 15, 2023

Form Version: September 2022



Motion #46

Revision is for a: Cross-listing Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To cross-level list ENGN 4070 to SDE-8070

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8070 Novel Engineered Materials	SDE-8070 Novel Engineered Materials
This course is a graduate-level examination of the	This course is a graduate-level examination of the
properties and processing of novel, engineered	properties and processing of novel, engineered
materials for sustainable applications. Fundamental	materials for sustainable applications. Fundamental
concepts of solid-state diffusion, phase	concepts of solid-state diffusion, phase
transformations, amorphous-to-crystalline kinetics,	transformations, amorphous-to-crystalline kinetics,
rapid solidification - for nuclear energy, more electric	rapid solidification - for nuclear energy, more electric
generation, renewable energy systems, additive	generation, renewable energy systems, additive
manufacturing, modeling and simulation of the	manufacturing, modeling and simulation of the
nanoscale will be discussed. As well, the relationships	nanoscale will be discussed. As well, the relationships
between the performance of electrical, optical, and	between the performance of electrical, optical, and
magnetic devices and the microstructural and defect	magnetic devices and the microstructural and defect
characteristics of the materials from which they are	characteristics of the materials from which they are
constructed will be explored. Focusing on functional	constructed will be explored. Focusing on functional
materials for emerging technologies and emphasizing a	materials for emerging technologies and emphasizing a
device-design approach, applications will center	device-design approach, applications will center
around current research in the Faculty of Sustainable	around current research in the Faculty of Sustainable
DESIGN ENGINEERING.	Design Engineering. <u>Graduate-level project will be</u>
regram in School of Sustainable Design Engineering	Cross level listed with ENCN 4070; credit cannot be
HOURS OF CREDIT: 3	received for both courses
	PREREOUUSITES: Admission to the graduate
	program in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3
Ationale for Change: This existing graduate course	b being revised to include a cross-level listing to a

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4070), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Authorization	Da	ate:
Departmental Approval: Graduate Studie	s Committee De	ecember 12, 2022
Faculty/School Approval: FSDE Faculty	Ja	anuary 18, 2023
Faculty Dean's Approval: Wayne Peters	Ja	anuary 18, 2023
Grad. Studies Dean's Approval: Marva Sv	veeney-Nixon Fe	ebruary 3, 2023
Registrar's Office Approval: Darcy McCa	rdle Fe	ebruary 15, 2023



Motion #47

Revision is for a: Cross-listing Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To cross-level list ENGN 4080 to SDE-8080

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8080 Industrial Machine Vision	SDE-8080 Industrial Machine Vision
This course focuses on computer vision with an	This course focuses on computer vision with an
emphasis on techniques for automated inspection,	emphasis on techniques for automated inspection,
object recognition, mechanical metrology, and	object recognition, mechanical metrology, and
robotics. Image processing courses typically focus for	robotics. Image processing courses typically focus for
image enhancement, restoration, filtering, smoothing,	image enhancement, restoration, filtering, smoothing,
etc. These topics will be covered to a certain degree but	etc. These topics will be covered to a certain degree but
the main focus will be on image segmentation, feature	the main focus will be on image segmentation, feature
extraction, morphological operators, recognition and	extraction, morphological operators, recognition and
photogrammetry. Issues related to the efficient	photogrammetry. Issues related to the efficient
software implementation of these techniques for real-	software implementation of these techniques for real-
time applications will also be addressed.	time applications will also be addressed. <u>Graduate-</u>
PREREQUISITES: Admission to the graduate	level project will be required as defined in consultation
program in School of Sustainable Design Engineering	with the instructor.
HOURS OF CREDIT: 3	Cross-level listed with ENGN-4080; credit cannot be
	received for both courses.
	PREREQUISITES: Admission to the graduate
	program in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3

Rationale for Change: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4080), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Provides additional course choices to students

Authorization

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #48

Revision is for a: Cross-listing Change Faculty/School/Department: Sustainable Design Engineering Department/Program(s)/Academic Regulations: MScSDE MOTION: To cross-level list ENGN 4081 to SDE-8081

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8081 Modern Mechatronic Systems	SDE-8081 Modern Mechatronic Systems
This course emphasizes how the abstract concepts of	This course emphasizes how the abstract concepts of
control theory and advanced design tools are used	control theory and advanced design tools are used
pragmatically in engineering practice in the	pragmatically in engineering practice in the
mechatronics field. This course explores current topics	mechatronics field. This course explores current topics
of modern mechatronics, from the application of	of modern mechatronics, from the application of
complex systems through dimensionality reduction,	complex systems through dimensionality reduction,
machine learning, and dynamical systems modelling to	machine learning, and dynamical systems modelling to
innovative methods and algorithms such as augmented	innovative methods and algorithms such as augmented
reality, medical image analysis, and automated	reality, medical image analysis, and automated
mapping of environments. Above all, this course is	mapping of environments. Above all, this course is
designed to entice students to think, ask questions of	designed to entice students to think, ask questions of
existing theory, and understand the essence of	existing theory, and understand the essence of
mechatronics systems. To this end, students will	mechatronics systems. To this end, students will
develop and implement practical, hands-on-with-	develop and implement practical, hands-on-with-
hardware applications of the control system analysis	hardware applications of the control system analysis
and design principles that are the subject matter of their	and design principles that are the subject matter of their
research. The findings and results of this project will be	research. The findings and results of this project will be
presented in the format of a manuscript that	presented in the format of a manuscript that
incorporates the research methodology, their final	incorporates the research methodology, their final
product, and critical thinking over the mechatronic	product, and critical thinking over the mechatronic
	topic. Graduate-level project will be required as defined
PREREQUISITES: Admission to the graduate	in consultation with the instructor.
program in School of Sustainable Design Engineering	Cross-level listed with ENGN-4081; credit cannot be
HOURS OF CREDIT: 3	received for both courses.
	PREREQUISITES: Admission to the graduate
	program in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4081), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None



Motion #48

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #49

Revision is for a: Cross-listing Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To cross-level list ENGN 4100 to SDE-8100

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
SDE-8100 Biofuel and Biomass Technology	SDE-8100 Biofuel and Biomass Technology
This course focuses on advanced concepts in	This course focuses on advanced concepts in
understanding biofuels and bioenergy systems,	understanding biofuels and bioenergy systems,
renewable feedstocks, their production, availability and	renewable feedstocks, their production, availability and
attributes for biofuel/bioenergy production, types of	attributes for biofuel/bioenergy production, types of
biomass derived fuels and energy, thermochemical	biomass derived fuels and energy, thermochemical
conversion of biomass to heat, power and fuel,	conversion of biomass to heat, power and fuel,
biochemical conversion of biomass to fuel	biochemical conversion of biomass to fuel
environmental aspects of biofuel production,	environmental aspects of biofuel production,
economics and life-cycle analysis of biofuel, and value	economics and life-cycle analysis of biofuel, and value
adding of biofuel residues. Students will analyze, as	adding of biofuel residues. Students will analyze, as
well as prepare, case studies on biofuel production.	well as prepare, case studies on biofuel production.
PREREQUISITES: Admission to the graduate	<u>Graduate-level project will be required as defined in</u>
program in School of Sustainable Design Engineering	<u>consultation with the instructor.</u>
HOURS OF CREDIT: 3	<u>Cross-level listed with ENGN-4100; credit cannot be</u>
	received for both courses. PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3

<u>Rationale for Change</u>: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4100), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #50

Revision is for a: Cross-listing Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To cross-level list ENGN 4101 to SDE-8101

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8101 Advanced Bioresource Engineering	SDE-8101 Advanced Bioresource Engineering
The quest for food security, renewable energy, climate	The quest for food security, renewable energy, climate
change and demand for sustainable fuels has increased	change and demand for sustainable fuels has increased
focus on biomass conversion and technological	focus on biomass conversion and technological
interventions to cope with these challenges. This	interventions to cope with these challenges. This
course covers advanced topics in bioresource	course covers advanced topics in bioresource
engineering to acquire an understanding of	engineering to acquire an understanding of
sustainability challenges in bioresource sector and	sustainability challenges in bioresource sector and
propose optimal climate smart solutions by	propose optimal climate smart solutions by
implementing technologies and processes. The course	implementing technologies and processes. The course
is delivered in three complementary modules: i) deep	is delivered in three complementary modules: i) deep
learning and artificial intelligence for sustainable food	learning and artificial intelligence for sustainable food
production, ii) biofuels and biomaterials, and iii) the	production, ii) biofuels and biomaterials, and iii) the
design of biomass conversion reactors.	design of biomass conversion reactors. <u>Graduate-level</u>
PREREQUISITES: Admission to the graduate	project will be required as defined in consultation with
program in School of Sustainable Design Engineering	the instructor.
HOURS OF CREDIT: 3	Cross-level listed with ENGN-4101; credit cannot be
	received for both courses.
	PREREQUISITES: Admission to the graduate
	program in Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3

Rationale for Change: This existing graduate course is being revised to include a cross-level listing to a new undergraduate level course (ENGN 4101), which was created under a previous motion, to be able to deliver both an undergraduate and graduate level version of the course in accordance with Graduate Academic Regulation 14.

Effective Term: FALL 2023

Implications for Other Programs: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #51

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

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8310

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8310 Advanced Fabrication Techniques	SDE-8310 Advanced Fabrication Techniques
This course concentrates on manufacturing knowledge	This course concentrates on manufacturing knowledge
with a focus on advanced fabrication techniques	with a focus on advanced fabrication techniques (AFT)
(AFT) and Computer Integrated Manufacturing	and Computer Integrated Manufacturing (CIM).
(CIM). Students will expand their knowledge of	Students will expand their knowledge of traditional
traditional processes including CAD/CAM, forming,	processes including CAD/CAM, forming, welding,
welding, milling, etc. leading into innovative	milling, etc. leading into innovative advanced
advanced fabrication techniques in additive and	fabrication techniques in additive and precision
precision manufacturing, next generation electronics,	manufacturing, next generation electronics, robotics
robotics and smart automation (CIM), and sustainable	and smart automation (CIM), and sustainable and
and green manufacturing modeling and simulation in	green manufacturing modeling and simulation in the
the manufacturing process developed through lectures	manufacturing process developed through lectures and
and labs. Integration of CIM into supply chain design	labs. Integration of CIM into supply chain design and
and management is emphasized based on synergistic	management is emphasized based on synergistic
application of mechatronics approach and philosophy.	application of mechatronics approach and philosophy.
Graduate-level project will be required as defined in	Graduate-level project will be required as defined in
consultation with the instructor.	consultation with the instructor. <u>This course is not</u>
Cross-level listed with ENGN 4310; credit cannot be	eligible for the PhD-SDE program.
received for both courses	Cross-level listed with ENGN 4310; credit cannot be
PREREQUISITES: Admission to the graduate	received for both courses.
program in School of Sustainable Design Engineering	PREREQUISITES: Admission to the MSc SDE
HOURS OF CREDIT: 3	program graduate program in School of Sustainable
	Design Engineering and permission of the instructor
	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #52

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

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8320

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8320 Control System Design	SDE-8320 Control System Design
This course will provide students with an overview of	This course will provide students with an overview of
system modelling and control methodologies of	system modelling and control methodologies of
single/multiple input/output systems, e.g., energy	single/multiple input/output systems, e.g., energy
transport control, reactor control, heat exchanger	transport control, reactor control, heat exchanger
control, power production, and mechatronic systems.	control, power production, and mechatronic systems.
Students will learn classical control methods	Students will learn classical control methods
e.g.,feedforward, feedbacks, cascade, decoupling to	e.g.,feedforward, feedbacks, cascade, decoupling to
modern control methods, LQR, predictive	modern control methods, LQR, predictive
control,optimal and robust control. Students will be	control,optimal and robust control. Students will be
equipped with knowledge and skills for analyzing	equipped with knowledge and skills for analyzing
stability, controllability and observability of state-	stability, controllability and observability of state-space
space representation modelled systems. Graduate-level	representation modelled systems. Graduate-level project
project will be required as defined in consultation with	will be required as defined in consultation with the
the instructor.	instructor. This course is not eligible for the PhD-SDE
Cross-level listed with ENGN 4320; credit cannot be	program.
received for both courses.	Cross-level listed with ENGN 4320; credit cannot be
PREREQUISITES: Admission to the graduate	received for both courses.
program in School of Sustainable Design Engineering	PREREQUISTIES: Admission to the <u>MSc SDE</u>
HOUKS OF CREDIT: 3	program graduate program in School of Sustainable
	UQUES OF CREDIT: 2
	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023


Motion #53

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8330

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8330 Innovations in Biomedical Engineering	SDE-8330 Innovations in Biomedical Engineering
This course provides an overview of the subdisciplines	This course provides an overview of the subdisciplines
that are included in field of biomedical engineering.	that are included in field of biomedical engineering.
Through a hands-on approach, the course introduces	Through a hands-on approach, the course introduces
topics including biotransport, bioelectrical	topics including biotransport, bioelectrical phenomena,
phenomena, bioinstrumentation, biomechanics,	bioinstrumentation, biomechanics, diagnostic devices,
diagnostic devices, medical imaging, rehabilitation,	medical imaging, rehabilitation, biomaterials, tissue
biomaterials, tissue engineering, biosensors, lab-on-a-	engineering, biosensors, lab-on-a-chip and micro- and
chip and micro- and nano-technology. The course also	nano-technology. The course also introduces the basics
introduces the basics of medical device regulations and	of medical device regulations and ethics of medical
ethics of medical instrumentation. Students will gain	instrumentation. Students will gain an appreciation for
an appreciation for the collaborative, interdisciplinary	the collaborative, interdisciplinary nature of engineering
nature of engineering in medicine and its potential	in medicine and its potential impact on society.
impact on society.	Graduate-level project will be required as defined in
Cross-level listed with ENGIN 4330; credit cannot be	<u>consultation with the instructor. This course is not</u>
received for both courses.	<u>eligible for the PhD-SDE program.</u>
PREREQUISITES: Admission to the graduate	Cross-level listed with ENGN 4330; credit cannot be
Design Engineering	DEPENDENTES: A diministration to the MSe SDE
HOURS OF CREDIT: 5	rkekeQUISITES: Admission to the <u>MSC SDE</u>
	Design Engineering and permission of the instructor
	HOUDS OF OPEDIT: 3
	HOURS OF CREDIT, 5

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #54

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8350

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
SDE-8350 Advanced Robotic Dynamic & Control This course advances the fundamentals of robotics through exposure to in-depth knowledge and understanding of kinematics, dynamics, control and trajectory with applications to autonomous vehicles, automated manufacturing and processing and mobile robotics. Areas of interest include: position transformation and control, rigid body motion, kinematic control, compliance and force control. Graduate-level project will be required as defined in consultation with the instructor. Cross-level listed with ENGN 4350; credit cannot be received for both courses. PREREQUISITES: Admission to the graduate program in School of Sustainable Design Engineering HOURS OF CREDIT: 3	SDE-8350 Advanced Robotic Dynamic & Control This course advances the fundamentals of robotics through exposure to in-depth knowledge and understanding of kinematics, dynamics, control and trajectory with applications to autonomous vehicles, automated manufacturing and processing and mobile robotics. Areas of interest include: position transformation and control, rigid body motion, kinematic control, compliance and force control. Graduate-level project will be required as defined in consultation with the instructor. <u>This course is not eligible for the PhD-SDE program.</u> Cross-level listed with ENGN 4350; credit cannot be received for both courses. PREREQUISITES: Admission to the <u>MSc SDE</u> <u>program graduate program in School of Sustainable</u> <u>Design Engineering and permission of the instructor</u>
	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #55

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8370

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8370 Fluid Power Control	SDE-8370 Fluid Power Control
This course covers the analysis and design of basic	This course covers the analysis and design of basic
hydraulic and pneumatic circuits and systems. Topics	hydraulic and pneumatic circuits and systems. Topics
include a review of the fundamentals of fluid	include a review of the fundamentals of fluid mechanics
mechanics including flow through valves, fittings, and	including flow through valves, fittings, and pipe;
pipe; classification of hydrostatic pumps and motors;	classification of hydrostatic pumps and motors; control
control valves; hydraulic accumulators; sizing of	valves; hydraulic accumulators; sizing of practical
practical hydraulic circuits; thermal and energy	hydraulic circuits; thermal and energy considerations;
considerations; electrohydraulic control and modeling	electrohydraulic control and modeling of hydraulic
of hydraulic control systems. The latter part of the	control systems. The latter part of the course focuses on
course focuses on pneumatic systems including	pneumatic systems including pneumatic cylinders and
pneumatic cylinders and motors, control valves, and	motors, control valves, and compressor technology.
compressor technology. The application of	The application of Programmable Logic Controls
Programmable Logic Controls (PLCs) to industrial	(PLCs) to industrial automation and the sequential
automation and the sequential control of pneumatic	control of pneumatic actuators is also addressed.
actuators is also addressed. Graduate-level project will	Graduate-level project will be required as defined in
be required as defined in consultation with the	consultation with the instructor. This course is not
instructor.	eligible for the PhD-SDE program.
Cross-level listed with ENGN 4370; credit cannot be	Cross-level listed with ENGN 4370; credit cannot be
received for both courses	received for both courses.
PREREQUISITES: Admission to the graduate	PREREQUISITES: Admission to the MSc SDE
program in School of Sustainable Design Engineering	program graduate program in School of Sustainable
HOURS OF CREDIT: 3	Design Engineering and permission of the instructor
	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	N/A



Motion #56

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

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8410

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8410 Macro Energy Systems	SDE-8410 Macro Energy Systems
This course covers methods for analyzing energy	This course covers methods for analyzing energy
supply, conversion processes, and end-use at the	supply, conversion processes, and end-use at the system
system level. Aspects considered include the dynamics	level. Aspects considered include the dynamics of
of energy supply and demand, efficiencies of energy	energy supply and demand, efficiencies of energy
conversion, characteristics of energy currencies, and	conversion, characteristics of energy currencies, and
energy needs across different sectors. Students will	energy needs across different sectors. Students will
characterize methods of delivering energy services	characterize methods of delivering energy services such
such as heat, light, industrial power and	as heat, light, industrial power and transportation.
transportation. Energy analysis will be introduced and	Energy analysis will be introduced and used to build a
used to build a quantitative framework for integrating	quantitative framework for integrating techno-economic
techno-economic analysis of energy system	analysis of energy system components, with emphasis
components, with emphasis on elements such as fossil	on elements such as fossil fuels and nuclear power.
fuels and nuclear power. Students will gain an	Students will gain an enhanced, quantitative
enhanced, quantitative appreciation for the	appreciation for the sustainability, emissions, cost and
sustainability, emissions, cost and energy intensity	energy intensity aspects of energy services delivery.
aspects of energy services delivery. Graduate-level	Graduate-level project will be required as defined in
project will be required as defined in consultation with	consultation with the instructor. This course is not
the instructor.	eligible for the PhD-SDE program.
Cross-level listed with ENGN 4410; credit cannot be	Cross-level listed with ENGN 4410; credit cannot be
DEDEOLUSITES. A devision to the graduate	DEDEOLUSITES.
PREREQUISITES: Autilission to the graduate	PREREQUISITES: Autilission to the <u>MSC SDE</u> program graduate program in School of Sustainable
HOUDS OF OPEDIT: 2	<u>program graduate program in School of Sustainable</u>
TOURS OF CREDIT. 5	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #57

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

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8440

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8440 Advanced Energy Storage	SDE-8440 Advanced Energy Storage
This course considers advanced technical analysis of	This course considers advanced technical analysis of
energy storage systems. A comprehensive overview of	energy storage systems. A comprehensive overview of
all industrially relevant energy storage systems is	all industrially relevant energy storage systems is
reviewed and emphasis is placed on promising energy	reviewed and emphasis is placed on promising energy
storage technologies of the future. Chemical, thermal	storage technologies of the future. Chemical, thermal
and kinetic storage technologies will be discussed in	and kinetic storage technologies will be discussed in
detail. Graduate-level project will be required as	detail. Graduate-level project will be required as
defined in consultation with the instructor.	defined in consultation with the instructor. <u>This course</u>
Cross-level listed with ENGN 4440; credit cannot be	is not eligible for the PhD-SDE program.
received for both courses.	Cross-level listed with ENGN 4440; credit cannot be
PREREQUISITES: Admission to the graduate	received for both courses
program in School of Sustainable Design Engineering	PREREQUISITES: Admission to the <u>MSc SDE</u>
HOURS OF CREDIT: 3	program graduate program in School of Sustainable
	Design Engineering and permission of the instructor
	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #58

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8450

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8450 Fluid Load on Energy Structures	SDE-8450 Fluid Load on Energy Structures
This course is an introduction to the loads applied on	This course is an introduction to the loads applied on
structures from wind, waves, and currents, and their	structures from wind, waves, and currents, and their
heightened relevance to structures designed for energy	heightened relevance to structures designed for energy
conversion. Phenomena to be discussed include lift	conversion. Phenomena to be discussed include lift and
and drag, boundary layers, vortex-induced vibrations,	drag, boundary layers, vortex-induced vibrations,
wakes, hydrostatic loading, and water waves. A	wakes, hydrostatic loading, and water waves. A
selection of engineering methods will be introduced	selection of engineering methods will be introduced and
and brought to bear on these topics, such as potential	brought to bear on these topics, such as potential flow
flow theory, blade-element theory, Airy wave theory	theory, blade-element theory, Airy wave theory and
and Morison's equation. Dimensional analysis will be	Morison's equation. Dimensional analysis will be
introduced to characterize flow problems. Design	introduced to characterize flow problems. Design
implications will be discussed for a selection of	implications will be discussed for a selection of relevant
relevant energy conversion structures such as aircraft	energy conversion structures such as aircraft wings,
wings, wind turbines, breakwaters, marine vessels, and	wind turbines, breakwaters, marine vessels, and
offshore energy platforms. Graduate-level project will	offshore energy platforms. Graduate-level project will
be required as defined in consultation with the	be required as defined in consultation with the
instructor.	instructor. Inis course is not eligible for the PhD-SDE
Cross-level listed with ENGN 4450; credit cannot be	program.
received for both courses.	Cross-level listed with ENGN 4450; credit cannot be
PREREQUISITES: Admission to the graduate	DEDEOLIGITES.
HOUDS OF CREDIT: 2	PREREQUISITES. Autilission to the <u>Misc SDE</u>
HOURS OF CREDIT: 5	program graduate program in school of sustainable
	HOUDS OF OF EDIT: 3
	HOURS OF CREDIT. S

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #59

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8470

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8470 Micro Grids	SDE-8470 Micro Grids
This course focuses on the concept, operation and	This course focuses on the concept, operation and
optimization of renewable-energy-based micro-grids.	optimization of renewable-energy-based micro-grids.
Concepts introduced and considered include	Concepts introduced and considered include renewable
renewable energy resources, integration technologies,	energy resources, integration technologies, grid-
grid-connected operation, islanded grid operation,	connected operation, islanded grid operation, energy
energy storage integration and the optimal	storage integration and the optimal dimensioning and
dimensioning and mixing of multiple energy sources	mixing of multiple energy sources where some are
where some are stochastic in nature and some are	stochastic in nature and some are dispatchable. Existing
dispatchable. Existing and future energy storage	and future energy storage technologies will be also be
technologies will be also be discussed. This course is	discussed. This course is based on energy flow analysis
based on energy flow analysis and makes extensive	and makes extensive use of software simulation tools.
use of software simulation tools. Students will develop	Students will develop a framework for performing
a framework for performing techno-economic	techno-economic assessments of micro-grid
assessments of micro-grid architectures and designs. A	architectures and designs. A strong background in
strong background in electrical power systems is not	electrical power systems is not necessarily required.
necessarily required. Graduate-level project will be	Graduate-level project will be required as defined in
required as defined in consultation with the instructor.	consultation with the instructor. This course is not
Cross-level listed with ENGN 4470; credit cannot be	eligible for the PhD-SDE program.
received for both courses.	Cross-level listed with ENGN 4470; credit cannot be
PREREQUISITES: Admission to the graduate	received for both courses.
program in School of Sustainable Design Engineering	PREREQUISTIES: Admission to the <u>MSc SDE</u>
HOURS OF CREDIT: 3	program graduate program in School of Sustainable
	Design Engineering and permission of the instructor
	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #60

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8510

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8510 Geoinformatics in Bioresource	SDE-8510 Geoinformatics in Bioresource
This course covers the theory and practice of	This course covers the theory and practice of
geoinformatics and their applications to problems in	geoinformatics and their applications to problems in
bioresources using digital mapping and spatial	bioresources using digital mapping and spatial analysis.
analysis. Hands on laboratories will provide students	Hands on laboratories will provide students with an
with an experience to collect georeferenced data using	experience to collect georeferenced data using
differential global positioning system, followed by	differential global positioning system, followed by
mapping and analysis in geographical information	mapping and analysis in geographical information
system. Topics include datums, map projections and	system. Topics include datums, map projections and
transformations, vector and raster data, geo-spatial	transformations, vector and raster data, geo-spatial
analysis, geo-statistics and interpolation techniques.	analysis, geo-statistics and interpolation techniques.
This course will also cover the fundamentals of remote	This course will also cover the fundamentals of remote
sensing, data collection with sensors, and spatial and	sensing, data collection with sensors, and spatial and
temporal aspects of the bio-resources attributes.	temporal aspects of the bio-resources attributes.
Graduate-level project will be required as defined in	Graduate-level project will be required as defined in
consultation with the instructor.	consultation with the instructor. <u>This course is not</u>
Cross-level listed with ENGN 4510; credit cannot be	eligible for the PhD-SDE program.
received for both courses.	Cross-level listed with ENGN 4510; credit cannot be
PREREQUISITES: Admission to the graduate	received for both courses.
program in School of Sustainable Design Engineering	PREREQUISITES: Admission to the <u>MSc SDE</u>
HOURS OF CREDIT: 3	program graduate program in School of Sustainable
	Design Engineering and permission of the instructor
	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #61

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8530

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8530 Fundamentals Agri Machinery	SDE-8530 Fundamentals Agri Machinery
This course highlights the fundamentals of	This course highlights the fundamentals of mechanized
mechanized agriculture machinery from soil	agriculture machinery from soil preparation, planting,
preparation, planting, and crop management to	and crop management to mechanical harvesting. The
mechanical harvesting. The machines and their unit	machines and their unit operation are analyzed with
operation are analyzed with respect functions, work	respect functions, work rates, material flow and power
rates, material flow and power usage. The machine	usage. The machine performance relating to work
performance relating to work quality and	quality and environmental effects will also be evaluated.
environmental effects will also be evaluated. The labs	The labs will emphasize on safety, basic maintenance,
will emphasize on safety, basic maintenance,	adjustment, calibrations of equipment and performance
adjustment, calibrations of equipment and	testing. This course also covers the variable rate
performance testing. This course also covers the	applicators for site-specific application of inputs, auto
variable rate applicators for site-specific application of	guidance system, data acquisition and management for
inputs, auto guidance system, data acquisition and	intelligent decision making for machines, and precision
management for intelligent decision making for	agriculture technologies. Graduate-level project will be
machines, and precision agriculture technologies.	required as defined in consultation with the instructor.
Graduate-level project will be required as defined in	This course is not eligible for the PhD-SDE program.
consultation with the instructor.	Cross-level listed with ENGN 4530; credit cannot be
Cross-level listed with ENGN 4530; credit cannot be	received for both courses.
received for both courses.	PREREQUISITES: Admission to the <u>MSc SDE</u>
PREREQUISITES: Admission to the graduate	program graduate program in School of Sustainable
program in School of Sustainable Design Engineering	Design Engineering and permission of the instructor
HOURS OF CREDIT: 3	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle.	February 15, 2023



Motion #62

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8550

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8550 Chemical/Biological Processes	SDE-8550 Chemical/Biological Processes
Processes used in the chemical and biological	Processes used in the chemical and biological
industries, which emphasize underlying physical,	industries, which emphasize underlying physical,
chemical, and biological principles, will be introduced.	chemical, and biological principles, will be introduced.
By carrying out the mass and energy balances,	By carrying out the mass and energy balances, students
students will conduct design and economic assessment	will conduct design and economic assessment of major
of major chemical and biological engineering	chemical and biological engineering processes.
processes. Introduction to modelling of chemical	Introduction to modelling of chemical processes will be
processes will be covered in this course. Graduate-	covered in this course. Graduate-level project will be
level project will be required as defined in consultation	required as defined in consultation with the instructor.
with the instructor.	This course is not eligible for the PhD-SDE program.
Cross-level listed with ENGN 4550; credit cannot be	Cross-level listed with ENGN 4550; credit cannot be
received for both courses.	received for both courses.
PREREQUISITES: Admission to the graduate	PREREQUISITES: Admission to the MSc SDE
program in School of Sustainable Design Engineering	program graduate program in School of Sustainable
HOURS OF CREDIT: 3	Design Engineering and permission of the instructor
	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #63

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: MScSDE

MOTION: To add "permission of the instructor" as a pre-requisite for SDE 8830

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
SDE-8830 Biomedical Signal Processing	SDE-8830 Biomedical Signal Processing
This course is an introduction to the basics of viewing,	This course is an introduction to the basics of viewing,
processing, and analyzing of biosignals, or signals	processing, and analyzing of biosignals, or signals
originating from living beings. Biosignals may be	originating from living beings. Biosignals may be
characterized as bioelectrical signals which can be	characterized as bioelectrical signals which can be
composed of both electrical and non-electrical parts.	composed of both electrical and non-electrical parts.
Topics include both linear and nonlinear systems,	Topics include both linear and nonlinear systems, signal
signal conditioning or filtering, improving signal	conditioning or filtering, improving signal quality
quality (signal-to-noise ratio) through averaging	(signal-to-noise ratio) through averaging techniques,
techniques, and signal representations in both the time	and signal representations in both the time and
and frequency domains. Graduate-level project will be	frequency domains. Graduate-level project will be
required as defined in consultation with the instructor.	required as defined in consultation with the instructor.
Cross-level listed with ENGN 4830; credit cannot be	This course is not eligible for the PhD-SDE program.
received for both courses.	Cross-level listed with ENGN 4830; credit cannot be
PREREQUISITES: Admission to the graduate	received for both courses.
program in School of Sustainable Design Engineering	PREREQUISITES: Admission to the MSc SDE
HOURS OF CREDIT: 3	program graduate program in School of Sustainable
	Design Engineering and permission of the instructor
	HOURS OF CREDIT: 3

Rationale for Change: The prerequisite is being revised to allow the instructor to ensure that the student has the appropriate prerequisite knowledge, and to confirm that this course is not eligible for the PhD-SDE program. It is only eligible for the MSc-SDE program.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



Motion #64

Revision is for a: Calendar Entry Change

Faculty/School/Department: Sustainable Design Engineering

Department/Program(s)/Academic Regulations: PhDSDE

<u>MOTION:</u> That the Academic Calendar entry for the Doctor of Philosophy in Sustainable Design Engineering be revised to identify which graduate-level courses are eligible for the PhD program.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
Faculty of Sustainable Design Engineering PhD Program	Faculty of Sustainable Design Engineering PhD Program
Overview: The UPEI Doctor of Philosophy in Sustainable Design Engineering (PhD-SDE) program aims to train graduates who have in-depth expertise in applying principles of sustainable design engineering to interdisciplinary and transdisciplinary research challenges. The PhD-SDE degree program will be research-intensive and require the students to complete their thesis work under the supervision of a Faculty of Sustainable Design Engineering (FSDE) faculty member.	Overview: The UPEI Doctor of Philosophy in Sustainable Design Engineering (PhD-SDE) program aims to train graduates who have in-depth expertise in applying principles of sustainable design engineering to interdisciplinary and transdisciplinary research challenges. The PhD-SDE degree program will be research-intensive and require the students to complete their thesis work under the supervision of a Faculty of Sustainable Design Engineering (FSDE) faculty member.
Course Requirements: Students will be required to take at least four (4) graduate-level courses (equivalent to at least 12 credits). At least two of the graduate-level courses must be from graduate-level courses offered in FSDE. All students must complete the SDE 8030 (Contemporary Topics in Sustainable Design Engineering) course unless they receive approval from their committee to take an alternate FSDE graduate-level course. The courses that students who transfer from MSc-SDE program at UPEI have completed during their MSc degree will count towards their PhD degree. Each student is expected to complete these courses within the first 24 months of the degree, before or in the concurrent semester of their PhD Comprehensive Exam.	Course Requirements: Students will be required to take at least four (4) graduate-level courses (equivalent to at least 12 credits) <u>in addition to SDE 8010 (PhD Thesis)</u> and SDE 8900 (Seminar). Normally these courses should be selected from the PhD-SDE Graduate level Courses listed below. Upon approval of the student's supervisory committee, up to two graduate-level courses may be taken from outside the FSDE. At least two of the graduate level courses must be from graduate level courses offered in FSDE. All students must complete the SDE 8030 (Contemporary Topics in Sustainable Design Engineering) course unless they receive approval from their <u>supervisory</u> committee to take an alternate FSDE graduate-level courses. In the case of The courses that students who transfer from <u>the</u> MSc-SDE program at UPEI, any PhD-SDE Graduate-level Courses have completed during their MSc degree will count towards their PhD degree. Each student is expected to complete these courses within the first 24 months of the degree, before or in the concurrent semester of their PhD Comprehensive Exam.
Thesis and Seminar: PhD-SDE students are required to register for SDE 8010 (PhD Thesis) throughout their degree program. PhD-SDE students are also required to register in the SDE 8900 (Seminar) course in the first four years of their degree program. SDE 8900 is a Pass/Fail course. Seminars are held on a weekly basis, and each	Thesis and Seminar: PhD-SDE students are required to register for SDE 8010 (PhD Thesis) throughout their degree program. PhD-SDE students are also required to register in the SDE 8900 (Seminar) course in the first four years of their degree program. SDE 8900 is a Pass/Fail



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
student must present their research work at least once a	course. Seminars are held on a weekly basis, and each
year and attend all the seminar sessions to receive Pass	student must present their research work at least once a
the SDE 8901 course, unless prior arrangement is made	year and attend all the seminar sessions to receive Pass
with the Supervisor and the Graduate Studies	the SDE 8900 8901 course unless prior arrangement is
Coordinator SDF 8010 will be evaluated as	made with the Supervisor and the Graduate Studies
satisfactory /unsatisfactory and the requirement for	Coordinator SDE 8010 will be evaluated as
receiving satisfactory in the SDE 2010 is explained under	satisfactory /upsatisfactory and the requirement for
the Doctoral Examination subsection	receiving satisfactory in the SDE 2010 is explained under
the Doctoral Examination subsection.	the Doctoral Examination subsection
	the Doctoral Examination subsection.
Duration of Program: A minimum period of three (3)	
years and maximum period of seven (7) years from the	Duration of Program: A minimum period of three (3)
date of first registration will be allocated for the	years and maximum period of seven (7) years from the
completion of the PhD-SDE program. The date of	date of first registration will be allocated for the
registration for students who transfer from MSc-SDE	completion of the PhD-SDE program. The date of
program at UPEI will be considered as the beginning of	registration for students who transfer from MSc-SDE
their MSc degree. Exceptional circumstances will be	program at UPEI will be considered as the beginning of
considered provided that they are supported by the	their MSc degree. Exceptional circumstances will be
student's supervisor(s) and properly communicated,	considered provided that they are supported by the
discussed and supported by the supervisory committee.	student's supervisor(s) and properly communicated,
In all cases, extensions beyond this maximum period	discussed and supported by the supervisory committee.
must be approved by the FSDE Graduate Studies	In all cases, extensions beyond this maximum period
Committee (GSC) and the Dean of the Faculty of	must be approved by the FSDE Graduate Studies
Graduate Studies.	Committee (GSC) and the Dean of the Faculty of
	Graduate Studies.
Mentorship and Supervision: In the first semester of the	
PhD program, each student will be assigned a	Mentorship and Supervision: In the first semester of the
supervisory committee which will consist of the student's	PhD program, each student will be assigned a
supervisor(s), three (3) members chosen from UPEI	supervisory committee which will consist of the student's
faculty. Up to two of these committee members can be	supervisor(s), three (3) members chosen from UPEI
UPEI adjunct faculty members with graduate faculty	faculty. Up to two of these committee members can be
status. The primary supervisor must be a faculty member	UPEI adjunct faculty members with graduate faculty
in the FSDE. Adjunct faculty with graduate faculty status	status. The primary supervisor must be a faculty member
may be faculty members from other universities or	in the FSDE. Adjunct faculty with graduate faculty status
professionals with doctorates at external organizations	may be faculty members from other universities or
with whom UPEI FSDE has research collaborations.	professionals with doctorates at external organizations
The FSDE GSC has provided a document, "Guidelines	with whom UPEI FSDE has research collaborations.
for Graduate Supervision", that is shared with	The FSDE GSC has provided a document, "Guidelines
supervisor(s), supervisory committees and graduate	for Graduate Supervision", that is shared with
students at orientation sessions and this document serves	supervisor(s), supervisory committees and graduate
as a reference to follow throughout a student's program.	students at orientation sessions and this document serves
	as a reference to follow throughout a student's program.
Doctoral Research: Independent research will be the	
major focus of the PhD-SDE degree. In order to avoid	Doctoral Research: Independent research will be the
undue extension of the time required to complete the	major focus of the PhD-SDE degree. In order to avoid
degree, the research topic must be identified early and	undue extension of the time required to complete the
approved by the supervisory committee. The research	degree, the research topic must be identified early and
should comprise an extensive body of original research in	approved by the supervisory committee. The research
the student's field, making a true contribution	should comprise an extensive body of original research in



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Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
exemplifying the student's depth of knowledge,	the student's field, making a true contribution
creativity, innovation and proven ability to make	exemplifying the student's depth of knowledge,
significant scientific research contributions. The PhD-	creativity, innovation and proven ability to make
SDE student must be able to articulate how their research	significant scientific research contributions. The PhD-
demonstrates aspects of engineering design and	SDE student must be able to articulate how their research
sustainability. The supervisor(s) will meet with the	demonstrates aspects of engineering design and
student regularly, and the supervisory committee will	sustainability. The supervisor(s) will meet with the
meet at least twice a year with the student to provide	student regularly, and the supervisory committee will
feedback on the student's progress.	meet at least twice a year with the student to provide
	feedback on the student's progress.
Candidacy Examination: Doctoral students must	
complete a candidacy examination within two (2) years	Candidacy Examination: Doctoral students must
of entering the PhD program. Students who register for	complete a candidacy examination within two (2) years
the MSc-SDE program at UPEI and then transfer into	of entering the PhD program. Students who register for
the PhD program must complete their candidacy exam	the MSc-SDE program at UPEI and then transfer into
within three (3) years of registering as a graduate student	the PhD program must complete their candidacy exam
at UPEI (including the MSc period before the transfer).	within three (3) years of registering as a graduate student
Before the exam, the student must present a thesis	at UPEI (including the MSc period before the transfer).
proposal abstract to the supervisory committee and	Before the exam, the student must present a thesis
obtain a recommendation that the student proceed with	proposal adstract to the supervisory committee and
the FSDE GSC of this decision, and will suggest the	the eral condidery over The supervisor(a) will inform
make up of the candidacy examination committee. The	the FSDE GSC of this decision and will suggest the
candidacy examination committee will consist of two (2)	make up of the candidacy examination committee. The
members of the supervisory committee and one (1) UPEL	candidacy examination committee will consist of two (2)
faculty member external to FSDE who has graduate	members of the supervisory committee and one (1) UPEI
faculty status. This external member of the candidacy	faculty member external to FSDE who has graduate
examination committee must have no conflict of interest	faculty status. This external member of the candidacy
with the student's supervisor(s). A designate from the	examination committee must have no conflict of interest
FSDE GSC will act as Chair of the examination. The	with the student's supervisor(s). A designate from the
student must submit a thesis proposal to the candidacy	FSDE GSC will act as Chair of the examination. The
examination committee at least two weeks before the	student must submit a thesis proposal to the candidacy
examination date. The thesis proposal should address not	examination committee at least two weeks before the
only the research plan, but also a knowledge and	examination date. The thesis proposal should address not
implementation plan that demonstrates the student's	only the research plan, but also a knowledge and
reflection and understanding of the research topic within	implementation plan that demonstrates the student's
the context of sustainable design. After the student's	reflection and understanding of the research topic within
presentation and question period, the examination	the context of sustainable design. After the student's
committee will make a judgment of satisfactory or	presentation and question period, the examination
unsatisfactory. A judgment of satisfactory will result in	committee will make a judgment of satisfactory or
indement is upsatisfactory, the student will be required to	the student being declared a DbD Condidate. If the
retake the even within 4 months. A second	indement is unsatisfactory, the student will be required to
unsatisfactory judgment will result in the student being	retake the exam within A months. A second
required to withdraw from the PhD program. If the	unsatisfactory judgment will result in the student being
student has not previously completed an MSc degree	required to withdraw from the PhD program If the
completed un mot degree,	student has not previously completed an MSc degree



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
they are then free to enter the MSc program and transfer research and academic coursework.	they are then free to enter the MSc program and transfer research and academic coursework.
Thesis Dissertation: Each candidate for the PhD-SDE is	Thesis Dissertation: Each candidate for the PhD-SDE is
required to submit a written thesis dissertation based	required to submit a written thesis dissertation based
upon the research conducted under supervision described	upon the research conducted under supervision described
above. The thesis dissertation must demonstrate the	above. The thesis dissertation must demonstrate the
candidate's capacity for original and independent work,	candidate's capacity for original and independent work,
and should include a critical evaluation of work which	and should include a critical evaluation of work which
has previously been done in the field of their research, as	has previously been done in the field of their research, as
well as a clear understanding of sustainable design. The	well as a clear understanding of sustainable design. The
thesis dissertation must highlight new conclusions which	thesis dissertation must highlight new conclusions which
are drawn from the candidate's own research work.	are drawn from the candidate's own research work.
Defence: The examination committee will be chaired by	Defence: The examination committee will be chaired by
a representative from the FSDE GSC and will consist of	a representative from the FSDE GSC and will consist of
the following: supervisor(s), two (2) members of the	the following: supervisor(s), two (2) members of the
supervisory committee, one (1) UPEI faculty member	supervisory committee, one (1) UPEI faculty member
external to FSDE who has graduate faculty status, and	external to FSDE who has graduate faculty status, and
one (1) external examiner from outside the University of	one (1) external examiner from outside the University of
Prince Edward Island. These examiners must have no	Prince Edward Island. These examiners must have no
conflict of interest with the supervisor(s). In order to	conflict of interest with the supervisor(s). In order to
proceed to defence, the candidate must submit a copy of	proceed to defence, the candidate must submit a copy of
their dissertation to the supervisory committee for review	their dissertation to the supervisory committee for review
and approval. Once approved by all members, the	and approval. Once approved by all members, the
supervisor(s) will then submit the PhD dissertation and a	supervisor(s) will then submit the PhD dissertation and a
list of potential external examiners to FSDE Graduate	list of potential external examiners to FSDE Graduate
Studies Coordinator. The FSDE Graduate Studies	Studies Coordinator. The FSDE Graduate Studies
Coordinator will then confirm the external examiners as	Coordinator will then confirm the external examiners as
well as the defence Chair, and notify the Deans of FSDE	well as the defence Chair, and notify the Deans of FSDE
and Faculty of Graduate Studies. A copy of the	and Faculty of Graduate Studies. A copy of the
dissertation will be shared with the examination	dissertation will be shared with the examination
committee and the defence date will be finalized.	committee and the defence date will be finalized.
Prior to the exam, the external examiners will submit	Prior to the exam, the external examiners will submit
written evaluations of the dissertation to the defence	written evaluations of the dissertation to the defence
Chair. This brief report will summarize their evaluation	Chair. This brief report will summarize their evaluation
of the thesis and normally include a discussion of the	of the thesis and normally include a discussion of the
scientific significance of the thesis with comments	scientific significance of the thesis with comments
regarding its theoretical framework, methodology,	regarding its theoretical framework, methodology,
findings, and interpretations. The report will consider its	findings, and interpretations. The report will consider its
academic standard and quality, reflecting that the	academic standard and quality, reflecting that the
candidate meets the minimum requirements to qualify as	candidate meets the minimum requirements to qualify as
a researcher, considering the candidate's formulation of	a researcher, considering the candidate's formulation of
research questions, logical and original approaches to	research questions, logical and original approaches to
testing stated hypotheses, and understanding of current	testing stated hypotheses, and understanding of current
methods and their limitations.	methods and their limitations.



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
The final oral examination of the PhD thesis will consist	The final oral examination of the PhD thesis will consist
of a public research seminar, followed by questions from	of a public research seminar, followed by questions from
the doctoral examination committee. The examination	the doctoral examination committee. The examination
will be public, but members of the audience may only	will be public, but members of the audience may only
question the candidate upon invitation of the Chair of the	question the candidate upon invitation of the Chair of the
committee. After the defence seminar and question	committee. After the defence seminar and question
period, the committee will make a judgment of	period, the committee will make a judgment of
satisfactory or unsatisfactory. The members of the	satisfactory or unsatisfactory. The members of the
examination committee report individually on both the	examination committee report individually on both the
defence and the dissertation. The candidate passes if at	defence and the dissertation. The candidate passes if at
least four (4) of the five (5) examiners votes positively.	least four (4) of the five (5) examiners votes positively.
An abstention is regarded as a negative vote	An abstention is regarded as a negative vote
Concurrently, the members sign the Certificate of	Concurrently, the members sign the Certificate of
Approval to be submitted with the approved dissertation	Approval to be submitted with the approved dissertation
in its final form (after implementation of revisions	in its final form (after implementation of revisions
requested by the committee at the defense) to the Dean of	requested by the committee at the defense) to the Dean of
ESDE. The report to the Deep will record the decision as	ESDE. The report to the Deep will record the decision as
"unacticfo story" or "esticfo story" If "unacticfo story"	"unacticfo story" on "acticfo story" If "unacticfo story"
unsatisfactory, or satisfactory. In unsatisfactory,	unsatisfactory, or satisfactory. In unsatisfactory,
the candidate will be given the opportunity of a second	the candidate will be given the opportunity of a second
attempt. A second "unsatisfactory" will terminate	attempt. A second "unsatisfactory" will terminate
candidacy at UPEI.	candidacy at UPE1.
Graduation: The candidate will receive the degree	Graduation: The candidate will receive the degree
certificate at UPEI convocation upon successful	certificate at UPEL convocation upon successful
completion of four (4) approved graduate courses (with	completion of four (4) approved graduate courses (with
minimum of 60% in each course) receiving Pass in SDE	minimum of 60% in each course) receiving Pass in SDE
8901 (Seminar) course and receiving Satisfactory in SDE	8901 (Seminar) course and receiving Satisfactory in SDE
8010 (PhD Thesis).	8010 (PhD Thesis).
List of Courses	List of Courses
1 571 - 10 - 1	
1. I nesis and Seminar	1. I nesis and Seminar
SDF 8010 PHD THESIS	SDF 8010 PHD THESIS
This is a research-oriented course in which students will	This is a research oriented course in which students will
conduct an extensive original research project	conduct an extensive original research project
conduct an extensive original research project,	conduct an extensive original research project,
culminating in the submission and defence of a thesis.	culminating in the submission and defence of a thesis.
Students must register in this course each semester to	Students must register in this course each semester to
maintain enrolment in the program. It embodies the	maintain enrolment in the program. It embodies the
research component of the PhD program.	research component of the PhD program.
PREREQUISITE: Admission to the graduate program in	PREREQUISITE: Admission to the graduate program in
Faculty of Sustainable Design Engineering	Faculty of Sustainable Design Engineering
HOURS OF CREDIT: 3	HOURS OF CREDIT: 3
SDE 8900 SEMINAR	SDF 8900 SEMINAR
In this course students attend seminars on current topics	In this course students attend seminars on current topics
in their research area of Sustainable Design Engineering	in their research area of Sustainable Design Engineering
and are expected to be seminar presenters. Techniques in	and are expected to be seminar presenters. Techniques in
and are expected to be seminar presenters. Techniques in	and are expected to be seminar presenters. rechniques in



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
preparing scientific communication (oral presentations and poster displays) are also covered. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3	preparing scientific communication (oral presentations and poster displays) are also covered. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3
1. Graduate-level Courses	2. FSDE-PhD-SDE Graduate-level Courses
SDE 8020 QUALITY CONTROL AND PROJECT MANAGEMENT This course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers. PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 8021 CONTEMPORARY TOPICS IN ENGINEERING MANAGEMENT This graduate-level course is an introduction to the most widely accepted engineering management practices in the workforce today. Through lectures, case studies, guest speakers, and facilitated discussion, students will develop	SDE 8020 QUALITY CONTROL AND PROJECT MANAGEMENT This course is an introduction to the most widely accepted project management practices in the workforce today. The student will learn the industrially accepted techniques associated with the management of time, cost, risk, and scope in order to achieve total project stakeholder satisfaction. The goal in this course is to prepare students with the most efficient and effective project management practices by applying these techniques to their graduate research work, and in so doing greatly increase their likelihood of managing successful projects during their careers. <u>Graduate-level</u> <u>project will be required as defined in consultation with the instructor.</u> <u>Cross-level listed with ENGN-4020; credit cannot be</u> <u>received for both courses</u> PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 8021 CONTEMPORARY TOPICS IN ENGINEERING MANAGEMENT
speakers, and facilitated discussion, students will develop managerial knowledge and skills and be exposed to a spectrum of corporate activities in the engineering environment. Topics presented in this course include strategic management of research and development, organizational management, knowledge, risk and IP management, new product development, globalization, ethics, project management in a technology-based organization. This course will focus on "management for future engineering leaders" and examine national guidelines, practice engineering team dynamics, apply quantitative quality and supply chain concepts, and present financial/accounting basics for engineers. PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3	This graduate-level course is an introduction to the most widely accepted engineering management practices in the workforce today. Through lectures, case studies, guest speakers, and facilitated discussion, students will develop managerial knowledge and skills and be exposed to a spectrum of corporate activities in the engineering environment. Topics presented in this course include strategic management of research and development, organizational management, knowledge, risk and IP management, new product development, globalization, ethics, project management in a technology-based organization. This course will focus on "management for future engineering leaders" and examine national guidelines, practice engineering team dynamics, apply quantitative quality and supply chain concepts, and present financial/accounting basics for engineers. Graduate-level project will be required as defined in



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usability studies. Students will also be introduced to

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	indicated clearly
SDE 8030 CONTEMPORARY TOPICS IN	consultation with the instructor.
SUSTAINABLE DESIGN ENGINEERING	Cross-level listed with ENGN-4021; credit cannot be
In this course students will be exposed to and examine	received for both courses.
the concepts underlying sustainable design engineering as	PREREQUISITES: Admission to the graduate program
they pertain to engineering practice and in particular	in Faculty of Sustainable Design Engineering
engineering research and the development of new	HOURS OF CREDIT: 3
technologies. Sustainable design engineering can be	
defined as an engineering design process which considers	SDE 8030 CONTEMPORARY TOPICS IN
not only the key performance indicators and functional	SUSTAINABLE DESIGN ENGINEERING
characteristics of the system being developed but also the	In this course students will be exposed to and examine
environmental, social and economic context and impacts	the concepts underlying sustainable design engineering as
of the system. Recent advances in sustainability research	they pertain to engineering practice and in particular
have focused on the complex interactions between these	engineering research and the development of new
areas, evolving from "green engineering" to a full	technologies. Sustainable design engineering can be
consideration of sustainability. In order to develop	defined as an engineering design process which considers
sustainable solutions, engineers and researchers must be	not only the key performance indicators and functional
able to critically evaluate their work in this context. To	characteristics of the system being developed but also the
this end, students will examine case studies and relevant	environmental, social and economic context and impacts
readings on such topics as sustainability indicators,	of the system. Recent advances in sustainability research
techno-economic and life cycle assessment, stakeholder	have focused on the complex interactions between these
engagement, real time technology assessment,	areas, evolving from "green engineering" to a full
engineering justice, and design for sustainability. While	consideration of sustainability. In order to develop
approaches for addressing the specific areas of	sustainable solutions, engineers and researchers must be
environmental, social and economic sustainability will be	able to critically evaluate their work in this context. To
covered, the focus of the course will be on the	this end, students will examine case studies and relevant
interactions between these areas. A key outcome of this	readings on such topics as sustainability indicators.
course will be a paper critically examining the student's	techno-economic and life cycle assessment stakeholder
research topic from the perspective of sustainable design	engagement, real time technology assessment.
engineering.	engineering justice, and design for sustainability. While
PREREQUISITES: Admission to the graduate program	approaches for addressing the specific areas of
in School of Sustainable Design Engineering	environmental social and economic sustainability will be
HOURS OF CREDIT: 3	covered the focus of the course will be on the
	interactions between these areas. A key outcome of this
SDE 8031 CONTEMPORARY TOPICS IN USER-	course will be a paper critically examining the student's
CENTRED ENGINEERING DESIGN	research topic from the perspective of sustainable design
User-centred design offers a powerful and systematic	engineering Graduate-level project will be required as
approach to understanding users and their needs and	defined in consultation with the instructor
delivering effective design solutions in many domains	Cross-level listed with ENGN-4030: credit cannot be
including engineering technology and health sciences	received for both courses
This course will introduce students to a variety of	PREREQUISITES: Admission to the graduate program
principles practices and research methods for designing	in Faculty of Sustainable Design Engineering
developing and evaluating products systems and	HOURS OF CREDIT' 3
solutions based on the users' needs, and context	
Students will learn human factors ergonomics cognitive	
and perceptual psychology principles for designing	SDE 8031 CONTEMPORARY TOPICS IN USER-
products, information displays and complex systems	LENIKED ENGINEEKING DESIGN
Students will be exposed to various subjective and	User-centrea design offers a powerful and systematic
objective metrics and methods for evaluations and	approach to understanding users and their needs and
objective metrics and metrious for evaluations and	delivering effective design solutions in many domains



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apply user-centred design for developing sustainable	including engineering, technology and health sciences.
products and systems.	This course will introduce students to a variety of
PREREQUISITES: Admission to the graduate program	principles, practices and research methods for designing,
in School of Sustainable Design Engineering	developing and evaluating products, systems and
HOURS OF CREDIT: 3	solutions based on the users' needs, and context. Students
	will learn human factors, ergonomics, cognitive and
SDE 8040 DESIGN OF EXDEDIMENTS	perceptual psychology principles for designing products.
This second for more on the design inculation and	information displays and complex systems Students will
This course focuses on the design, implementation, and	be exposed to various subjective and objective metrics
analysis of engineering, scientific, and computer-based	and methods for evaluations and usability studies
experiments. The course will examine the proper and	Students will also be introduced to apply user-centred
scientific approach to experimentation, modeling,	design for developing systemable products and systems
simulation, and analysis of data. Various designs are	Graduate level project will be required as defined in
discussed and their respective advantages and	<u>Gladuate-level project will be required as defined in</u>
disadvantages are noted. Factorial designs and sensitivity	Consultation with the instructor.
analysis will be studied in detail because of its relevance	Cross-level listed with ENGN-4031; credit cannot be
to various industries. Use of software for designing and	received for both courses.
analyzing experiments will also be used. For experiments	PREREQUISITES: Admission to the graduate program
that involved mainly physical quantities and natural	in Faculty of Sustainable Design Engineering
phenomena, techniques of dimensional analysis will also	HOURS OF CREDIT: 3
be introduced.	
PREREOUISITE: Admission to the graduate program in	SDE 8040 DESIGN OF EXPERIMENTS
Faculty of Sustainable Design Engineering	This course focuses on the design, implementation, and
HOURS OF CREDIT' 3	analysis of engineering scientific and computer-based
	experiments. The course will examine the proper and
	scientific approach to experimentation modeling
SDE 8050 ENGINEERING RESEARCH METHODS	simulation and analysis of data. Various designs are
& EXPERIMENT DESIGN	discussed and their respective advantages and
This course will introduce students to the elements of a	discussed and then respective advantages and
research project and will focus on quantitative research	analyzia will be studied in detail because of its relevance
methodologies. Students will practice the planning,	to sugrice in destruction. Lies of a frequence for designing and
implementation, analysis, and documentation for a	to various industries. Use of software for designing and
research project of their own design. Topics will include:	analyzing experiments will also be used. For experiments
performing a literature review, developing a hypothesis,	that involved mainly physical quantities and natural
creating a research plan, collecting data, analyzing the	phenomena, techniques of dimensional analysis will also
results, and compiling a research report. Students will use	be introduced. <u>Graduate-level project will be required as</u>
tools for quantitative data analysis and will explore	defined in consultation with the instructor.
reliability, validation, and verification concepts. Students	Cross-level listed with ENGN-4040; credit cannot be
will report findings in a technical presentation. The	received for both courses.
course encourages students to develop their research	PREREQUISITES: Admission to the graduate program
question and perform a sample experiment to apply	in Faculty of Sustainable Design Engineering
lessons learned to their main research tonic. Intellectual	HOURS OF CREDIT: 3
property rights and engineering ethics topics will be	
evplored	SDF 8050 FNGINFERING RESEARCH METHODS
PREPERIUSITES: Admission to the graduate program	& FYDERIMENT DESIGN
in Faculty of Sustainable Design Engineering	This course will introduce students to the elements of a
In Faculty of Sustainable Design Engineering	reasonable project and will former an acceptibility reasonable
HOURS OF CREDIT: 5	research project and will focus on quantitative research
	methodologies. Students will practice the planning,
SDE 8060 MODELING, CONTROL, AND DESIGN	implementation, analysis, and documentation for a
OF ENERGY SYSTEMS	research project of their own design. Topics will include:



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This course focuses on the understanding of the physical processes underlying the energy conversion process from wind and solar energy. Students will have an advanced knowledge of aerodynamics and structural dynamics, and they will understand the main strategies used for controlling these machines over their complete operating range. A specific goal of the course is to provide students with a multidisciplinary vision on the physics of energy systems, and an understanding of the methods used for their modeling and simulation. A particular emphasis will be placed on design, and on the effects of design	indicated clearly 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. <u>Graduate-level project will be required as</u>
choices on the cost of energy. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8061 OPTIMIZATION IN ENERGY	defined in consultation with the instructor. <u>Cross-level listed with ENGN-4050; credit cannot be</u> <u>received for both courses.</u> PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3
INFRASTRUCTURE The course aims to provide the knowledge about the application of various optimization methods in designing energy infrastructure. The course starts with the introduction to various optimization algorithms. Thereafter, the integration of energy modeling and simulation with optimization algorithms will be demonstrated. This course will also cover the optimization of distributed energy systems using single and multi-objective optimization methods. Several minor projects will be introduced to formulate the energy system optimization problem deciding design variables, objectives, and constraints. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3	SDE 8060 MODELING, CONTROL, AND DESIGN OF ENERGY SYSTEMS This course focuses on the understanding of the physical processes underlying the energy conversion process from wind and solar energy. Students will have an advanced knowledge of aerodynamics and structural dynamics, and they will understand the main strategies used for controlling these machines over their complete operating range. A specific goal of the course is to provide students with a multidisciplinary vision on the physics of energy systems, and an understanding of the methods used for their modeling and simulation. A particular emphasis will be placed on design, and on the effects of design choices on the cost of energy. <u>Graduate-level project will be required as defined in consultation with the instructor.</u> Cross-level listed with ENGN-4060: credit cannot be
SDE 8062 SOLAR BUILDINGS AND NEIGHBORHOODS The course is aimed to discuss the design considerations in designing solar buildings and neighborhoods. The course will start with the historical background of solar neighborhoods in modern and ancient history. Thereafter, passive solar design considerations in various small and large scale buildings will be discussed. Principles of solar design such as building site setting, building shape, building envelopes, active and passive based heating and cooling techniques will be introduced. The active electrical and thermal energy generation and storage strategies will be discussed. Energy modeling and simulation tools used for the assessment of solar access of	received for both courses. PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8061 OPTIMIZATION IN ENERGY INFRASTRUCTURE The course aims to provide the knowledge about the application of various optimization methods in designing energy infrastructure. The course starts with the introduction to various optimization algorithms. Thereafter, the integration of energy modeling and simulation with optimization algorithms will be demonstrated. This course will also cover the



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
various building will be demonstrated. Various case studies related to solar buildings and neighborhood will be taken for assignments. For the term project, incorporation of solar strategies for modifying existing Canadian buildings and neighborhoods will be assigned to groups of students. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3	optimization of distributed energy systems using single and multi-objective optimization methods. Several minor projects will be introduced to formulate the energy system optimization problem deciding design variables, objectives, and constraints. <u>Graduate-level project will</u> <u>be required as defined in consultation with the instructor.</u> <u>Cross-level listed with ENGN-4061; credit cannot be</u> <u>received for both courses.</u> PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3
SUSTAINABLE ENERGY This broadly applicable course discusses global energy usage and exposes students to current trends in local and global sustainable energy initiatives (i.e., energy	SDE 8062 SOLAR BUILDINGS AND NEIGHBORHOODS The course is aimed to discuss the design considerations
generation and storage) and applications. Present and future global energy consumption and related CO2 emissions are considered and discussed. Students will be exposed to and analyze case studies as well as develop and design their own globally relevant solution concepts.	in designing solar buildings and neighborhoods. The course will start with the historical background of solar neighborhoods in modern and ancient history. Thereafter, passive solar design considerations in various small and large scale buildings will be discussed.
Students will ultimately gain an enhanced, quantitative appreciation for the challenges and opportunities related to global energy system decarbonization. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3	Principles of solar design such as building site setting, building shape, building envelopes, active and passive based heating and cooling techniques will be introduced. The active electrical and thermal energy generation and storage strategies will be discussed. Energy modeling and simulation tools used for the assessment of solar access of
SDE 8070 NOVEL ENGINEERED MATERIALS FOR SUSTAINABLE APPLICATIONS This course is a graduate-level examination of the properties and processing of novel, engineered materials for sustainable applications. Fundamental concepts of solid-state diffusion, phase transformations, amorphous- to-crystalline kinetics, rapid solidification – for nuclear energy, more electric generation, renewable energy	studies related to solar buildings and neighborhood will be taken for assignments. For the term project, incorporation of solar strategies for modifying existing Canadian buildings and neighborhoods will be assigned to groups of students. <u>Graduate-level project will be</u> <u>required as defined in consultation with the instructor.</u> <u>Cross-level listed with ENGN-4062; credit cannot be</u> <u>received for both courses.</u>
systems, additive manufacturing, modeling and simulation of the nanoscale will be discussed. As well, the relationships between the performance of electrical, optical, and magnetic devices and the microstructural	PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3
and defect characteristics of the materials from which they are constructed will be explored. Focusing on functional materials for emerging technologies and emphasizing a device-design approach, applications will center around current research in the Faculty of Sustainable Design Engineering. PREREQUISITE: Admission to the graduate program in	SDE 8063 CONTEMPORARY TOPICS IN SUSTAINABLE ENERGY This broadly applicable course discusses global energy usage and exposes students to current trends in local and global sustainable energy initiatives (i.e., energy generation and storage) and applications. Present and future global energy consumption and related CO2 emissions are considered and discussed. Students will be exposed to and analyze case studies as well as develop



CALENDAR & CURRICULUM CHANGE

Reproduction of Current Calendar Entry Proposed revision with changes underlined and deletions indicated clearly Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 and design their own globally relevant solution concepts. Students will ultimately gain an enhanced, quantitative appreciation for the challenges and opportunities related to global energy system decarbonization. Graduate-level projects will be required as defined in consultation with main focus will be covered to a certain degree but the main focus will be covered to a certain degree but the main focus will be on image segmentation, feature enhancement, restoration, filtering, smoothing, etc. These topics will be covered to a certain degree but the main focus will also be addressed. SDE 8070 NOVEL ENGINEERED MATERIALS FOR SUSTAINABLE APPLICATIONS This course for Real-time applications will also be addressed. SDE 8081 MODERN MECHATRONIC SYSTEMS This course explores current topics of modern mechatronics, from the application of complex systems through dimensionality reduction, machine learning, and dynamical systems modelling to innovative methods and algorithms such as augmented reality, medical image research. The findings and results of this project will be presented in the format of a manuscript that incorporate the research. The findings and results of this project will be presented in the format of a manuscript that incorporate the research. The findings and results of this project will be presented in the format of a manuscript that incorporate the research. The findings and results of this project will be presented in the format of a manuscript that incorporate the research. The findings and results of this project will be presented in the format of a manuscript that incorporate the research. The findings and results of this project will be presented in the format of a manuscript that incor		
Faculty of Sustainable Design Engineering and design their own globally relevant solution concepts. SDE 8080 INDUSTRIAL MACHINE VISION and design their own globally relevant solution concepts. SDE 8080 INDUSTRIAL MACHINE VISION and design their own globally relevant solution concepts. SDE 8080 INDUSTRIAL MACHINE VISION appreciation for the challenges and opportunities related to the officient software. recognition, mechanical metrology, and robotics. Image processing courses typically focus for image explications full be covered to a certain degree but the main focus will be on image segmentation, feature extraction, morphological operators, recognition and photogrammetry. Issues related to the efficient software implications will also be addressed. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering SDE 8081 MODERN MECHATRONIC SYSTEMS SDE 8081 MODERN MECHATRONIC SYSTEMS SDE 8081 MODERN MECHATRONIC SYSTEMS This course explores current topics of modern mechatronic, from the applications of existing theory, and understand the sesence of mechatronic systems. To this end, students will develop and implement practical hand-sont with-hardware applications of the sonte of existing theory, and understand the sesence of mechatronic styler. Above all, this course is designed to entice students to the seraduce from which hardware applications of the control system analysia and automated mapping of environments. How and understand the serece of mechatronic styler. Above all, this course is explanable Design Engineering HOURS OF CREDIT: 3 </td <td>Reproduction of Current Calendar Entry</td> <td>Proposed revision with changes underlined and deletions</td>	Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
 Pacuty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8080 INDUSTRIAL MACHINE VISION This course focuses on computer vision with an emphasis on techniques for automated inspection, object recognition, mechanical metrology, and robotics. Image processing courses typically focus for image enhancement, restoration, filtering, smoothing, etc. These topics will be covered to a certain degree but the main focus will be to owned to a certain degree but the main focus will be to owned to a certain degree but the main focus will be to a mage segmentation, feature extraction, morphological operators, recognition and photogrammetry. Issues related to the efficient software implementation of these techniques for readiate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8081 MODERN MECHATRONIC SYSTEMS This course explores current topics of modem mechatronics, from the application of compiex systems infough dimensionality reduction, machine learning, an dynamical systems modelling to innovative methods and digorithms such as augmented reality, medical image analysis, and automated mapping of environments. Above all, this course chained reality, medical inage analysis, and automated mapping of environments. Above all, this course is designed to entice students to think, ask questions of this project will be presented in the format of a manuscript that incorporate the research methodology, their final product, and critical thinking over the mechatronic topic. PREREQUISTE: Admission to the graduate program if aculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8100 BIOFUEL AND BIOMASS TECHNOLOGY This course focuses on advanced concepts in understanding biofuels and bioenergy systems, renewable SDE 8100 BIOFUEL AND BIOMASS SDE 8100 BIOFUEL AND BIOMASS SDE 8100 BIOFUEL AND BIOMASS 		
HOURS OF CREDIT: 3 Students will utimately gain an chanced, quantitative appreciation for the challenges and opportunities related to global energy system decarbonization. <u>Graduate-level</u> processing courses typically focus for image enhancement, restoration, filtering, smoothing, etc. These topics will be on image segmentation, fature extraction, morphological operators, recognition and photogrammetry. Issues related to the efficient software implications will also be addressed. SDE 8081 MODERN MECHATRONIC SYSTEMS This course emphasizes how the abstract concepts of control theory and advanced design tools are used pragmatically in engineering HOURS OF CREDIT: 3 SDE 8081 MODERN MECHATRONIC SYSTEMS This course emphasizes how the abstract concepts of control theory and advanced design tools are used pragmatically in engineering HOURS OF CREDIT: 3 SDE 8081 MODERN MECHATRONIC SYSTEMS This course emphasizes how the abstract concepts of control theory and advanced design tools are used pragmatically in engineering practice in the mechatronics field. This course is edgraduate is produced implications for complex systems through dimensionality reduction, machine learning, and dynamical systems modelling to innovative methods and digorithms such as augmented reality, medical image analysis, and automated mapping of environments. Above all, this course is designed to entice students to thick, ask questions of existing theory, and understand the essence of mechatronic topic. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8000 BIOFUEL AND BIOMASS ETECHNOLOGY This course focues on advanced concepts in understanding biofuels and bioenergy systems, renewable entra round current research methodology, their final product, and entical thinking over the mechatronic topic. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8000 BIOFUEL AND BIOMASS ETECHNO	Faculty of Sustainable Design Engineering	and design their own globally relevant solution concepts.
SDE 8080 INDUSTRIAL MACHINE VISION This course focuses on computer vision with an emphasis on techniques for automated inspection, object recognition, mechanical metrology, and robotics. Intage processing courses typically focus for image enhancement, restoration, filtering, smoothing, etc. These topics will be covered to a certain degree but the main focus will be on image segmentation, fature extraction, morphological operators, recognition and photogrammetry. Issues related to the efficient software implementation of these techniques for real-time applications will also be addressed. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8081 MODERN MECHATRONIC SYSTEMS This course emphasizes how the abstract concepts of foottor theory and advanced design tools are used pragmatically in engineering practice in the mechatronics field. This course explores current topics of modern mechatronics, from the application of complex systems through dimensionality reduction, machine learning, and algorithms such as augmented reality, medical image analysis, and automated mapping of environments. Above all, this course is designed to entice students to thick assue coof mechatronics systems. To this end, students will develop and implement practical, hands-ori- min faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8100 BIOFUEL AND BIOMASS ETECHNOLOGY This course focuses on advanced concepts in understanding biofuels and bioenergy systems, recognition, and structured as defined in consultation will her insaculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8100 BIOFUEL AND BIOMASS ETECHNOLOGY	HOURS OF CREDIT: 3	Students will ultimately gain an enhanced, quantitative
SDE 8080 INDUSTRIAL MACHINE VISION This course for automated inspection, object recognition, mechanical metrology, and robotics. Image processing courses typically focus for image enhancement, restoration, filtering, smoothing, etc. These topics will be covered to a certain degree but the main focus will be on image segmentation, feature extraction, morphological operators, recognition and photogrammetry. Issues related to the efficient software implementation of these techniques for real-time applications will also be addressed. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 DE 8081 MODERN MECHATRONIC SYSTEMS This course emphasizes how the abstrate concepts of control theory and advanced design tools are used pragmatically in engineering practice in the mechatronics field. This course explores current topics of modern mechatronics, from the application of complex systems through dimensionality reduction, machine learning, and dynamical systems modelling to innovative methods and algorithms such as augmented reality, medical image analysis, and automated mapping of environments. Above all, this course is designed to entice students to think, ask questions of the sorthy system sitt the research methodology, their final product, and erestined in the format of a manuscript that incorporate the research methodology, their final product, and eretical think gover the mechatronic topic. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8100 BIOFUEL AND BIOMASS TECHNOLOGY This course focuess on advanced concepts in understanding biofuels and bioenergy systems, recognition and bioenergy systems, recognition, machinale concepts of nechatronice, from the application of the project will be eretained in the format of a ananuscript that incorporate the research methodology, their final product, and eretained will be on image segmentation, feature erustacti		appreciation for the challenges and opportunities related
This course focuses on computer vision with an emphasis on techniques for automated inspection, object recognition, mechanical metrology, and robotics. Integent processing courses typically focus for image enhancement, restoration, fletting, smoothing, etc. These topics will be covered to a certain degree but the main focus will be covered to a certain degree but the main focus will be covered to a certain degree but the main focus will be covered to a certain degree but the main focus will be on image segmentation, feature extraction, morphological operators, recognition and photogrammetty. Issues related to the efficient software applications will also be addressed. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8081 MODERN MECHATRONIC SYSTEMS This course emphasizes how the abstract concepts of foottor theory and advanced design topic are used pragmatically in engineering practice in the mechatronics field. This course explores current topics of modern mechatronics, from the application of complex systems indugation of the anterials from which the values will be course to discussed. As well, the relationships between the performance of electrical, optical, and magnetic devices and the materials from which they are constructed will be explored. Focusing on functional materials for emerging technologies and algorithms such as augmented reality, medical image analysis, and automated mapping of environments. Above all, this course is designed to entice students to think, ask questions of existing theory, and understand the essence of mecharronic spic. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8100 BIOFUEL AND BIOMASS TECHNOLOGY This course focuses on advanced concepts in understanding biofuels and bioenergy systems, recognition, mechanical metrology, and robotics. Image enhancement, restoration, filtering, smoothing, etc.	SDE 8080 INDUSTRIAL MACHINE VISION	to global energy system decarbonization. <u>Graduate-level</u>
 This course consect spicality of course is a graduate level examination of the graduate program in faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 DE 8081 MODERN MECHATRONIC SYSTEMS SDE 8081 MODERN MECHATRONIC SYSTEMS SDE 8081 MODERN MECHATRONIC SYSTEMS Advanced design tools are used pragmatically in engineering practice in the mechatronics, from the application of complex systems, additive manufacturing, modeling and simulation of the articlas for energing technologies and automated mapping of environments. Above all, this course is designed to entice students to the sesence of mechatronic systems. To this end, students will develop and implement practical, hands-on with-hardware applications of the graduate program in faculty of Sustainable Design Engineering the existing theory, and understand the essence of mechatronics profers in approach, applications will evelop and implement practical, hands-on with-hardware applications of the graduate program in faculty of Sustainable Design Engineering the reactive of both courses. PREREQUISTIE: Admission to the graduate program in faculty of Sustainable Design Engineering that incorporate the research methodology, their final product, and cricial thing over the mechatronic topic. PREREQUISTIE: Admission to the graduate program in faculty of Sustainable Design Engineering thourses or existing theory. PDE 8100 BIOFUEL AND BIOMASS PDE	This course focuses on computer vision with an emphasis	project will be required as defined in consultation with
 Construction of the set optical portage segmentation, fature extraction, morphological operators, recognition and photogrammetry. Issues related to the efficient software implementation of these techniques for real-time applications will also be addressed. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8081 MODERN MECHATRONIC SYSTEMS This course emphasizes how the abstract concepts of control theory and advanced design tools are used pragmatically in engineering practice in the mechatronic field. This course explores current topics of modern mechatronics, from the application of complex systems, additive manufactic device-design applications. Fundamental concepts of suitainable Design Engineering in the relationships between the performance of electrical, optical, and magnetic device-design applications. Fundamental concepts of suitainable Design Engineering, more lecteric generation, renewable energy systems, additive manufacturing, modeling and simulation of the nanoscale will be explored. Focusing on functional materials for emerging technologies and algorithms such as augmented reality, medical image analysis, and automated mapping of environments. Above all, this course is designed to entice students to think, ask questions of the control system analysis and design principles that are the subject mature of their research. The findings and results of this project will be required as defined in consultation will the instructor. SDE 8100 BIOFUEL AND BIOMASS TECHNOLOGY SDE 8100 BIOFUEL AND BIOMASS TECHNOLOGY	an techniques for sutemated inspection, shipet	the instructor
 Tecognition, mechanical metrology, and robotics. Image processing courses typically focus for image enhancement, restoration, filtering, smoothing, etc. These topics will be covered to a certain degree but the main focus will be on image segmentation, feature extraction, morphological operators, recognition and photogrammetry. Issues related to the efficient software implementation of these techniques for real-time applications will also be addressed. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering protecting practice in the mechatronics, from the application of complex systems, additive manufacturing, modeling and dynamical systems modelling to innovative methods and algorithms such as augmented reality, medical image analysis, and automated mapping of environments. Above all, this course is designed to entice students to with-hardware applications of the control system analysis, and design principles that are the subject matter of their research methodology, their final product, and critical think, ask questins of a manuscript that incorporate the research methodology, their final product, and critical think gover the mechatronic topic. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering. Graduate-level project with hardware applications of the control system analysis, and design principles that are the subject matter of their presented in the format of a manuscript that incorporate the research methodology, their final product, and critical thinking over the mechatronic topic. PREREQUISITE: Admission to the graduate program in Faculty of Sustainable Design Engineering. Graduate-level project with hardware applications of the control system analysis on the graduate program in Faculty of Sustainable Design Engineering. Graduate-level project with hardware applications of the control system analysis on the graduate program in Faculty of Sustainable Design Engineering. Graduat	on techniques for automated inspection, object	Cross-level listed with FNGN-4063: credit cannot be
 PREREQUISITES: Admission to the graduate program in Faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8081 MODERN MECHATRONIC SYSTEMS This course emphasizes how the abstract concepts of control theory and advanced design tools are used pragmatically in engineering practice in the mechatronic field. This course explores current topics of modern through dimensionality reduction, machine learning, and defect characteristics of the materials for emerging advice-design approach, applications will action of existing theory, and understand the essence of mechatronics systems. To this end, students will develop and implement practical, hands-on-with-hardware applications of the control system analysis and design principles that are the subject matter of their research. The findings and results of this project will be required as defined in consultation with the instructor. SDE 8100 BIOFUEL AND BIOMASS TECHNOLOGY 	recognition, mechanical metrology, and robotics. Image	received for both courses
 Enhancement, restoration, filtering, smoothing, etc. These topics will be covered to a certain degree but the main focus will be on image segmentation, feature extraction, morphological operators, recognition and photogrammetry. Issues related to the efficient software implementation of these techniques for real-time applications will also be addressed. PREREQUISITE: Admission to the graduate program in faculty of Sustainable Design Engineering HOURS OF CREDIT: 3 SDE 8100 BIOFUEL AND BIOMASS SDE 8100 BIOFU	processing courses typically focus for image	DEEEOUUSITES: Admission to the graduate program
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SDE 8100 BIOFUEL AND BIOMASS TECHNOLOGYenhancement, restoration, filtering, smoothing, etc. These topics will be covered to a certain degree but the main focus will be on image segmentation, feature extraction, morphological operators, recognition and		processing courses typically focus for image
TECHNOLOGY This course focuses on advanced concepts in understanding biofuels and bioenergy systems, renewable	SDE 8100 BIOFUEL AND BIOMASS	enhancement, restoration, filtering, smoothing, etc.
This course focuses on advanced concepts in understanding biofuels and bioenergy systems, renewable main focus will be on image segmentation, feature extraction, morphological operators, recognition and	TECHNOLOGY	These topics will be covered to a certain degree but the
understanding biofuels and bioenergy systems, renewable extraction, morphological operators, recognition and	This course focuses on advanced concepts in	main focus will be on image segmentation, feature
understanding bioracis and biochergy systems, renewable , i bour , i bour , bou	understanding hiofuels and hioenergy systems renewable	extraction, morphological operators, recognition and
feedstocks, their production, availability and attributes photogrammetry. Issues related to the efficient software	feedstocks, their production, availability and attributes	photogrammetry. Issues related to the efficient software



CALENDAR & CURRICULUM CHANGE

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
for biofuel/bioenergy production, types of biomass	implementation of these techniques for real-time
derived fuels and energy, thermochemical conversion of	applications will also be addressed. <u>Graduate-level</u>
biomass to heat, power and fuel, biochemical conversion	project will be required as defined in consultation with
of biomass to fuel environmental aspects of biofuel	the instructor.
production, economics and life-cycle analysis of biofuel,	Cross-level listed with ENGN-4080; credit cannot be
and value adding of biofuel residues. Students will	received for both courses.
analyze, as well as prepare, case studies on biofuel	PREREQUISITES: Admission to the graduate program
production.	in Faculty of Sustainable Design Engineering
PREREQUISITE: Admission to the graduate program in	HOURS OF CREDIT: 3
Faculty of Sustainable Design Engineering	
HOURS OF CREDIT: 3	SDE 8081 MODERN MECHATRONIC SYSTEMS
	This course emphasizes how the abstract concepts of
SDE 8101 ADVANCES IN BIORESOURCE	control theory and advanced design tools are used
ENGINEERING	pragmatically in engineering practice in the mechatronics
The quest for food security, renewable energy, climate	field. This course explores current topics of modern
change and demand for sustainable fuels has increased	mechatronics, from the application of complex systems
focus on biomass conversion and technological	through dimensionality reduction, machine learning, and
interventions to cope with these challenges. This course	dynamical systems modelling to innovative methods and
covers advanced topics in bioresource engineering to	algorithms such as augmented reality, medical image
acquire an understanding of sustainability challenges in	analysis, and automated mapping of environments.
bioresource sector and propose optimal climate smart	Above all, this course is designed to entice students to
solutions by implementing technologies and processes.	think, ask questions of existing theory, and understand
The course is delivered in three complementary modules:	the essence of mechatronics systems. To this end,
i) deep learning and artificial intelligence for sustainable	students will develop and implement practical, hands-on-
food production, ii) biofuels and biomaterials, and iii) the	with-hardware applications of the control system analysis
design of biomass conversion reactors.	and design principles that are the subject matter of their
PREREQUISITE: Admission to the graduate program in	research. The findings and results of this project will be
Faculty of Sustainable Design Engineering	presented in the format of a manuscript that incorporates
HOURS OF CREDIT: 3	the research methodology, their final product, and
	critical thinking over the mechatronic topic. Graduate-
Cross-Level Listed Graduate Courses	level project will be required as defined in consultation
	with the instructor.
SDF 8230 ΤΕCHNOLOGY ΜΑΝΔGEMENT &	<u>Cross-level listed with ENGN-4081; credit cannot be</u>
ENTREPRENEUR	received for both courses.
This course provides an overview on how to start and	PREREQUISTIES: Admission to the graduate program
sustain a technology-oriented company. Topics discussed	In Faculty of Sustainable Design Engineering
will include the role of technology in society, intellectual	HOURS OF CREDIT: 5
property, patents, business plans, financial planning,	
sources of capital, business structure, liability, tax	SDE 8100 BIOFUEL AND BIOMASS
implications, sales, marketing, operational and human	TECHNOLOGY
resource management. This course will be taught using	I nis course focuses on advanced concepts in
problem-based and experiential learning strategies with	understanding bioruels and bioenergy systems, renewable
involvement from real life entrepreneurs as motivators	recustocks, their production, availability and attributes
and facilitators. Graduate-level project will be defined.	for bioluci/ bioenergy production, types of biomass
Cross-level listed with ENGN 3430; credit cannot be	biomass to heat nower and fuel biochemical conversion
received for both courses.	of high as to fiel environmental aspects of higher
PREREQUISITE: Admission to the graduate program in	production economics and life cycle analysis of biofuel
	production, continues and inc-cycle analysis of Dioluci,



CALENDAR & CURRICULUM CHANGE

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
Faculty of Sustainable Design Engineering	and value adding of biofuel residues. Students will
HOURS OF CREDIT: 3	analyze, as well as prepare, case studies on biofuel
	production. Graduate-level project will be required as
	defined in consultation with the instructor.
SDE 8510 ADVANCED FABRICATION	Cross-level listed with FNGN-4100: credit cannot be
TECHNIQUES AND COMPUTER-INTEGRATED	received for both courses
MANUFACTURING	DEPENIUSITES: Admission to the graduate program
This course concentrates on manufacturing knowledge	r REREQUISTIES. Autilission to the graduate program
with a focus on advanced fabrication techniques (AFT)	In Faculty of Sustainable Design Engineering
and Computer Integrated Manufacturing (CIM).	HOURS OF CREDIT: 5
Students will expand their knowledge of traditional	
processes including CAD/CAM, forming, welding,	SDE 8101 ADVANCES IN BIORESOURCE
milling, etc. leading into innovative advanced fabrication	ENGINEERING
techniques in additive and precision manufacturing, next	The quest for food security, renewable energy, climate
generation electronics, robotics and smart automation	change and demand for sustainable fuels has increased
(CIM), and sustainable and green manufacturing	focus on biomass conversion and technological
modeling and simulation in the manufacturing process	interventions to cope with these challenges. This course
developed through lectures and labs. Integration of CIM	covers advanced topics in bioresource engineering to
into supply chain design and management is emphasized	acquire an understanding of sustainability challenges in
based on synergistic application of mechatronics	bioresource sector and propose optimal climate smart
approach and philosophy. Graduate-level project will be	solutions by implementing technologies and processes.
required as defined in consultation with the instructor	The course is delivered in three complementary modules.
Cross-level listed with ENGN 4310: credit cannot be	i) deep learning and artificial intelligence for sustainable
received for both courses	food production ii) biofiles and biomaterials and iii) the
PREREQUISITE: Admission to the graduate program in	design of biomass conversion reactors. Graduate-level
Faculty of Sustainable Design Engineering	project will be required as defined in consultation with
HOURS OF CREDIT [•] 3	the instructor
	Cross-level listed with ENGN-4101: credit cannot be
	received for both courses
SDE 8320 CONTROL SYSTEM DESIGN	PRERECULISITES: Admission to the graduate program
I his course will provide students with an overview of	in Faculty of Sustainable Design Engineering
system modelling and control methodologies of	HOURS OF CREDIT: 3
single/multiple input/output systems, e.g., energy	HOURS OF CREDIT. 5
transport control, reactor control, heat exchanger control,	
power production, and mechatronic systems. Students	 Cross-Level Listed Graduate Courses
will learn classical control methods e.g., feedforward,	
feedbacks, cascade, decoupling to modern control	SDE 8230 TECHNOLOGY MANAGEMENT &
methods, LQR, predictive control, optimal and robust	ENTREPRENEUR
control. Students will be equipped with knowledge and	This course provides an overview on how to start and
skills for analyzing stability, controllability and	sustain a technology-oriented company. Topics discussed
observability of state-space representation modelled	will include the role of technology in society, intellectual
systems. Graduate-level project will be required as	property, patents, business plans, financial planning.
defined in consultation with the instructor.	sources of capital, business structure. liability, tax
Cross-level listed with ENGN 4320; credit cannot be	implications, sales, marketing, operational and human
received for both courses.	resource management. This course will be taught using
PREREQUISITE: Admission to the graduate program in	problem based and experiential learning strategies with
Faculty of Sustainable Design Engineering	involvement from real life entrepreneurs as motivators
HOURS OF CREDIT: 3	and facilitators. Graduate level project will be defined.
	Cross level listed with ENGN 3430; credit cannot be
	received for both courses.



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
SDE 8330 INNOVATIONS IN BIOMEDICAL	PREREOUISITE: Admission to the graduate program in
FNGINFFRING	Eagulty of Sustainable Design Engineering
This source provides an everyieve of the subdissimilines	LIQUES OF CREDIT, 2
This course provides an overview of the subdisciplines	HUUKA UF CKEDIT: 3
that are included in field of biomedical engineering.	
Through a hands-on approach, the course introduces	SDE 8310 ADVANCED FABRICATION
topics including biotransport, bioelectrical phenomena,	TECHNIQUES AND COMPLITER INTEGRATED
bioinstrumentation, biomechanics, diagnostic devices.	
medical imaging rehabilitation biomaterials tissue	
anging pigespage lab on a shin and migro and	This course concentrates on manufacturing knowledge
engineering, biosensors, lab-on-a-chip and micro- and	with a focus on advanced fabrication techniques (AFT)
nano-technology. The course also introduces the basics	and Computer Integrated Manufacturing (CIM).
of medical device regulations and ethics of medical	Students will expand their knowledge of traditional
instrumentation. Students will gain an appreciation for	processes including CAD/CAM forming welding
the collaborative, interdisciplinary nature of engineering	milling etc. leading into innovative advanced fabrication
in medicine and its potential impact on society	the share set in a difference of a maximum account of the start of the
Cross-level listed with ENGN 4330: credit cannot be	techniques in additive and precision manufacturing, next
received for both courses	generation electronics, robotics and smart automation
DEDEOLUCITE A 1	(CIM), and sustainable and green manufacturing
PREREQUISITE: Admission to the graduate program in	modeling and simulation in the manufacturing process
Faculty of Sustainable Design Engineering	developed through lectures and labs. Integration of CIM
HOURS OF CREDIT: 3	into supply chain design and management is emphasized
	based on synergistic application of mechatronics
SDE 8350 ADVANCED ROBOTIC DYNAMICS AND	approach and philosophy. Graduate-level project will be
CONTROL	required as defined in consultation with the instructor.
This course advances the fundamentals of robotics	Cross level listed with ENGN 4310; credit cannot be
through exposure to in-depth knowledge and	received for both courses.
understanding of kinematics, dynamics, control and	PREREOUISITE: Admission to the graduate program in
trajectory with applications to autonomous vehicles	Faculty of Sustainable Design Engineering
automated manufacturing and processing and mobile	HOURS OF CREDIT: 3
relation A reas of interest in sluder position	HOURD OF CREDIT. 5
Tobolics. Areas of interest include, position	
transformation and control, rigid body motion, kinematic	SDE 8320 CONTROL SYSTEM DESIGN
control, compliance and force control. Graduate-level	This course will provide students with an overview of
project will be required as defined in consultation with	system modelling and control methodologies of
the instructor.	single/multiple input/output systems e.g. energy
Cross-level listed with ENGN 4350; credit cannot be	transport control reactor control heat exchanger control
received for both courses.	nower production and machatronia systems. Students
PREREQUISITE: Admission to the graduate program in	power production, and mechanismic systems. Students
Faculty of Sustainable Design Engineering	will learn classical control methods e.g., leedlorward,
HOUDS OF OPEDITY 2	feedbacks, cascade, decoupling to modern control
HOURS OF CREDIT. 5	methods, LQR, predictive control, optimal and robust
	control. Students will be equipped with knowledge and
SDE 8370 FLUID POWER CONTROL	skills for analyzing stability, controllability and
This course covers the analysis and design of basic	observability of state space representation modelled
hydraulic and pneumatic circuits and systems. Topics	systems. Graduate level project will be required as
include a review of the fundamentals of fluid mechanics	defined in consultation with the instructor.
including flow through valves fittings and nine	Cross level listed with FNGN 4320 credit cannot be
alossification of hydrostatic numes and motors: control	received for both courses
values hydroxilic commulatery since of the stice of	DEDEOLUCITE, Administration to the sure denote reasons in
valves, hydraulic accumulators; sizing of practical	FREREQUISITE: Admission to the graduate program in
hydraulic circuits; thermal and energy	Faculty of Sustainable Design Engineering
considerations; electrohydraulic control and modeling of	HOURS OF CREDIT: 3
hydraulic control systems. The latter part of the course	



Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
focuses on pneumatic systems including pneumatic	SDE 8330 INNOVATIONS IN BIOMEDICAL
technology. The application of Programmable Logic	This course provides an overview of the subdisciplines
Controls (PLCs) to industrial automation and the	that are included in field of biomedical engineering
controls (FLCs) to industrial automation and the	Through a hands on approach the course introduces
sequential control of pheumatic actuators is also	tanias in all ding histranemout his slastricel nhanomona
defined in consultation with the instructor	hisingtrumentation hismachanica diagnostic devices
Cross level listed with ENCN 4270; gradit cannot be	modical imaging rehabilitation biomaterials tiquic
closs-level listed with EINGIN 4570, cledit califiot be	angingering biogeneors lab on a shin and migro and
DEEDEOLUSITE: Admission to the graduate program in	rano technology. The course also introduces the basics
Faculty of Sustainable Design Engineering	of medical device regulations and ethics of medical
HOURS OF CREDIT: 3	instrumentation. Students will gain an appreciation for
HOURS OF CREDIT. 5	the collaborative interdisciplinary nature of engineering
	in medicine and its potential impact on society.
SDE 8410 MACRO ENERGY SYSTEMS	Cross level listed with ENGN 4330: credit cannot be
This course covers methods for analyzing energy supply,	received for both courses.
conversion processes, and end-use at the system level.	PREREOUUSITE: Admission to the graduate program in
Aspects considered include the dynamics of energy	Faculty of Sustainable Design Engineering
supply and demand, enclencies of energy conversion,	HOURS OF CREDIT: 3
characteristics of energy currencies, and energy needs	
actoss different sectors. Students will characterize	
inductrial power and transportation. Energy analysis will	CONTROL
he introduced and used to build a quantitative framework	This course advances the fundamentals of robotics
for integrating techno-economic analysis of energy	through exposure to in depth knowledge and
system components with emphasis on elements such as	understanding of kinematics dynamics control and
fossil fuels and nuclear power. Students will gain an	trajectory with applications to autonomous vehicles
enhanced quantitative appreciation for the sustainability	automated manufacturing and processing and mobile
emissions cost and energy intensity aspects of energy	robotics Areas of interest include: position
services delivery Graduate-level project will be required	transformation and control rigid body motion kinematic
as defined in consultation with the instructor.	control. compliance and force control. Graduate-level
Cross-level listed with ENGN 4410: credit cannot be	project will be required as defined in consultation with
received for both courses.	the instructor.
PREREQUISITE: Admission to the graduate program in	Cross level listed with ENGN 4350; credit cannot be
Faculty of Sustainable Design Engineering	received for both courses.
HOURS OF CREDIT: 3	PREREOUISITE: Admission to the graduate program in
	Faculty of Sustainable Design Engineering
SDF 8440 ADVANCED ENERGY STOR AGE	HOURS OF CREDIT: 3
This course considers advanced technical analysis of	
energy storage systems. A comprehensive overview of all	SDF 8370 FLUID POWER CONTROL
industrially relevant energy storage systems is reviewed	This course covers the analysis and design of basic
and emphasis is placed on promising energy storage	hydraulic and pneumatic circuits and systems. Topics
technologies of the future. Chemical, thermal and kinetic	include a review of the fundamentals of fluid mechanics
storage technologies will be discussed in	including flow through valves, fittings, and pipe;
detail. Graduate-level project will be required as defined	classification of hydrostatic pumps and motors; control
in consultation with the instructor.	valves; hydraulic accumulators; sizing of practical
Cross-level listed with ENGN 4440; credit cannot be	hydraulic circuits; thermal and energy
received for both courses.	considerations; electrohydraulic control and modeling of
PREREQUISITE: Admission to the graduate program in	hydraulic control systems. The latter part of the course



CALENDAR & CURRICULUM CHANGE

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
Faculty of Sustainable Design Engineering	focuses on pneumatic systems including pneumatic
HOURS OF CREDIT: 3	cylinders and motors, control valves, and compressor
	technology. The application of Programmable Logic
	Controls (PLCs) to industrial automation and the
SDE 8450 FLUID LOADS ON ENERGY	sequential control of pneumatic actuators is also
SIRUCIURES	addressed. Graduate level project will be required as
This course is an introduction to the loads applied on	defined in consultation with the instructor
structures from wind, waves, and currents, and their	Cross level listed with ENGN 4370; credit cannot be
heightened relevance to structures designed for energy	received for both courses
conversion. Phenomena to be discussed include lift and	DEEDEOLUSITE: A draiging to the graduate program in
drag, boundary layers, vortex-induced vibrations, wakes,	FREREQUISTIE. Automission to the graduate program in
hydrostatic loading, and water waves. A selection of	Faculty of Sustainable Design Engineering
engineering methods will be introduced and brought to	HOURS OF CREDIT: 3
bear on these topics, such as potential flow theory, blade-	
element theory, Airy wave theory and Morison's	SDE 8410 MACRO ENERGY SYSTEMS
equation. Dimensional analysis will be introduced to	This course covers methods for analyzing energy supply,
characterize flow problems. Design implications will be	conversion processes, and end-use at the system level.
discussed for a selection of relevant energy conversion	Aspects considered include the dynamics of energy
structures such as aircraft wings, wind turbines,	supply and demand, efficiencies of energy conversion,
breakwaters, marine vessels, and offshore energy	characteristics of energy currencies, and energy needs
platforms. Graduate-level project will be required as	across different sectors. Students will characterize
defined in consultation with the instructor.	methods of delivering energy services such as heat, light,
Cross-level listed with ENGN 4450; credit cannot be	industrial power and transportation. Energy analysis will
received for both courses.	be introduced and used to build a quantitative framework
PREREQUISITE: Admission to the graduate program in	for integrating techno-economic analysis of energy
Faculty of Sustainable Design Engineering	system components, with emphasis on elements such as
HOURS OF CREDIT: 3	fossil fuels and nuclear power. Students will gain an
	enhanced, quantitative appreciation for the sustainability,
SDE 8470 MICRO GRIDS	emissions, cost and energy intensity aspects of energy
This course focuses on the concept, operation and	services delivery. Graduate-level project will be required
optimization of renewable-energy-based micro-grids.	as defined in consultation with the instructor.
Concepts introduced and considered include renewable	Cross level listed with ENGN 4410; credit cannot be
energy resources, integration technologies, grid-	received for both courses.
connected operation, islanded grid operation, energy	PREREQUISITE: Admission to the graduate program in
storage integration and the optimal dimensioning and	Faculty of Sustainable Design Engineering
mixing of multiple energy sources where some are	HOURS OF CREDIT: 3
stochastic in nature and some are dispatchable. Existing	
and future energy storage technologies will also be	SDE 8440 ADVANCED ENERGY STORAGE
discussed. This course is based on energy flow analysis	This course considers advanced technical analysis of
and makes extensive use of software simulation	energy storage systems. A comprehensive overview of all
tools. Students will develop a framework for performing	industrially relevant energy storage systems is reviewed
techno-economic assessments of micro-grid architectures	and emphasis is placed on promising energy storage
and designs. A strong background in electrical power	technologies of the future. Chemical, thermal and kinetic
systems is not necessarily required. Graduate-level	storage technologies will be discussed in
project will be required as defined in consultation with	detail. Graduate-level project will be required as defined
the instructor.	in consultation with the instructor.
Cross-level listed with ENGN 4470; credit cannot be	Cross level listed with ENGN 4440; credit cannot be
received for both courses.	received for both courses.
PREREQUISITE: Admission to the graduate program in	PREREQUISITE: Admission to the graduate program in



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Faculty of Sustainable Design Engineering	Faculty of Sustainable Design Engineering
HOURS OF CREDIT: 3	HOURS OF CREDIT: 3
HOORS OF CREDIT. 5	
SDE 8510 GEOINFORMATICS IN BIORESOURCES	SDE 8450 FLUID LOADS ON ENERGY
This course covers the theory and practice of	STRUCTURES
geoinformatics and their applications to problems in	This course is an introduction to the loads applied on
bioresources using digital mapping and spatial analysis.	structures from wind, waves, and currents, and their
Hands on laboratories will provide students with an	heightened relevance to structures designed for energy
experience to collect georeferenced data using differential	conversion Phenomena to be discussed include lift and
global positioning system followed by mapping and	drag boundary layers vortex-induced vibrations wakes
analysis in geographical information system. Tonics	hydrostatic loading and water waves A selection of
include datums man projections and transformations	engineering methods will be introduced and brought to
include datums, map projections and transformations,	hear on these tonics such as notential flow theory had
vector and faster data, geo-spatial analysis, geo-statistics	the second secon
and interpolation techniques. This course will also cover	element theory, Airy wave theory and Morison s
the fundamentals of remote sensing, data collection with	equation. Dimensional analysis will be introduced to
sensors, and spatial and temporal aspects of the bio-	characterize flow problems. Design implications will be
resources attributes. Graduate-level project will be	discussed for a selection of relevant energy conversion
required as defined in consultation with the instructor.	structures such as aircraft wings, wind turbines,
Cross-level listed with ENGN 4510; credit cannot be	breakwaters, marine vessels, and offshore energy
received for both courses.	platforms. Graduate level project will be required as
PREREQUISITE: Admission to the graduate program in	defined in consultation with the instructor.
Faculty of Sustainable Design Engineering	Cross-level listed with ENGN 4450: credit cannot be
HOURS OF CREDIT: 3	received for both courses
	PREREOIUSITE: Admission to the graduate program in
	Faculty of Sustainable Design Engineering
SDE 8530 FUNDAMENTALS OF AGRICULTURE	HOURS OF CREDIT: 3
MACHINERY	HOURD OF CREDIT. 5
This course highlights the fundamentals of mechanized	
agriculture machinery from soil preparation, planting,	SDE 8470 MICRO GRIDS
and crop management to mechanical harvesting. The	This course focuses on the concept, operation and
machines and their unit operation are analyzed with	optimization of renewable-energy-based micro-grids.
respect functions, work rates, material flow and power	Concepts introduced and considered include renewable
usage. The machine performance relating to work quality	energy resources, integration technologies, grid-
and environmental effects will also be evaluated. The	connected operation, islanded grid operation, energy
labs will emphasize on safety, basic maintenance.	storage integration and the optimal dimensioning and
adjustment, calibrations of equipment and performance	mixing of multiple energy sources where some are
testing This course also covers the variable rate	stochastic in nature and some are dispatchable. Existing
applicators for site-specific application of inputs auto	and future energy storage technologies will also be
guidance system data acquisition and management for	discussed. This course is based on energy flow analysis
intelligent decision making for machines, and presision	and males avtensive use of astruare simulation
agrigulture technologies. Creducte level precision	toola Studenta will develop a framework for parfamine
agriculture technologies. Graduate-level project will be	tools. Students will develop a framework for performing
required as defined in consultation with the instructor.	teenno economic assessments of micro grid architectures
Cross-level listed with ENGN 4530; credit cannot be	and designs. A strong background in electrical power
received for both courses.	systems is not necessarily required. Graduate-level
PREREQUISITE: Admission to the graduate program in	project will be required as defined in consultation with
Faculty of Sustainable Design Engineering	the instructor.
HOURS OF CREDIT: 3	Cross level listed with ENGN 4470; credit cannot be
	received for both courses.
	PREREQUISITE: Admission to the graduate program in



CALENDAR & CURRICULUM CHANGE

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
CDE 8550 CHEMICAL AND DIOLOCICAL	Engulty of Sustainable Design Engineering
SDE 6550 CHEMICAL AND DIOLOGICAL	HOUDE OF CREDIT: 2
PROCESSES	HOUKS OF CKEDIT: 5
Processes used in the chemical and biological industries,	
which emphasize underlying physical, chemical, and	SDE 8510 GEOINFORMATICS IN BIORESOURCES
biological principles, will be introduced. By carrying out	This course covers the theory and practice of
the mass and energy balances, students will conduct	geoinformatics and their applications to problems in
design and economic assessment of major chemical and	bioresources using digital mapping and spatial analysis.
biological engineering processes. Introduction to	Hands on laboratories will provide students with an
modelling of chemical processes will be covered in this	experience to collect georeferenced data using differential
course. Graduate-level project will be required as defined	global positioning system, followed by mapping and
in consultation with the instructor.	analysis in geographical information system. Topics
Cross-level listed with ENGN 4550; credit cannot be	include datums, map projections and transformations.
received for both courses.	vector and raster data, geo-spatial analysis, geo-statistics
PREREQUISITE: Admission to the graduate program in	and interpolation techniques. This course will also cover
Faculty of Sustainable Design Engineering	the fundamentals of remote sensing, data collection with
HOURS OF CREDIT: 3	sensors, and spatial and temporal aspects of the bio-
	resources attributes. Graduate level project will be
SDE 8810 DIRECTED STUDIES IN SUSTAINABLE	required as defined in consultation with the instructor.
DESIGN ENGINEERING	Cross level listed with ENGN 4510: credit cannot be
Under the supervision of a faculty member, a graduate	received for both courses.
student independently pursues an area of interest in	PREREQUISITE: Admission to the graduate program in
depth. The course includes an extensive literature review	Faculty of Sustainable Design Engineering
of the specific discipline, directed research on the topic.	HOURS OF CREDIT: 3
or collection and analysis of data. The student may be	
required to present a written report and/or present a	
seminar in the area. Topics must not be a part of the	A CUINEDY
student's thesis research although they may be in a	WIACTIMENT
complementary area. Course outlines must be approved	This course mightights the fundamentals of mechanized
by the supervisory committee, the department Chair, and	agriculture inactimiery from son preparation, planting,
the Dean of Science.	and crop indiagement to incention are analyzed with
PREREQUISITE: Admission to the graduate program in	machines and then will operation are analyzed with
Faculty of Sustainable Design Engineering and	respect functions, work rates, indicated now and power
permission of supervisor	usage. The inactine performance relating to work quality
HOURS OF CREDIT: 3	and environmental enects will also be evaluated. The
	advise the set of the streng of a subsection of a subsection of the set of th
CDE 9920 DIOMEDICAL CICNAL DDOCECCINC	aujustment, canorations of equipment and performance
SDE 8850 DIOMEDICAL SIGNAL PROCESSING	testing. This course also covers the variable rate
I his course is an introduction to the basics of viewing,	applicators for site-specific application of inputs, auto
processing, and analyzing of biosignals, or signals	guidance system, data acquisition and management for
originating from living beings. Biosignals may be	intelligent decision making for machines, and precision
characterized as bioelectrical signals which can be	agriculture technologies. Graduate level project will be
Topics include both linear and non-electrical parts.	required as defined in consultation with the instructor.
Topics include both linear and nonlinear systems, signal	Cross-rever listed with EinGin 4550; credit carnot be
conditioning of intering, improving signal quality (signal-	DEDECTION Administration to the surface to the surf
co-noise ratio) through averaging techniques, and signal	FREREQUISTIE: Authission to the graduate program in
domaina. Craduata laval project will be required as	Faculty of Sustainable Design Engineering
defined in computation with the instructor	HUURD OF CREDIT: D
Cross lovel listed with ENCN 4820; gradit garnet he	
CIUSS-IEVELUSIEU WITH FUNCTIN 48.50° CIECIII CATILIOF DE	



CALENDAR & CURRICULUM CHANGE

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
received for both courses.	SDE 8550 CHEMICAL AND BIOLOGICAL
PREREQUISITE: Admission to the graduate program in	PROCESSES
Faculty of Sustainable Design Engineering	Processes used in the chemical and biological industries
HOURS OF CREDIT: 3	which emphasize underlying physical chemical and
HOORS OF CREDIT. 5	biological principles, will be introduced. By carrying out
	the mass and anorry halon and students will conduct
	the mass and energy balances, students will conduct
	design and economic assessment of major chemical and
	piological engineering processes. Introduction to
	modelling of chemical processes will be covered in this
	course. Graduate-level project will be required as defined
	in consultation with the instructor.
	Cross-level listed with ENGN 4550; credit cannot be
	received for both courses.
	PREREQUISITE: Admission to the graduate program in
	Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3
	SUE 8810 DIRECTED STUDIES IN SUSTAINABLE
	DESIGN ENGINEERING
	Under the supervision of a faculty member, a graduate
	student independently pursues an area of interest in
	depth. The course includes an extensive literature review
	of the specific discipline, directed research on the topic,
	or collection and analysis of data. The student may be
	required to present a written report and/or present a
	seminar in the area. Topics must not be a part of the
	student's thesis research although they may be in a
	complementary area. Course outlines must be approved
	by the supervisory committee, the department Chair, and
	the Dean of Science.
	PREREQUISITE: Admission to the graduate program in
	Faculty of Sustainable Design Engineering and
	permission of supervisor
	HOURS OF CREDIT: 3
	SDE 8830 BIOMEDICAL SIGNAL DROCESSING
	This course is an introduction to the basics of viewing
	processing and analyzing of biosignals, or signals
	processing, and analyzing of blosignals, of signals
	originating from fiving beings. Biosignals may be
	cnaracterized as bioelectrical signals which can be
	composed of both electrical and non-electrical parts.
	Topics include both linear and nonlinear systems, signal
	conditioning or filtering, improving signal quality (signal-
	to-noise ratio) through averaging techniques, and signal
	representations in both the time and frequency
	domains. Graduate-level project will be required as
	defined in consultation with the instructor.
	Cross level listed with ENGN 4830; credit cannot be



Motion #64

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions
	indicated clearly
	received for both courses.
	PREREQUISITE: Admission to the graduate program in
	Faculty of Sustainable Design Engineering
	HOURS OF CREDIT: 3

<u>Rationale for Change</u>: To identify which graduate-level courses are eligible for the PhD-SDE program. In addition to the change proposed here to clarify this, additional clarification is also provided in the calendar descriptions of each ineligible course to indicate they are not eligible for the PhD-SDE program.

Effective Term: Fall 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Graduate Studies Committee	December 12, 2022
Faculty/School Approval: FSDE Faculty	January 18, 2023
Faculty Dean's Approval: Wayne Peters	January 18, 2023
Grad. Studies Dean's Approval: Marva Sweeney-Nixon	February 3, 2023
Registrar's Office Approval: Darcy McCardle	February 15, 2023



SUMMARY OF FACULTY OF IKERAS MOTION #'S 65-82

Faculty of Indigenous Knowledge, Education, Research and Applied Studies (IKERAS)

APCC Curriculum Changes

February 2023

New Courses:

- IKE 2052 Indigenous Resistance and Decolonizing
- IKE 2110 Métis Culture, History and Governance
- IKE 2220 Beadwork: The Symbols of Indigenous Culture Resilience and Value
- IKE 2230 The Mi'kmaq of Eastern Canada
- IKE 2320 Wabanaki Confederacy
- IKE 3010 Mi'kmaq Language II
- IKE 3056 Indigenous Peoples and Justice
- IKE 3066 Introduction to Indigenous Research Methodologies
- IKE 3221 Mi'kmaq Spiritualities
- IKE 3340 Wabanaki Peace & Friendship Treaties
- IKE 3350 Storytelling and Wabanaki Legends
- IKE 3410 Canadian Treaties and Self Government
- IKE 4520 Islands of Indigeneity
- IKE 4096 Applied Indigenous Justice
- IKE 4090 Indigenous Special Topics
- IKE 4210 Gijituaqasin: On the Land
- IKE 4240 Ika'taquey: Indigenous Gardening & Mediative Practices
- IKE 4410 Indigenous Territories Use-and-Occupancy Research Methods



Motion #65

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 2052 Indigenous Resistance and Decolonizing be approved as proposed.

Course Number and Title	IKE 2052 Indigenous Resistance and Decolonizing
Description	Students will be introduced to how colonialism has caused and continues to cause irreparable harm to Indigenous and non-Indigenous peoples in Canada and throughout the world. The harm permeates all relations including our animals and plants, our planet (Mother Earth), and those elements that sustain life. Students learn about the Indigenous warrior spirit which has risen to resist the on-going colonial and post-colonial hegemony. Students will understand the complexities and work of decolonizing by which resistance takes shape and hold in a time when all relations need it most.
Cross-Listing	Click here to enter text.
Prerequisite/Co-Requisite	IKE 1040
Credit(s)	3
Notation	N/A

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50

Is there an Enrolment Cap: No

Date:

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

Resources Required: None

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

Authorization

Departmental Approval:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #65

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 2052 Indigenous Resistance and Decolonizing

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

The Library has made a budgetary request to purchase materials to provide access to books, videos, databases, and other resources in the APCC form included with the IKE-1040 New Course form previously submitted. This is a scholarly and research area that is growing and we have requested annual funding to support ongoing purchases and maintain subscriptions for these courses and the program.

Existing resources:

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - <u>Colonialism</u> (1601)
 - <u>Decolonization</u> (522)
 - <u>Decolonization</u> > <u>Study and teaching.</u> (23)
 - Indigenous peoples Politics and government. (204)
 - Indians of North America > Canada > Government relations (393)
 - Indians of North America > Legal status, laws, etc. > Canada (207)
 - Indians of North America > Canada > Treaties (71)
 - Canada. Indian Act (36)
 - Indigenous peoples > Legal status, laws, etc. > Canada. (92)
 - Indigenous resistance (915)
 - <u>Native peoples</u> > <u>Canada</u> > <u>Government relations.</u> (581)
 - <u>Native peoples</u> > <u>Civil rights</u> > <u>Canada.</u> (29)
 - <u>Native peoples</u> > <u>Legal status, laws, etc.</u> > <u>Canada.</u> (89)
 - North America Colonization (103)
 - <u>Postcolonialism</u> (140)
 - Relevant keywords include:
 - <u>Doctrine of Discovery</u> (122)
 - o <u>Terra Nullius</u> (47)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Academic Search Complete (EBSCO)



Motion #65

- MLA International Bibliography (EBSCO)
- America: History & Life (EBSCO)
- SocIndex with Full Text (EBSCO)
- CBCA (Canadian Business & Current Affairs) (Proquest)
- DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
- Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
- CHASS/CANSIM Statistics Canada's socioeconomic database
- Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
- Streaming Video
 - NFB Campus (National Film Board)
 - o Includes Indigenous People in Canada (First Nations and Metis) (41 videos),
 - Indigenous Peoples in Canada (Inuit) (29 videos), and more
- Curio (CBC news and documentary videos)
 - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.



Motion #65

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

A budget for the entire IKERAS program was included in the IKE-1040 course package submitted to APCC and Senate in 2022. Ongoing annual costs for the program are \$11,500 which includes \$6,300 for databases/subscriptions and \$5,000 for books/ebooks along with an annual increase of 3% to cover annual vendor increases. Additional resources were suggested to support the program.

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023


Motion #66

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

MOTION: That a new course IKE 2110 Métis Culture, History and Governance

Course Number and Title	IKE 2110 Métis Culture, History and Governance
Description	This course will provide an overview of Métis identity, culture, Language(s), history and governance. Métis ethnogenesis will be explored to build awareness that Métis does not simply mean, "mixed." Grounded in authentic teachings, students will be immersed in perspectives and understandings unique to Métis. Academic research will support accurate, authentic narratives of historical and contemporary issues that have shaped who Métis are, the distinct history and resilience as a people and a Nation.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 1040
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50

If there is an enrolment limit, please explain.

Is there an Enrolment Cap: No

Rationale for New Course: Elective option for IKERAS minor

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: Existing Instructor

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

Authorization

Date:

Departmental Approval:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #66

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 2110 Métis Culture, History and Governance

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

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - <u>Métis</u> (283)
 - Métis > <u>Canada</u> > <u>Cultural assimilation</u>. (2)
 - Métis > Ethnic identity. (38)
 - <u>Métis</u> > <u>History.</u> (132)
 - Métis > Legal status, laws, etc. (25)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Canadiana
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See</u> spreadsheet.
 - Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)



Motion #66

- Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	Dec. 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #67

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 2220 Beadwork: The symbols of Indigenous Cultural Resilience and Value be approved as proposed.

Course Number and Title	IKE 2220 Beadwork: The Symbols of Indigenous Cultural Resilience and	
	Value	
Description	This course will explore how beadwork symbolized Indigenous perseverance in the aftermath of colonization and the residential school system. The course will examine the importance of beadwork both before and after European contact. The course will investigate how beading plays a vital role in restoring cultural ties and spiritual belief and how it continues to be significant in demonstrating Indigenous resiliency as well as highlighting the diverse cultural value of Indigenous peoples. The student will learn beading techniques along with the histories of Mi'kmaq beading and storytelling across Turtle Island.	
Cross-Listing	Click here to enter text.	
Prerequisite/Co-Requisite	IKE 1040	
Credit(s)	3	
Notation	Click here to enter text.	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 30 Is there an Enrolment Cap: Yes - 30

This class includes a component that is hands on and experiential and a maximal class size is set to allow desk space and oversight.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective Resources Required: None

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

Authorization

Date:

Departmental Approval:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #67

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 2220 Beadwork: The Symbols of Indigenous Cultural Resilience and Value

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

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Indians of North America (5,278)
 - Indigenous art > Canada (84)
 - Indigenous artists > Canada (13)
 - Indian beadwork (6)
 - Indian beadwork > Canada. (2)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Canadiana
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - *DesLibris Canadian Electronic Library* (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
 - Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)



Motion #67

- Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	Dec. 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #68

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

MOTION: That a new course IKE 2230 The Mi'Kmaq of Eastern Canada be approved as proposed.

Course Number and Title	IKE 2230 The Mi'Kmaq of Eastern Canada
Description	This is an ethnological-style course examining traditional Mi'Kmaq culture and how it has evolved historically. It introduces students to L'nu cultural practices about the body, food, traditional medicines, religion, politics, and the natural world.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 1040
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50

Is there an Enrolment Cap: No

If there is an enrolment limit, please explain.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

Resources Required: None

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

Authorization

Authorization	Date:
Departmental Approval:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #68

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 2230 The Mi'Kmaq of Eastern Canada

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

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Indians of North America (5,278)
 - <u>Mi'kmaq</u> (256)
 - <u>Mi'kmaq (people)</u> > <u>Culture.</u> (8)
 - <u>Mi'kmaq (people)</u> > <u>Fishing</u> (13)
 - <u>Mi'kmaq (people)</u> > <u>Food</u> > <u>Prince Edward Island.</u> (3)
 - Mi'kmaq (people) > History. (56)
 - <u>Mi'kmaq (people)</u> > <u>Land tenure.</u> (8)
 - <u>Mi'kmaq (people)</u> > <u>Medicine.</u> (3)
 - <u>Mi'kmaq (people)</u> > <u>Religion</u> (10)
 - <u>Mi'kmaq language</u> (14)
 - <u>Micmac Language</u> (23) (We are working to update this Subject Heading with the proper name)
 - <u>Micmac Indians</u> > <u>Social life and customs.</u> (7)
 - o Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Canadiana
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.



Motion #68

- Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
- Curio (CBC news and documentary videos)
 - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #69

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

MOTION: That a new course IKE 2320 Wabanaki Confederacy be approved as proposed.

Course Number and Title	IKE 2320 Wabanaki Confederacy
Description	This course covers the Tribes of the East Coast of the United States and Canada that formed a political/military alliance to support each other during the French Indian Wars. It situates them in their tribal lands and examines some notable individuals and their accomplishments. Relevant legislation that affects them will be covered.
Cross-Listing	Click here to enter text.
Prerequisite/Co-Requisite	IKE 1040
Credit(s)	3
Notation	Click here to enter text.

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50 *If there is an enrolment limit, please explain.* Is there an Enrolment Cap: No

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

Resources Required: None

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

If yes, please explain.

Authorization

Authorization	Date:
Departmental Approval:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #69

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 2320 Wabanaki'k Confederacy

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

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Indians of North America (5,278)
 - <u>Abenaki Indians.</u> (15)
 - <u>Mi'kmaq</u> (256)
 - <u>Mi'kmaq (people)</u> > <u>History.</u> (56)
 - <u>Canada</u> > <u>History</u> > <u>French and Indian War</u>, <u>1755-1763</u>. (27)
 - United States > <u>History</u> > <u>French and Indian War</u>, <u>1754-1763</u>. (60)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Canadiana
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See</u> spreadsheet.
 - Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)



Motion #69

- Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #70

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

MOTION: That a new course IKE 3010 Mi'Kmaw Language II be approved as proposed.

Course Number and Title	IKE 3010 Mi'kmaw Language II
Description	This course continues learning from IKE 2010 allowing the student to build on both their vocabulary and understanding both written and oral. This course requires a significant amount of time dedicated to assignments and application of the language.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 2010
Credit(s)	3
Notation	

This is: An Elective Course

Anticipated Enrolment: 50

Grade Mode: Numeric (Standard)

Is there an Enrolment Cap: No

If there is an enrolment limit, please explain.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

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:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #70

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 3010 Mi'kmaw Langauge II

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

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Indians of North America (5,278)
 - <u>Mi'kmaq language</u> (13)
 - <u>Mi'kmaq language > Dictionaries > English</u> (5)
 - <u>Mi'kmaq (people)</u> > <u>Treaties</u> (9)
 - <u>Treaties</u> > <u>Language</u> (7)
 - o Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Canadiana
 - Academic Search Complete (EBSCO)
 - *MLA International Bibliography* (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See</u> spreadsheet.
 - Streaming Video
 - NFB Campus (National Film Board)
 - o Includes Indigenous People in Canada (First Nations and Metis) (41 videos),
 - Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)
 - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.



Motion #70

- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #71

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 3056 Indigenous Peoples and Justice be approved as proposed.

Course Number and Title	IKE 3056 Indigenous Peoples and Justice	
Description	Students will be introduced to how colonialism perpetuates inequality of Indigenous peoples and results in their over-representation in the criminal justice system, now referred to as 'the new residential schools in contemporary Canadian society' and other unjust systems in Canada. Students will understand the systemic issues that prevent the fair and equitable treatment of Indigenous peoples despite measures that are intended to curb the rise of their incarceration. An examination of social justice and criminological theories will be of benefit to students interested in understanding inequities in larger systems beyond criminal justice, and potential pathways to end this disturbing reality.	
Cross-Listing		
Prerequisite/Co-Requisite	IKE 2000, and IKE 2055 OR IKE 2800	
Credit(s)	3	
Notation		

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50

Is there an Enrolment Cap: No

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

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:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #71

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 3056 Indigenous Peoples and Justice

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

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - <u>Colonialism</u> (1601)
 - Decolonization (522)
 - Decolonization > Study and teaching. (23)
 - Discrimination in criminal justice administration > Canada. (25)
 - <u>Discrimination in criminal justice administration</u> > <u>Canada.</u> > <u>Indigenous</u> <u>Peoples</u> (3)
 - <u>Discrimination in criminal justice administration</u> > <u>Canada.</u> > <u>Native</u> <u>Peoples</u> (3)
 - Indians of North America (5,278)
 - Indigenous peoples > Legal status, laws, etc. > Canada. (92)
 - Indigenous resistance (915)
 - <u>Canada. Indian Act</u> (36)
 - <u>Native peoples</u> > <u>Canada</u> > <u>Government relations</u>. (581)
 - <u>Native peoples</u> > <u>Civil rights</u> > <u>Canada.</u> (29)
 - Native peoples > Legal status, laws, etc. > Canada. (89)
 - Indians of North America > Canada > Treaties (71)
 - <u>Residential schools Canada</u> (104)
 - o Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Canadiana
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)



Motion #71

- CHASS/CANSIM Statistics Canada's socioeconomic database
- Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
- Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
- Curio (CBC news and documentary videos)
 - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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



Motion #71

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #72

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 3066 Introduction to Indigenous Research Methodologies be approved as proposed.

Course Number and Title	IKE 3066 Introduction to Indigenous Research Methodologies
Description	Students will be introduced to the foundations of Indigenous Research Methodologies which are grounded in the principles of 'for and by Indigenous Peoples', which emphasizes techniques and methods from traditional Indigenous knowledges and worldviews. Students will understand quantitative and qualitative research methodologies, and important concepts of ownership, control, access, and possession as well as duty to consult. Students will understand that Indigenous research methodologies are a powerful tool for social change as they are relational, inclusive and participatory in nature.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 2000
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50

Is there an Enrolment Cap: No

If there is an enrolment limit, please explain.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

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:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #72

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 3066 Introduction to Indigenous Research Methodologies

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Postcolonialism > Research > Methodology. (3)
 - Indigenous peoples > Ecology. (134)
 - Indigenous peoples > <u>Research</u> > <u>Methodology.</u> (23)
 - <u>Qualitative research methods</u> (78)
 - <u>Qualitative research</u> (57)
 - <u>Qualitative research</u> > <u>Canada</u> > <u>Methodology</u>. (1)
 - <u>Quantitative research.</u> (216)
 - Indigenous knowledge (54)
 - <u>Traditional ecological knowledge</u> (39)
 - o Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Sage Research Methods and Sage Research Foundations
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - *Frontier Life: Borderlands, Settlement & Colonial Encounters* (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
 - Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos),
 Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)



Motion #72

- Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #73

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

MOTION: That a new course IKE 3221 Mi'Kmaq Spiritualities be approved as proposed.

Course Number and Title	IKE 3221 Mi'Kmaq Spiritualities
Description	This course provides insight into L'nu cosmology by examining various Wabanaki'k Creation Stories, along with pan-Indigenous ceremonies, including smudging, fasting, pipe ceremonies, sharing circles, and sweat lodges, powwow drumming and dancing. It will examine hybrid Mi'Kmaq Catholicism and its modern-day manifestations.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 1040
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50

Is there an Enrolment Cap: No

If there is an enrolment limit, please explain.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

Resources Required: None

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

If yes, please explain.

Authorization

Authorization	Date:
Departmental Approval:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #73

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 3221 Mi'Kmaq Spiritualities

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - <u>Catholic Church</u> > <u>Prayers and devotions</u> > <u>Micmac.</u> (3)
 - <u>Glooscap</u> (8)
 - Indigenous peoples -- Rites and ceremonies (16)
 - <u>Mi'kmaq</u> (256)
 - <u>Mi'kmaq (people)</u> > <u>History.</u> (56)
 - <u>Mi'kmaq (people)</u> > <u>Culture.</u> (8)
 - <u>Mi'kmaq (people)</u> > <u>Land tenure.</u> (8)
 - <u>Mi'kmaq (people)</u> > <u>Medicine.</u> (3)
 - <u>Mi'kmaq (people)</u> > <u>Religion</u> (10)
 - <u>Catholic Church</u> > <u>Prayers and devotions</u> > <u>Micmac.</u> (3)
 - <u>Mi'kmaq language</u> (14)
 - <u>Micmac Indians</u> > <u>Social life and customs.</u> (7)
 - <u>Mi'kmaw mythology</u> > <u>Prince Edward Island</u> > <u>Juvenile literature</u>. (1)
 - Indigenous knowledge (54)
 - <u>Traditional ecological knowledge</u> (39)
 - o Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See</u> spreadsheet.
 - Streaming Video



- NFB Campus (National Film Board)
- Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
- Curio (CBC news and documentary videos)
 - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #74

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 3340 Wabanaki Peace & Friendship Treaties be approved as proposed.

Course Number and Title	IKE 3340 Wabanaki Peace & Friendship Treaties
Description	This course examines the chain of treaties commencing in the State of Maine between the Abenaki and English in Massachusetts, moving along the Eastern Seaboard into the Maritimes of Canada, involving Wabanaki Tribes and the British Crown. It will include the preceding conflicts, resolutions, and key players.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 1040
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50

If there is an enrolment limit, please explain.

Is there an Enrolment Cap: No

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

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:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #74

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 3340 Wabanaki Peace & Friendship Treaties

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Indians of North America > Canada > Treaties (71)
 - <u>Abenaki Indians</u> > <u>Land tenure</u> > <u>Maine.</u> (2)
 - <u>Mi'kmaq (people)</u> > <u>Land tenure.</u> (8)
 - <u>Mi'kmaq (people)</u> > <u>Treaties</u> (9)
 - <u>Treaties</u> > <u>Language</u> (7)
 - o Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Canadiana
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
 - Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)
 - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
 - Academic Videos Online
 - Over 150 videos



Motion #74

- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #75

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

MOTION: That a new course IKE 3350 Storytelling and Wabanaki Legends be approved as proposed.

Course Number and Title	IKE 3350 Storytelling and Wabanaki Legends	
Description	Legends and oral traditions provide a deep connection to place and identity. One of the ways that Traditional Ecological Knowledges or Indigenous Territories are passed down is through oral tradition. This course is based on Wabanaki stories and legends about the land and its inhabitants.	
Cross-Listing		
Prerequisite/Co-Requisite	IKE 1040	
Credit(s)	3	
Notation		

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50

Is there an Enrolment Cap: No

If there is an enrolment limit, please explain.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

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:		
Faculty/School Approval: IKERAS	February 12, 2023	
Faculty Dean's Approval: Gary Evans	February 12, 2023	
Graduate Studies Dean's Approval:		
Registrar's Office Approval: Darcy McCardle	March 22, 2023	



Motion #75

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 3350 Storytelling and Wabanaki'k Legends

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - <u>Glooscap</u> (8)
 - Indians of North America > Folklore. (186)
 - Indigenous knowledge (54)
 - <u>Mi'kmaq (people)</u> > <u>History.</u> (56)
 - <u>Mi'kmaq (people)</u> > <u>Land tenure.</u> (8)
 - <u>Mi'kmaq legends</u> (23)
 - <u>Mi'kmaq (people)</u> > <u>Religion</u> (10)
 - <u>Mi'kmaq language</u> (13)
 - <u>Traditional ecological knowledge</u> (39)
 - o Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Canadiana
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - *Frontier Life: Borderlands, Settlement & Colonial Encounters* (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
 - Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)



Motion #75

- Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #76

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 3410 Canadian Treaties and Self-Government Agreements be approved as proposed.

Course Number and Title	IKE 3410 Canadian Treaties and Self-Government Agreements	
Description	This course is a survey of the Numbered Treaties in Canada, along with the British Columbia (BC) Treaty process and modern-day Treaties, such as Self- Government Agreements.	
Cross-Listing		
Prerequisite/Co-Requisite	IKE 2000	
Credit(s)	3	
Notation		

This is: An Elective Course

Anticipated Enrolment: 50

Grade Mode: Numeric (Standard)

Is there an Enrolment Cap: No

If there is an enrolment limit, please explain.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

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:		
Faculty/School Approval: IKERAS	February 12, 2023	
Faculty Dean's Approval: Gary Evans	February 12, 2023	
Graduate Studies Dean's Approval:		
Registrar's Office Approval: Darcy McCardle	March 22, 2023	



Motion #76

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 3410 Canadian Treaties and Self Government Agreements

Existing resources:

Collections - Holdings, Subscriptions, Other

Books

Relevant subject headings include:

- Indigenous peoples > Canada > Government relations. (128)
- Indigenous peoples > Land tenure > Canada. (29)
- Indigenous peoples -- Canada Treaties (7)
- Indigenous peoples > Canada > Treaties > History. (1)
 - <u>Mi'kmaq (people)</u> > <u>Land tenure.</u> (8)
 - Nisga'a Nation. Treaties, etc. 1999 April 27. (4)
- o Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Canadiana
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of ebooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
- o Journal Subscriptions
 - The Library provides access to a number of key journals in this field. See spreadsheet.
- o Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
- Curio (CBC news and documentary videos)
- Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- Subscription Dependencies (in interdisciplinary packages)



Motion #76

- 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, Elsevier, and Project Muse.
- o Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- o Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

Date Received by Liaison/Collections Librarian	Jan. 5, 2023
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #77

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

MOTION: That a new course IKE 4520 Islands of Indigeneity be approved as proposed.

Course Number and Title	IKE 4520 Islands of Indigeneity	
Description	Islands have traditionally been represented in a multitude of ways, for instance as warm-water tourism destinations, quiet retreats from the mainland and nature reserves, amongst others. This course examines islandness utilizing Indigenous worldviews.	
Cross-Listing		
Prerequisite/Co-Requisite	IKE 1040	
Credit(s)	3	
Notation		

This is: An Elective Course

Anticipated Enrolment: 50

Grade Mode: Numeric (Standard)

If there is an enrolment limit, please explain.

Is there an Enrolment Cap: No

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

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:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #77

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 4520 Islands of Indigeneity

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

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Indians of North America (5,278)
 - <u>Islands.</u> (1127)
 - Indian reservations > Prince Edward Island > Lennox Island.
 - <u>Lennox Island</u> (14)
 - <u>Mi'kmaw mythology</u> > <u>Prince Edward Island</u> > <u>Juvenile literature</u>. (1)
 - Indigenous knowledge (54)
 - <u>Traditional ecological knowledge</u> (39)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
 - Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)


Motion #77

- Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

A budget for the entire IKERAS program was included in the IKE-1040 course package submitted to APCC and Senate in 2022. Ongoing annual costs for the program are \$11,500 which includes \$6,300 for databases/subscriptions and \$5,000 for books/ebooks along with an annual increase of 3% to cover annual vendor increases. Additional resources were suggested to support the program.

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #78

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 4096 Applied Indigenous Justice be approved as proposed.

Course Number and Title	IKE 4096 Applied Indigenous Justice
Description	Students will study various justice systems where Indigenous justice is being applied such as the Courts, federal and provincial corrections, and sentencing circles. This course will see students gain valuable and practical analytical and writing skills which can be applied to future careers in a variety of settings in ways that respond to the TRC Calls to Action and advance reconciliation in Canada. The format will be a combination of lecture and workshops.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 3056
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 50

Is there an Enrolment Cap: No

If there is an enrolment limit, please explain.

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Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

Resources Required: None

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

AuthorizationDate:Departmental Approval:Faculty/School Approval:IKERASFaculty/School Approval:February 12, 2023Faculty Dean's Approval:February 12, 2023Graduate Studies Dean's Approval:February 12, 2023Registrar's Office Approval:March 22, 2023

Form Version: January 2022



Motion #78

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 4096 Applied Indigenous Justice

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

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - <u>Canada. Indian Act</u> (36)
 - <u>Colonialism</u> (1601)
 - Decolonization (522)
 - Decolonization > Study and teaching. (23)
 - Discrimination in criminal justice administration > Canada. (25)
 - <u>Discrimination in criminal justice administration</u> > <u>Canada.</u> > <u>Indigenous</u> <u>Peoples</u> (3)
 - <u>Discrimination in criminal justice administration</u> > <u>Canada.</u> > <u>Native</u>
 <u>Peoples</u> (3)
 - Indians of North America (5,278)
 - Indians of North America > Canada > Treaties (71)
 - Indigenous environmental justice (5)
 - Indigenous peoples > Legal status, laws, etc. > Canada. (92)
 - Indigenous peoples > Canada > Social life and customs.
 - Indigenous resistance (915)
 - Native peoples > Canada > Government relations. (581)
 - Native peoples > Civil rights > Canada. (29)
 - Native peoples > Legal status, laws, etc. > Canada. (89)
 - Residential schools Canada (104)
 - Sentencing circles (Native peoples) (2)
 - Truth and Reconciliation Commission of Canada. (33)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)



Motion #78

- Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
- CHASS/CANSIM Statistics Canada's socioeconomic database
- Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
- Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
- Curio (CBC news and documentary videos)
 - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
 - Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

A budget for the entire IKERAS program was included in the IKE-1040 course package submitted to APCC and Senate in 2022. Ongoing annual costs for the program are \$11,500 which includes \$6,300 for databases/subscriptions and \$5,000 for books/ebooks along with an annual increase of 3% to cover annual vendor increases. Additional resources were suggested to support the program.



Motion #78

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #79

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 4090 Indigenous Special Topics be approved as proposed.

Course Number and Title	IKE 4090 Indigenous Special Topics
Description	Students will review the historical and contemporary developments of Indigenous issues in Canada. Students will undertake a thorough and independent examination of a topic of interest with an opportunity to present their research findings to stakeholders in ways that respond to the TRC Calls to Action and advance reconciliation in Canada.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 1040, One IKE 2000 level course and two IKE 3000 level courses
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 20

Is there an Enrolment Cap: No

If there is an enrolment limit, please explain.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

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:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: January 2022



Motion #79

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 4090 Indigenous Special Topics

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

Existing resources:

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - <u>Canada. Indian Act</u> (36)
 - <u>Colonialism</u> (1601)
 - <u>Colonization</u> (96)
 - <u>Decolonization</u> (522)
 - Decolonization > <u>Study and teaching</u>. (23)
 - <u>Colonialism</u> (1601)
 - Culturally relevant pedagogy (122)
 - <u>Discrimination in criminal justice administration</u> > <u>Canada.</u> (25)
 - <u>Discrimination in criminal justice administration</u> > <u>Canada.</u> > <u>Indigenous</u>
 <u>Peoples</u> (3)
 - <u>Discrimination in criminal justice administration</u> > <u>Canada.</u> > <u>Native</u> <u>Peoples</u> (3)
 - Indians of North America (5,278)
 - Indians of North America > Canada > Treaties (71)
 - Indigenous environmental justice (5)
 - Indigenous peoples Education (240)
 - Indigenous peoples > Legal status, laws, etc. > Canada. (92)
 - Indigenous peoples > Canada > Social life and customs.
 - Indigenous resistance (915)
 - Native peoples > Canada > Government relations. (581)
 - Native peoples > <u>Civil rights</u> > <u>Canada.</u> (29)
 - <u>Native peoples</u> > <u>Legal status, laws, etc.</u> > <u>Canada.</u> (89)
 - <u>Residential schools Canada</u> (104)
 - Truth and Reconciliation Commission of Canada. (33)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - ERIC
 - Education Research Complete
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)



Motion #79

- America: History & Life (EBSCO)
- SocIndex with Full Text (EBSCO)
- CBCA (Canadian Business & Current Affairs) (Proquest)
- DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
- *Frontier Life: Borderlands, Settlement & Colonial Encounters* (Adam Matthew Digital, historical archive)
- CHASS/CANSIM Statistics Canada's socioeconomic database
- Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
- Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
- Curio (CBC news and documentary videos)
 - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.



Motion #79

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

A budget for the entire IKERAS program was included in the IKE-1040 course package submitted to APCC and Senate in 2022. Ongoing annual costs for the program are \$11,500 which includes \$6,300 for databases/subscriptions and \$5,000 for books/ebooks along with an annual increase of 3% to cover annual vendor increases. Additional resources were suggested to support the program.

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #80

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

MOTION: That a new course IKE 4210 Gijituagasin: On the Land be approved as proposed.

Course Number and Title	IKE 4210 Gijituaqasin: On the Land
Description	This is an experiential land-based field course connecting students to Mother Earth utilizing a two-eyed seeing approach. Elders and Knowledge-keepers will provide guidance to the students during this intensive course.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 1040
Credit(s)	3
Notation	

This is: An Elective Course

Anticipated Enrolment: 10

Grade Mode: Numeric (Standard)

Is there an Enrolment Cap: Yes If there is an enrolment limit, please explain. This course is by interview and acceptance by the course director. This is a senior course for senior students who wish to have an on-land experience to Indigenous ways of knowing and doing.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: SUMMER 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

Resources Required: Student Transportation

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

Authorization	Date:
Departmental Approval:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: January 2022



Motion #80

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 4210 Gijituaqasin: On the Land

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

Existing resources:

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Experiential learning (194)
 - Mi'kmaq (people) > Religion (10)
 - Indigenous knowledge (54)
 - Traditional ecological knowledge (39)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - ERIC
 - Education Research Complete
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - *DesLibris Canadian Electronic Library* (thousands of eBooks, tens of thousands of public documents)
 - *Frontier Life: Borderlands, Settlement & Colonial Encounters* (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
 - Streaming Video
 - NFB Campus (National Film Board)
 - o Includes Indigenous People in Canada (First Nations and Metis) (41 videos),
 - Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)
 - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.



Motion #80

- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

A budget for the entire IKERAS program was included in the IKE-1040 course package submitted to APCC and Senate in 2022. Ongoing annual costs for the program are \$11,500 which includes \$6,300 for databases/subscriptions and \$5,000 for books/ebooks along with an annual increase of 3% to cover annual vendor increases. Additional resources were suggested to support the program.

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #81

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 4240 lka'taquey: Indigenous Gardening & Meditative Practices be approved as proposed.

Course Number and Title	IKE 4240 Ika'taquey: Indigenous Gardening & Meditative Practices
Description	Being mindful on the land provides a deep connection to Mother Earth. This is a hands-on experiential course where students learn and practice being present and mindful while growing a summer Mi'Kmaq garden.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 1040 and permission of the instructor
Credit(s)	3
Notation	

This is: An Elective Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 15 Is there an Enrolment Cap: Yes - 15 If there is an enrolment limit, please explain. This is a course shared with psychology department for students that have been interviewed prior to acceptance in the course.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Dato.

Impact on Students Currently Enrolled: Course elective

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:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: January 2022



Motion #81

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 4240 Ika'taquey: Indigenous Gardening & Medicative Practices

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

Existing resources:

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Experiential learning (194)
 - Food > North America > Religious aspects. (3)
 - Indians of North America
 - Indians of North America Food. (36)
 - Indigenous knowledge (54)
 - Indigenous peoples > Food > Canada > Case studies. (1)
 - <u>Traditional ecological knowledge</u> (39)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
 - CBCA (Canadian Business & Current Affairs) (Proquest)
 - DesLibris Canadian Electronic Library (thousands of eBooks, tens of thousands of public documents)
 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
 - Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)



Motion #81

- Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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, Elsevier, and Project Muse.
- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

A budget for the entire IKERAS program was included in the IKE-1040 course package submitted to APCC and Senate in 2022. Ongoing annual costs for the program are \$11,500 which includes \$6,300 for databases/subscriptions and \$5,000 for books/ebooks along with an annual increase of 3% to cover annual vendor increases. Additional resources were suggested to support the program.

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



Motion #82

Faculty/School: IKERAS

Department/Program(s): Click here to enter text.

<u>MOTION:</u> That a new course IKE 4410 Indigenous Territories Use-and-Occupancy Research Methods be approved as proposed.

Course Number and Title	IKE 4410 Indigenous Territories Use-and-Occupancy Research Methods
Description	This course utilizes Indigenous Methodologies and Research Methods to design and collect data for projects based on a land use-and-occupancy method called Biographic Mapping. The course has a learning-experiential component in the field and instructors will coordinate the course with Elders and Knowledge-Keepers from the region.
Cross-Listing	
Prerequisite/Co-Requisite	IKE 3066
Credit(s)	3
Notation	

This is: An Elective Course

Anticipated Enrolment: 15

Grade Mode: Numeric (Standard)

Is there an Enrolment Cap: Yes - 15

If there is an enrolment limit, please explain. This is an experiential land-based course that needs to be small to assimilate the information into maps that can be shared within the community.

Rationale for New Course: Expansion of IKERAS minor elective options

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Course elective

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:	
Faculty/School Approval: IKERAS	February 12, 2023
Faculty Dean's Approval: Gary Evans	February 12, 2023
Graduate Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: January 2022



Motion #82

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

IKE 4410 Indigenous Territories Use-and-Occupancy Research Methods

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

Existing resources:

- Collections Holdings, Subscriptions, Other
 - Books
 - Relevant subject headings include:
 - Indigenous knowledge (54)
 - Indigenous peoples > Ecology. (134)
 - Indigenous peoples > Research > Methodology. (23)
 - Postcolonialism > <u>Research</u> > <u>Methodology</u>. (3)
 - <u>Qualitative research methods</u> (78)
 - <u>Qualitative research</u> (57)
 - <u>Qualitative research</u> > <u>Canada</u> > <u>Methodology.</u> (1)
 - <u>Quantitative research.</u> (216)
 - <u>Traditional ecological knowledge</u> (39)
 - Databases
 - American Indian Religious Traditions
 - Bibliography of Native North Americans
 - Encyclopedia of Native-American History
 - HeinOnline Canadian Core
 - Indigenous Peoples of North America
 - Informit Indigenous Collection
 - Native peoples of the World: An Encyclopedia of Groups, Cultures, and Contemporary Issues
 - Academic Search Complete (EBSCO)
 - MLA International Bibliography (EBSCO)
 - America: History & Life (EBSCO)
 - SocIndex with Full Text (EBSCO)
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 - Frontier Life: Borderlands, Settlement & Colonial Encounters (Adam Matthew Digital, historical archive)
 - CHASS/CANSIM Statistics Canada's socioeconomic database
 - Journal Subscriptions
 - The Library provides access to a number of key journals in this field. <u>See spreadsheet</u>.
 - Streaming Video
 - NFB Campus (National Film Board)
 - Includes Indigenous People in Canada (First Nations and Metis) (41 videos), Indigenous Peoples in Canada (Inuit) (29 videos), and more
 - Curio (CBC news and documentary videos)



- Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (16 videos), Indigenous Youth (22 videos), Indigenous Language Revitalization (25 videos), and more.
- Academic Videos Online
 - Over 150 videos
- 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.
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- Special Collections
 - Since the early 1970s, the Library has worked to acquire, preserve, and make available all published works (books, periodicals, reports, etc.) generated on or otherwise connected to Epekwitk / Île Saint-Jean / Prince Edward Island; this "PEI Collection" now encompasses ~12,000 titles, and continues to grow steadily, with an active acquisitions mandate. This mandate includes material relating to the Island's first inhabitants, the Mi'kmaq People. Going forward, the Library's Special Collections unit is committed to supporting IKERAS faculty, knowledge keepers, and learners through the continued acquisition of publications and other learning / research materials relating to the Mi'kmaq, and other Indigenous peoples in the Atlantic region.
- Physical Space in Library (other than holdings, explain)
- Library Administrative/Research Support
 - Liaison Librarians provide reference and instruction support to both students and faculty as needed. They monitor publication lists for new titles in the subject area and purchase appropriate titles as existing budgetary resources permit.

New resources needed to support this proposal:

See IKE-1040 New Course Proposal form where the new resources are detailed.

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

A budget for the entire IKERAS program was included in the IKE-1040 course package submitted to APCC and Senate in 2022. Ongoing annual costs for the program are \$11,500 which includes \$6,300 for databases/subscriptions and \$5,000 for books/ebooks along with an annual increase of 3% to cover annual vendor increases. Additional resources were suggested to support the program.

Date Received by Liaison/Collections Librarian	December 19, 2022
Name of Librarian to be Contacted for Questions	Courtney Matthews
Approved by University Librarian or Designate - Name	Donald Moses
Date Approved by UL or Designate	January 27, 2023



SUMMARY OF FACULTY OF SCIENCE MOTION #'S 83-88

Foods and Nutrition	
Dietetic Option	Calendar Entry Change
Integrated Dietetic Internship Program	Calendar Entry Change
Biology	
Major/Honours Program	Calendar Entry Change
Major	Calendar Entry Change
Chemistry	
Biotechnology 2020	Prerequisite Change
Biotechnology 4820	Course Description Change



Motion #83

Revision is for a: Calendar Entry Change

Faculty/School/Department: Science

Department/Program(s)/Academic Regulations: Applied Human Sciences

MOTION: That the changes to the calendar entry for the Dietetic Option be approved as proposed.

DIETETIC OPTION

In addition to the courses required for the Foods and Nutrition major, students interested in applying for dietetic internship must take Foods and Nutrition 3210 (Foodservice Systems Management), Foods and Nutrition 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).

COURSE SEQUENCE: DIETETICS

Following is the usual sequence for completion of courses:

First Year

Foods and Nutrition 1010 – Concepts and Controversies in Nutrition Biology 1220 – Human Physiology Biology 1310 – Introduction to Cell and Molecular Biology Chemistry 1110 – General Chemistry I Chemistry 1120 – General Chemistry II One of UPEI 1010, 1020 or 1030 Math 1110 – Finite Mathematics **OR** Math 1120 – Calculus for the Managerial, Social and Life Sciences Two 3 semester hours Social Science

Second Year

Foods and Nutrition 2110 – Introductory Nutrition I Foods and Nutrition 2120 – Introductory Nutrition II Foods and Nutrition 2230 – Determinants of Dietary Behaviour Foods and Nutrition 2610 – Communications Foods and Nutrition 2810 – Introductory Foods Biology 2060 – Microbiology Chemistry 2430 – Organic Chemistry for the Life

DIETETIC OPTION

In addition to the courses required for the Foods and Nutrition major, students interested in applying for dietetic internship (<u>either UPEI Integrated Dietetic</u> <u>Internship or a post graduate internship</u>) must take Foods and Nutrition 3210 (Foodservice Systems Management), Foods and Nutrition 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).

COURSE SEQUENCE: DIETETICS

Following is the usual sequence for completion of courses:

First Year

Foods and Nutrition 1010 – Concepts and Controversies in Nutrition Biology 1220 – Human Physiology Biology 1310 – Introduction to Cell and Molecular Biology Chemistry 1110 – General Chemistry I Chemistry 1120 – General Chemistry II One of UPEI 1010, 1020 or 1030 Math 1110 – Finite Mathematics **OR** Math 1120 – Calculus for the Managerial, Social and Life Sciences <u>IKE 1040- Indigenous Teachings of Turtle Island</u> Two 3 semester hours Social Science

Second Year

Foods and Nutrition 2110 – Introductory Nutrition I Foods and Nutrition 2120 – Introductory Nutrition II Foods and Nutrition 2230 – Determinants of Dietary Behaviour Foods and Nutrition 2610 – Communications Foods and Nutrition 2810 – Introductory Foods <u>Foods and Nutrition 2820- Food Systems: Food</u> <u>Production and Food Processing</u>



Motion #83

Sciences	Biology 2060 – Microbiology
Statistics 1210 – Introductory Statistics	Chemistry 2430 – Organic Chemistry for the Life
Two free electives	Sciences
	Statistics 1210 – Introductory Statistics
	Two <u>One</u> free electives
Third Year	Third Year
Foods and Nutrition 3020 – Advanced Foods	Foods and Nutrition 3020 – Advanced Foods
Foods and Nutrition 3210 – Foodservice Systems	Foods and Nutrition 3210 – Foodservice Systems
Management	Management
Foods and Nutrition 3310 – Introduction to Research	Foods and Nutrition 3310 – Introduction to Research
Methods	Methods
Foods and Nutrition 3510 – Nutritional Assessment	Foods and Nutrition 3510 – Nutritional Assessment
Foods and Nutrition 3520 – Clinical Nutrition I	Foods and Nutrition 3520 – Clinical Nutrition I
Foods and Nutrition 3820 – Program Planning &	Foods and Nutrition 3820 – Program Planning &
Evaluation	Evaluation
Foods and Nutrition 3830 – Professional Practice in	Foods and Nutrition 3830 – Professional Practice in
Dietetics	Dietetics
Chemistry 3530 – Biochemistry	Chemistry 3530 – Biochemistry
Two free electives	<u>Business 1710 – Organizational Behaviour</u>
	Two <u>One</u> free elective s
Fourth Year	
Foods and Nutrition 3710 – Lifespan Nutrition	Fourth Year
Foods and Nutrition 4120 – Human Metabolism	Foods and Nutrition 3710 – Lifespan Nutrition
Foods and Nutrition 4220 – Quantity Food Production	Foods and Nutrition 4120 – Human Metabolism
Foods and Nutrition 4310 – Evidence-Based Practice in	Foods and Nutrition 4220 – Quantity Food Production
the Health Sciences	Foods and Nutrition 4310 – Evidence-Based Practice in
Foods and Nutrition 4340 – Community Nutrition	the Health Sciences
Foods and Nutrition 4610 – Clinical Nutrition II	Foods and Nutrition 4340 – Community Nutrition
Four free electives	Foods and Nutrition 4610 – Clinical Nutrition II
	Four free electives

<u>**Rationale for Change:**</u> The course sequence includes the new required course IKE 1040 and a new required FN course, FN 2820.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Rebecca Reed Jones	January 31, 2023
Faculty/School Approval: Science Council	February 1, 2023
Faculty Dean's Approval: Nola Etkin	February 1, 2023
Grad. Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023



Motion #84

Revision is for a: Calendar Entry Change

Faculty/School/Department: Science

Department/Program(s)/Academic Regulations: Applied Human Sciences

MOTION: To have changes to the calendar entry for the Integrated Dietetic Internship Program approved as proposed.

Integrated Dietetic Internshin Program
integratea Dietette interniship i rogram
This dietetic education program is an accredited program recognized by the Partnership for <u>which meets</u> <u>current standards for</u> d D ietetic eEducation and pPractice (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 <u>courses</u> levels and their results will be recorded on students' transcripts. Upon successful completion of both the accredited degree program and the required internship <u>courses</u> levels, students will be granted a <u>university certificate attesting to their</u> successful completion of the Integrated Dietetic Internship Program. their Bachelor of Science degree majoring in Foods and Nutrition with Integrated <u>Dietetic Internship</u> .
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
Foods & Nutrition 1010 – Concepts and Controversies in Nutrition Foods & Nutrition 2110 – Introductory Nutrition I Foods & Nutrition 2120 – Introductory Nutrition II



Academic Planning and Curriculum Committee March 28, 2023

CALENDAR & CURRICULUM CHANGE

Motion #84

Foods & Nutrition 2810 - Introductory Foods Foods & Nutrition 2230 – Determinants of Dietary Foods & Nutrition 3210 - Food Service Management Behaviour Foods & Nutrition 3310 - Research Methods Foods & Nutrition 3510 – Nutritional Assessment Foods & Nutrition 3830 – Professional Practice in Production and Processing Dietetics Chemistry 1110 – General Chemistry I Chemistry 1120 - General Chemistry II Chemistry 2430 – Organic Chemistry Biology 1220 – Human Physiology Dietetics Biology 1310 - Introduction to Cell and Molecular Biology Biology 2060 – Microbiology 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. Coordinator department. A selection panel will determine student admissibility based upon academic performance, paid and unpaid work experience, motivation and personal suitability. will also be considered. 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.

Foods & Nutrition 2810 – Introductory Foods Foods & Nutrition 2820 - Food Systems-Food Foods & Nutrition 3210 - Food Service Management Foods & Nutrition 3310 - Research Methods Foods & Nutrition 3510 – Nutritional Assessment Foods & Nutrition 3830 – Professional Practice in 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

Interested candidates are encouraged to consult the Director of the Foods & Nutrition Program 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 Professional Practice

A selection panel will determine student admissibility based upon academic performance, work paid and volunteer unpaid work experience, motivation and personal suitability. as demonstrated in their e-portfolio (including résumé) and the letter of intent. References

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.



Motion #84

CONTINUANCE REQUIREMENTS

Once admitted to the program, students must continue in full-time enrolment between internship courses. 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 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 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 internship courses.

INTERNSHIP SCHEDULE

Students must complete three internship courses in the Integrated Dietetic Internship Program. The first internship course FN-3001 is scheduled in the spring and summer months between the third and fourth academic years. The second and third internship courses FN-4001 and FN-4002 are completed following fourth year.

The first internship course 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 second and third internship courses of no less then 26 weeks, for a total of at least 35 weeks. Placements may be extended if an intern has not completed all competencies.

CONTINUANCE REQUIREMENTS

Once admitted to the program, students must continue in full-time enrolment between internship courses. 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 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 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 internship courses.

INTERNSHIP SCHEDULE

Students must complete three internship courses in the Integrated Dietetic Internship Program. The first internship course FN-3001 Integrated Dietetic Practice I is scheduled in the spring and summer months between the third and fourth academic years. The second and third internship courses FN-4001 Integrated Dietetic Practice II and FN-4002 Integrated Dietetic Practice III are are completed following fourth year. One of these may count as an elective in fourth year. Dietetic interns are therefore required to complete 126 semester hours.

The first internship course 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 second and third internship courses of no less th<u>an</u> 26 weeks, for a total of at least 35 weeks. Placements may be extended if an intern has not completed all competencies.



Motion #84

Satisfactory fulfilment of the Integrated Dietetic Internship courses requires:	Satisfactory fulfilment of the Integrated Dietetic Internship courses requires:	
1. A satisfactory evaluation from the Preceptor at the placement site.	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.	2. Completion of the minimum number of required competencies as indicated on the appropriate evaluation form.	
WITHDRAWAL CONDITIONS	WITHDRAWAL CONDITIONS	
Students will be required to withdraw from the Integrated Dietetic Internship Program if:	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	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	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.	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.	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	REGISTRATION AND FEES	
Students are required to register for all three internship courses (FN-3001, 4001, 4002) according to normal registration procedures. Internship courses will officially be designated on students' transcripts as pass or fail. Students pay for their internship courses 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.	Students are required to register for all three internship courses (FN-3001, 4001, 4002) according to normal registration procedures. Internship courses will officially be designated on students' transcripts as pass or fail. Students pay for their internship courses as they are taken. <u>Students may take one less elective in their</u> <u>fourth year since FN 3001 counts as an elective.</u> 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.	



Motion #84

Additional information on policies and procedures related to the Integrated Dietetic Internship Program are available from the Department.

Dieticians of Canada Graduate Internship

The Foods & Nutrition program is an accredited program recognized by the Partnership for Dietetic Education and Practice (PDEP) and prepares students for eligibility to apply for a graduate internship.

To apply for a position in an accredited graduate dietetic internship program, students must meet the academic requirements established by PDEP and should have a minimum cumulative GPA of 3.0 in their last 30 courses. In addition to the courses required for the Foods and Nutrition major, students interested in applying for a graduate dietetic internship placement must take Foods and Nutrition 3210, Foods and Nutrition 3830, Foods and Nutrition 4220, Foods and Nutrition 4310, and Foods and Nutrition 4610.

Students should consult with the Director of Internship for details and counselling by the end of second year.

NOTES REGARDING 1000-LEVEL FAMILY SCIENCE AND FOODS AND NUTRITION

Foods and Nutrition 1110 and Family Science 1140 are introductory courses required for, but not restricted to, Foods and Nutrition and Family Science majors. A grade of at least 60% in Foods and Nutrition 1110 and Family Science 1140 is a prerequisite for all Foods and Nutrition and Family Science courses above the 1000 level. However, this course prerequisite may be waived with the permission of the Chair for individual courses.

Foods and Nutrition 1010 is a course designed primarily for non-Foods and Nutrition or Family Science majors who will not be taking advanced courses in Nutrition; however it will be accepted for credit as an elective in the Foods and Nutrition or Family Science majors programs. Credit will NOT be allowed for Foods and Nutrition 1010 if completed after Foods and Nutrition 2110. Additional information on policies and procedures related to the Integrated Dietetic Internship Program are available from the Department.

Dieticians of Canada Graduate Dietetic Internship

The Foods & Nutrition program is an accredited program recognized by the Partnership for Dietetic Education and Practice (PDEP) and prepares students for eligibility to apply for a graduate internship.

To apply for a position in an accredited graduate dietetic internship program, students must meet the academic requirements established by PDEP and should have a minimum cumulative GPA of 3.0 in their last 30 courses. In addition to the courses required for the Foods and Nutrition major, students interested in applying for a graduate dietetic internship placement must take Foods and Nutrition 3210, Foods and Nutrition 3710, Foods and Nutrition 4830, Foods and Nutrition 4310, and Foods and Nutrition 4610.

Students should consult with the Director of <u>the Foods</u> <u>and Nutrition program</u> Internship for details and counselling by the end of second year.

NOTES REGARDING 1000-LEVEL FAMILY SCIENCE AND FOODS AND NUTRITION

Foods and Nutrition 1110 and Family Science 1140 are introductory courses required for, but not restricted to, Foods and Nutrition and Family Science majors. A grade of at least 60% in Foods and Nutrition 1110 and Family Science 1140 is a prerequisite for all Foods and Nutrition and Family Science courses above the 1000 level. However, this course prerequisite may be waived with the permission of the Chair for individual courses.

Foods and Nutrition 1010 is a course designed primarily for non Foods and Nutrition or Family Science majors who will not be taking advanced courses in Nutrition; however it will be accepted for credit as an elective in the Foods and Nutrition or Family Science majors programs. Credit will NOT be allowed for Foods and Nutrition 1010 if completed after Foods and Nutrition 2110.



Motion #84

Rationale for Change: There have been changes with regards to the former national accrediting body (PDEP); we have therefore removed reference to this. The integrated internship courses (FN 3001, FN 4001, FN 4002) which are required for dietetic interns, are three credit hours each. One of these courses will replace a three-semester hour elective in fourth year so that interns will take three rather than four electives; the other two courses will result in a total of 126 semester hours of credit for the internship. We have removed "Notes regarding 1000 level FSc and FN courses" because FN 1110 is now in second year (FN 2810) and FSc 1140 no longer exists. Students now take only FN 1010 in first year and it was decided that the 60% minimum is no longer needed. Changes to admissibility reflect current practice.

Effective Term: FALL 2023

Implications for Other Programs: None.

Impact on Students Currently Enrolled: Students who have enrolled for the first time in September 2022 are required to take Foods & Nutrition 2820-Food Systems-Prod/Processing. Students have always been required to take Bio 2060 prior to applying for internship; this was omitted from previous calendar entries. Students entering fourth year integrated dietetic internship will be notified that they can take one less elective in their fourth year. It will not impact students taking the dietetic stream but who are not applying to UPEI's Integrated Dietetic Internship, since they are applying to internships elsewhere and do not enrol in the FN integrated internship courses.

/	Authorization	1		

Authorization	Date:
Departmental Approval: Rebecca Reed Jones	January 31, 2023
Faculty/School Approval: Science Council	February 1, 2023
Faculty Dean's Approval: Nola Etkin	February 1, 2023
Grad. Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: September 2022



Motion #85

Revision is for a: Calendar Entry Change

Faculty/School/Department: Science

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

MOTION: To approve the changes to the "Suggested Course Sequences" for the Biology Major and Biology Honours program.

SUGGESTED COURSE SEQUENCES	SUGGESTED COURSE SEQUENCES
First Year	First Year
Introductory Biology (BIO 1310-1320)	Introductory Biology (BIO 1310-1320)
Introductory Chemistry (CHEM 1110-1120)	Introductory Chemistry (CHEM 1110-1120)
Calculus (MATH 1120 or 1910)	Calculus (MATH 1120 or 1910)
Statistics (STAT 1210)	Statistics (STAT 1210)
Physics for the Life Sciences (PHYS 1210 and 1220)	Indigenous Teachings (IKE 1040)
One of UPEI 1010, 1020, or 1030	Physics for the Life Sciences (PHYS 1210 and 1220)
Introductory Environmental Studies (ENV 1010) or a	One of UPEI 1010, 1020, or 1030
human or animal health course (BIO 1020 or 1030) or	Introductory Environmental Studies (ENV 1010) or a
Electives	human or animal health course (BIO 1020 or 1030) or
	Electives
Second Year	
Biodiversity courses (BIO 2020, 2040, 2060)	Second Year
Cell and Molecular Biology and/or Ecology and/or	Biodiversity courses (BIO 2020, 2040, 2060)
Genetics (BIO 2210, 2220, 2230, 2240)	Cell and Molecular Biology and/or Ecology and/or
Organic Chemistry and Environmental Chemistry or	Genetics (BIO 2210, 2220, 2230, 2240)
Biochemistry (CHEM 2410-2420 or 2430; CHEM	Organic Chemistry and Environmental Chemistry or
2020; CHEM 3530 or BIO 2250)	Biochemistry (CHEM 2410-2420 or 2430; CHEM 2020;
Nutrition 2210 or Physics 2430. Students interested in	CHEM 3530 or BIO 2250)
a Medical and biological Physics minor should take	Nutrition 2210 or Physics 2430.
Physics 2220, Modern Physics for Life Sciences [can	Statistics (STAT 1210)
also be taken in third year]	Students interested in a Medical and biological Physics
Electives (to make up 30 hours of credit)	minor should take Physics 2220, Modern Physics for
	Life Sciences [can also be taken in third year]
Third Year	Electives (to make up 30 hours of credit)
Core physiology or evolution (BIO 3260 or 3820)	
Research Methods and Communications (BIO 3310)	Third Year
Molecular Biology Research Techniques (BIO 3520)	Core physiology or evolution (BIO 3260 or 3820)
or Biomedical Imaging (PHYS 3520) [can also be	Research Methods and Communications (BIO 3310)
taken in fourth year]	Molecular Biology Research Techniques (BIO 3520) or
*Biology electives (2000 level or above) as indicated	Biomedical Imaging (PHYS 3520) [can also be taken in
above for your specialization	fourth yearl
Electives (to make up 30 hours of credit)	*Biology electives (2000 level or above) as indicated
	above for your specialization
Fourth Year	Electives (to make up 30 hours of credit)
Two Biology electives at 4000 level from the required	
specialization	Fourth Vear
Electives (to make up 30 hours of credit)	Two Biology electives at 4000 level from the required
	specialization
	Flectives (to make up 30 hours of credit)
	Electives (to make up 50 hours of creatly



Motion #85

<u>Rationale for Change</u>: Relocation of Statistics to Year 2 of suggested list of courses as a result of the added IKE graduation requirement.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Christian Lacroix, Chair, Biology Dept	January 27, 2023
Faculty/School Approval: Science Council	February 1, 2023
Faculty Dean's Approval: Nola Etkin	February 1, 2023
Grad. Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023
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Form Version: September 2022



CALENDAR & CURRICULUM CHANGE

Motion #86

Revision is for a: Calendar Entry Change

Faculty/School/Department: Science

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

MOTION: To approve the calendar entry change for the Biology Major "Required Courses from Other Departments" be approved as proposed.

REQUIRED COURSES FROM OTHER	REQUIRED COURSES FROM OTHER
DEPARTMENTS	DEPARTMENTS
One of UPEI 1010, 1020, or 1030;	One of UPEI 1010, 1020, or 1030;
AND IKE 1040; AND One Writing Intensive Course	AND IKE 1040; AND One Writing Intensive Course
Chemistry: Chemistry 1110 and 1120 Chemistry 2410-2420 or Chemistry 2430 (credit will not be given for both Chemistry 2430 and Chemistry 2410 or 2420) Chemistry 3530 or Biology 2250 is required for the General Stream and Life Sciences; Chemistry 3530 or 2020 is required for Environmental Biology	Chemistry: Chemistry 1110 and 1120 Chemistry 2410-2420 or Chemistry 2430 (credit will not be given for both Chemistry 2430 and Chemistry 2410 or 2420) Chemistry 3530 or Biology 2250 is required for the General Stream and Life Sciences: Chemistry 3530 or <u>Chemistry 2020 or Biology 2250</u> is required for Environmental Biology (credit will not be given for both Chemistry 3530 and Bio 2250)
Physics:	Physics:
Physics 1210 (or 1110) and Physics 1220 (or 1120)	Physics 1210 (or 1110) and Physics 1220 (or 1120)
Mathematics and Statistics:	Mathematics and Statistics:
Math 1120 or Math 1910	Math 1120 or Math 1910
Statistics 1210	Statistics 1210
Note: Some students may wish to take upper level	Note: Some students may wish to take upper level
Mathematics, Chemistry, or Physics courses for which	Mathematics, Chemistry, or Physics courses for which
Mathematics 1910-1920 is required: therefore	Mathematics 1910-1920 is required: therefore
Mathematics 1910-1920 may be taken in place of	Mathematics 1910-1920 may be taken in place of
Mathematics 1120 but the statistics requirement of	Mathematics 1120 but the statistics requirement of
Statistics 1210 remains. Credit will not be given for	Statistics 1210 remains. Credit will not be given for both
both Mathematics 1120 and Mathematics 1910.	Mathematics 1120 and Mathematics 1910.
Other electives:	Other electives:
The remaining number of semester hours required to	The remaining number of semester hours required to
complete the requirements for the Biology major (a	complete the requirements for the Biology major (a
total of 120 semester hours) will be made up from	total of 120 semester hours) will be made up from
courses selected by the students.	courses selected by the students.
Note: Please see <u>Academic Regulation 14(3)</u> :	Note: Please see <u>Academic Regulation 14(3)</u> :
Application of Certain Professional Courses.	Application of Certain Professional Courses.



Motion #86

<u>Rationale for Change</u>: The department wants to note specifically that students cannot get credit for both Chem 3530 and 2250; this modification also provides students in all 3 biology streams with more flexibility when choosing their Biochemistry requirement.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: Will provide more flexibility in course selection.

Authorization	Date:
Departmental Approval: Christian Lacroix, Chair, Biology Dept	January 27, 2023
Faculty/School Approval: Science Council	February 1, 2023
Faculty Dean's Approval: Nola Etkin	February 1, 2023
Grad. Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: September 2022



Motion #87

Revision is for a: Pre-requisite Addition/Change

Faculty/School/Department: Science

Department/Program(s)/Academic Regulations: Department of Chemistry

<u>MOTION:</u> To approve the removal of the prerequisite for BIOT 2020 Case Studies in Biotechnology as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
BIOT 2020 CASE STUDIES IN	BIOT 2020 CASE STUDIES IN BIOTECHNOLOGY
BIOTECHNOLOGY	This course develops critical thinking around research
This course develops critical thinking around research	problems in Biotechnology through a series of case
problems in Biotechnology through a series of case	studies. Students will examine and solve research
studies. Students will examine and solve research	problems in biotechnology. Material for the case studies
problems in biotechnology. Material for the case	will be drawn from biotechnology industries generically
studies will be drawn from biotechnology industries	and from local industries, increasing in complexity as
generically and from local industries, increasing in	the semester progresses. Students will build
complexity as the semester progresses. Students will	competencies in Biotechnology methods and
build competencies in Biotechnology methods and	techniques, develop the ability to see alternative
techniques, develop the ability to see alternative	approaches, and develop problem solving and critical
approaches, and develop problem solving and critical	thinking skills.
thinking skills.	PREREQUISITE: BIOT 1020 Must be taken either
PREREQUISITE: BIOT 1020 – Must be taken either	prior to or at the same time as this course
prior to or at the same time as this course	Three lecture hours per week
Three lecture hours per week	

<u>Rationale for Change</u>: To remove the prerequisite to allow BIOT 1020 and BIOT 2020 to be taken in any order.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization

Addionzation	Duic.
Departmental Approval: Barry Linkletter	January 30, 2023
Faculty/School Approval: Science Council	February 1, 2023
Faculty Dean's Approval: Nola Etkin	February 1, 2023
Grad. Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023

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Form Version: January 2022



Motion #88

Revision is for a: Course Description Change

Faculty/School/Department: Science

Department/Program(s)/Academic Regulations: Department of Chemistry

MOTION: To approve the course description change for BIOT 4820 Experiential Learning Project in Biotechnology as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
BIOT 4820 EXPERIENTIAL LEARNING	BIOT 4820 EXPERIENTIAL LEARNING PROJECT
PROJECT IN BIOTECHNOLOGY	IN BIOTECHNOLOGY
This practical course offers students the opportunity to	This practical course offers students the opportunity to
apply their knowledge and skills to working on and	apply their knowledge and skills to working on and
researching a problem in biotechnology. Students will	researching a problem in biotechnology. Students will
work under the supervision of an industry mentor	work under the supervision of an industry mentor
or/and a faculty member with a connection to local	or/and a faculty member with a connection to local
industry. Students are required to write a report	industry. Students are required to write a report
describing the work and give an oral presentation on	describing the work and give an oral presentation on the
the work where academic and industry experts will be	work where academic and industry experts will be
present.	present. Support of an industry mentor or/and a faculty
PREREQUISITE: BIOT 2020	member must be obtained prior to registering for this
Note: Minimum six hours per week	course. Students are advised to contact the chair at least
	two months in advance.
	PREREQUISITE: BIOT 2020 and permission of the
	instructor.
	Note: Minimum six hours per week

Rationale for Change: To better inform students of the need to arrange for the industry position ahead of enrolling in the course.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization

Authorization	Date:
Departmental Approval: Barry Linkletter	January 30, 2023
Faculty/School Approval: Science Council	February 1, 2023
Faculty Dean's Approval: Nola Etkin	February 1, 2023
Grad. Studies Dean's Approval:	
Registrar's Office Approval: Darcy McCardle	March 22, 2023

Form Version: January 2022



REGISTRAR'S OFFICE SUMMARY OF MOTION #'S 89-90

Academic Regulation #17

Calendar Entry Change

Terminology/Definitions

Calendar Entry Change



Motion #89

Revision is for a: Academic Regulation Change

Faculty/School/Department: Registrar's Office

Department/Program(s)/Academic Regulations: Academic Regulation 17

MOTION: To revise Academic Regulation #17 Academic Standing, as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
17. Academic Standing	17. Academic Standing
At the end of second academic semester, students are automatically assigned one of the following standings based on academic performance:	At the end of second academic semester, students are automatically assigned one of the following standings based on academic performance:
Good Standing Academic Probation Academic Suspension	Students' academic standing is assessed in May of each year, based on UPEI coursework completed over the previous 12 months. Academic standing is determined on the basis of a cumulative grade point average (CGPA), defined in Academic Regulation 10.
	Students will be assessed for the first time when they have attempted at least 18 credits at UPEI.
	<u>Academic Standing will be noted on a student's</u> <u>academic transcript.</u>
	Students are assigned one of the following standings based the criteria outlined in this regulation (GPA is rounded to the nearest .01):
	Good Standing Academic Probation Academic Suspension
Definitions:	Definitions:
For the purposes of this policy, "Academic Year" is defined as September 1 to August 31	For the purposes of this policy, "Academic Year" is defined as September 1 to August 31
Academic Standing Academic standing is determined on the basis of a cumulative grade point average (CGPA), defined in Academic Regulation 10, that is the numerical average of grades earned in all UPEI courses for all semesters completed*. Students are expected to meet the necessary minimum standards for performance	Academic Standing Academic standing is determined on the basis of a cumulative grade point average (CGPA), defined in Academic Regulation 10, that is the numerical average of grades earned in all UPEI courses for all semesters completed*. Students are expected to meet the necessary minimum standards for performance while



Motion #89

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
while attending UPEI. Those who fail to meet the minimum standard will be placed on academic probation. The minimum standard is defined as an academic average on nine or more semester credit hours of UPEI course work that produces a CGPA of at least 1.7 (excludes "P" grades).	attending UPEI. Those who fail to meet the minimum standard will be placed on academic probation. The minimum standard is defined as an academic average on nine or more semester credit hours of UPEI course work that produces a CGPA of at least 1.7 (excludes "P" grades).
Conditions of Academic Standing a) Good Standing : Students are deemed to be in good academic standing if they have achieved a CGPA of 1.70 or higher.	Conditions of Academic Standing a) Good Standing : Students are deemed to be in good academic standing if they have achieved a CGPA of 1.70 or higher.
b) Academic Probation : Academic Probation is a warning to a student that their CGPA is below the required standard for good academic standing.	b) Academic Probation: Academic Probation is a warning to a student that their CGPA is below the required standard for good academic standing.
Student records are reviewed for academic progress at the end of each academic semester. Students' academic standing is assessed in April, based on coursework completed over the previous 12 months.	Student records are reviewed for academic progress at the end of each academic semester. Students' academic standing is assessed in April, based on coursework completed over the previous 12 months.
Students will be placed on academic probation if they have a CGPA of less than 1.7 at the time of the academic assessment in April. As a condition of academic probation, students will have restrictions placed on their course load; and, be required to enrol in an academic support program.	Students will be placed on academic probation if they have a CGPA of less than 1.70 at the time of the academic assessment in April May. As a condition of academic probation, students will have restrictions placed on their course load; and, be required to enrol in an academic support program.
Students who are on Academic Probation and who achieve a Semester GPA (SGPA) of 1.7 or higher in subsequent semesters will be permitted to continue their studies at UPEI while on Academic Probation. Students are considered to have returned to good academic standing once their CGPA is 1.7 or higher.	Students who are on Academic Probation and who achieve a Semester GPA (SGPA) of 1.70 or higher in <u>all</u> subsequent semesters will be permitted to continue their studies at UPEI while on Academic Probation. Students are considered to have returned to good academic standing once their CGPA is 1.70 or higher.
*Students are not permitted to graduate while on Academic Probation.	*Students are not permitted to graduate while on Academic Probation.
*Letters of Permission will not be given to students on academic probation.	*Letters of Permission will not be given to students on academic probation.
*Students who entered UPEI prior to September 2013 when the GPA system was introduced, and who maintain continuous registration will be grandfathered	*Students who entered UPEI prior to September 2013 when the GPA system was introduced, and who maintain continuous registration will be grandfathered


Motion #89

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
under this clause, and not subject to the condition on graduation.	under this clause, and not subject to the condition on graduation.
c) Academic Suspension: Students will be placed on Academic Suspension if they fail to achieve a SGPA or a CGPA of 1.7 or higher after the completion of 30 semester credit hours while on Academic Probation. Students on Academic Suspension are not permitted to take academic courses at UPEI for a full academic year. Any post-secondary studies completed during the period of academic suspension are not eligible for credit toward a degree or other credential at UPEI.	c) Academic Suspension: Students will be placed on Academic Suspension if they fail to achieve a SGPA or a CGPA of 1.7 or higher after the completion of 30 semester credit hours while on Academic Probation. Students on Academic Suspension are not permitted to take academic courses at UPEI for a full academic year. Any post secondary studies completed during the period of academic suspension are not eligible for credit toward a degree or other credential at UPEI. if, after the completion of 30 semester hours of credit since being placed on probation, their CGPA is below 1.70 AND any SGPA since being placed on probation is below 1.70.
	<u>or</u>
	if upon assessment, a student's CGPA is below 0.50; they will be placed on academic suspension, without being placed on academic probation first.
	Students on Academic Suspension are not permitted to enrol in academic courses at UPEI for a full year. Any post-secondary studies completed (at any institution) during the period of academic suspension are not eligible for credit toward a degree or other credential at UPEI.
d) Conditions of Academic Standing will be noted on a student's academic transcript.	d) Conditions of Academic Standing will be noted on a student's academic transcript.
Following an Academic Suspension, in order to apply	d) Readmission after Suspension
submit an Undergraduate Application Form to the Registrar's Office. Students who are permitted to return to studies at UPEI return on academic probation, and are subject to the University's policy on academic standing.	Following an Academic Suspension , in order to apply for re-admission to the University , students must submit an Undergraduate Application Form <u>to be considered</u> <u>for re-admission to the University</u> . to the Registrar's Office. Students who are permitted to return to studies at UPEI return on academic probation and are subject to the University's policy this regulation (including a
will not normally be considered for re-admission for at least two full calendar years following the suspension.	<u>reduced courseload</u>) on academic standing. Students under placed on Academic Suspension a second time will not normally be considered for re-



Motion #89

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
Appeal: The conditions of academic probation and	admission for at least two full calendar years following
academic suspension are subject to appeal to the	the suspension.
Senate Academic and Student Discipline Appeals	
Committee.	Appeal: The conditions of academic probation and
	academic suspension are subject to appeal to the Senate
NOTE : Individual programs may have a higher	Academic and Student Discipline Appeals Committee.
standard for good academic standing and progression.	
Please refer to the appropriate degree requirements in	NOTE: Individual programs may have a higher
the Academic Calendar.	standard for good academic standing and progression
	Please refer to the appropriate degree/program
	requirements in the A codemic Colendar
	requirements in the Academic Calendar.

<u>Rationale for Change</u>: To provide a more clear and balanced set of parameters for assigning Academic Standing and making the conditions of each status clearer. These changes also define a minimum credit completion required before a review is completed, which is a more balanced approach for students beginning their studies at UPEI in the Winter semester.

Effective Term: FALL 2023

Implications for Other Programs: This regulation influences all Undergraduate programs governed by it.

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: N/A	N/A
Faculty/School Approval: N/A	N/A
Faculty Dean's Approval: N/A	N/A
Grad. Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 28, 2023

Form Version: September 2022



Motion #90

Revision is for a: Calendar Entry Change

Faculty/School/Department: Registrar's Office

Department/Program(s)/Academic Regulations: Terminology and Definitions

MOTION: To update the Terminology and Definitions section to align with the changes to Academic Regulation (#17).

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
Academic standing: at the end of the academic year,	Academic standing: in May of each year at the end of the
students are automatically assigned one of the	academic year, students are automatically assigned one
following standings, based on academic performance:	of the following standings, based on academic performance:
Good Standing – Students are deemed to be in good	
academic standing if they have achieved a CGPA of	Good Standing – Students are deemed to be in good
1.7 or higher.	academic standing if they have achieved a CGPA of 1.7 <u>0</u> or higher.
Academic Probation – Academic Probation is a warning	
to a student that has been below the required standard	Academic Probation – Academic Probation is a warning
and could lead to an Academic Suspension.	to a student that has been below the required standard
	and could lead to an Academic Suspension.
Academic Suspension - Students will be placed on	
Academic Suspension if they fail to achieve a SGPA	Academic Suspension - Students will be placed on
or a CGPA of 1.7 or higher after the completion of 30	Academic Suspension if they fail to achieve a SGPA or
semester credit hours while on Academic Probation.	a CGPA of 1.7 or higher after the completion of 30
	semester credit hours while on Academic Probation.
	after the completion of 30 semester hours of credit since
	AND any SCPA since being placed on probation is
	helow 1 70 OR if upon assessment a student's CGPA
	is below 0.50: they will be placed on academic
	suspension, without being placed on academic
	probation first.
The second	

Rationale for Change: To align with changes made to Academic regulation #17 Academic Standing.

Effective Term: FALL 2023

Implications for Other Programs: None

Impact on Students Currently Enrolled: More clear and balanced approach to reviewing for and assigning Academic Standing.

Authorization	Date:
Departmental Approval: N/A	N/A
Faculty/School Approval: N/A	N/A
Faculty Dean's Approval: N/A	N/A
Grad. Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	February 6, 2023



Motion

Revision is for a: Calendar Entry Change

Faculty/School/Department: Science

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

MOTION: That the calendar entry be revised as proposed.

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
Paramedicine	Paramedicine
Coordinator: Trevor Jain	Coordinator: Trevor Jain
The Bachelor of Science (BSc) in Paramedicine combines occupational content provided by the Paramedicine Diploma programs at Holland College (or any two-year CMA-accredited paramedicine program) with foundational science courses, senior specialized courses in the life sciences, and advanced capstone paramedicine courses at the University of Prince Edward Island. It is designed for paramedics interested in enhancing their science knowledge as well as their research and communication skills, thus increasing access to post-graduate opportunities (e.g., Master's degree programs) and improving job prospects.	The Bachelor of Science (BSc) in Paramedicine Applied Health (Paramedicine, and Paramedicine with Honours) combines occupational content provided by the Paramedicine Diploma programs at Holland College (or any two-year CMA-accredited paramedicine program) with foundational science courses, senior specialized courses in the life sciences, and advanced capstone paramedicine courses at the University of Prince Edward Island. It is designed for paramedics interested in enhancing their science knowledge as well as their research and communication skills, thus increasing access to post-graduate opportunities (e.g., Master's degree programs) and improving job prospects.
While at UPEI, paramedics in the BSc. program will take 20 courses. Of these, 15 are required (core) courses and the rest will be electives. The core courses will primarily be in Biology, with four advanced courses in Paramedicine:	While at UPEI, paramedics in the <u>BSe.</u> <u>Bachelor of</u> <u>Applied Health</u> program will take 20 courses. Of these, <u>15</u> <u>16</u> are required (core) courses and the rest will be electives. The core courses will primarily be in Biology, with four advanced courses in Paramedicine:
NOTE: As per Academic Regulation #1 h), all undergraduate degree programs require successful completion of IKE-1040, one of UPEI-1010, 1020 or 1030, and a Writing Intensive Course.	NOTE: As per Academic Regulation #1 h), all undergraduate degree programs require successful completion of IKE-1040, one of UPEI-1010, 1020 or 1030, and a Writing Intensive Course.
Introductory Biology I (Introduction to Cell & Molecular Biology), Introductory Chemistry I (General Chemistry I); -5 second year courses: Cell Biology, Microbiology, Human Genetics, Human Biochemistry, Introductory Statistics or Introduction to Probability and Statistics; -2 third year courses: Research Methods & Communications, Medical Microbiology; and -5 fourth year courses: Basic & Clinical Immunology or Medical Biology; Health Promotion, Planning &	 -3 <u>4</u> first year courses: First Year Experience, Introductory Biology I (Introduction to Cell & Molecular Biology), Introductory Chemistry I (General Chemistry I); <u>Indigenous Teachings of</u> <u>Turtle Island</u> -5 second year courses: Cell Biology, Microbiology, Human Genetics, Human Biochemistry, Introductory Statistics or Introduction to Probability and Statistics; -2 third year courses: Research Methods & Communications, Medical Microbiology; and



Academic Planning and Curriculum Committee April 28, 2023

CALENDAR & CURRICULUM CHANGE

Motion

Reproduction of Current Calendar Entry Proposed revision with changes underlined	and
deletions indicated clearly	
Evaluation; Disaster Medicine & Crisis Response; Critical Appraisal of Health Care Literature in the Acute Care Environment; and Current Issues in Paramedicine. -5 fourth year courses: Basic & Clinical Imp Medical Biology; Health Promotion, Plann Evaluation; Disaster Medicine & Crisis Re Critical Appraisal of Health Care Literatur Acute Care Environment; and Current Issues	munology or ning & sponse; e in the nes in
Paramedics will take five elective courses to complete this program. Two of these electives must be from Science (Chemistry, Nutrition, Kinesiology orParamedicine.Paramedics will take five four elective coursesParamedics will take five four elective courses	rses to
Physics) or Social Science areas (Business, Psychology or Philosophy). Contraction of these electric from Science (Chemistry, Nutrition, Kinest Physics) or Social Science areas (Business, Physics) or Social Science areas (Business, Physics) or Social Science areas (Business,	ves must be iology or Psychology
Students with an average of 75% in second year may or Philosophy).	
Paramedicine 4900 – Honours Thesis in Paramedicine. Students with an average of 75% in second apply to complete an Honours thesis and en- Paramedicine 4900 – Honours Thesis in Paramedicine 4900 – Honours Thesis 4900 – Honours Thesis in Paramedicine 4900 – Honours Thesis 4900 – Honours Thesis 4900 – Honours Thesis 4900 – Honours 4900 – Hon	year may nrol in aramedicine.
COURSE SEQUENCE:	
YEAR I	
Biology 1310 (Introduction to Cell & Molecular YEAR I	
Biology Biology 1310 (Introduction to Cell & Mole	cular
Biology 2060 (Microbiology) Biology 2010 (Coll Biology) Biology 2060 (Microbiology)	
Biology 2210 (Cell Biology) Biology 2000 (Microbiology) Biology 2240 (Human Genetics) Biology 2010 (Cell Biology)	
Biology 2250 (Human Biochemistry) Biology 2240 (Human Genetics)	
Chemistry 1110 (General Chemistry I) Biology 2250 (Human Biochemistry)	
Paramedicine 4010 (Health Promotion, Planning and Chemistry 1110 (General Chemistry I)	
Evaluation) IKE 1040 (Indigenous Teachings of Turtle)	<u>Island)</u>
UPEI 1010/1020/1030 (First Year Experience)	
2 Electives (recommended from the list below) Paramedicine 4010 (Health Promotion, Pla Evaluation)	anning and
YEAR 2 UPEI 1010/1020/1030 (First Year Experied	ence)
Biology 3310 (Research Methods and2 1 Electives (recommended from the list b	elow)
Communications in Biology)	
Biology 3/50 (Medical Microbiology) YEAR 2	
Biology 4050 (Medical Biology) OK Biology 4750 Biology 3310 (Research Methods and Com	imunications
(Dasic and Chinical Infinutiology) In Biology) Paramedicine 4020 (Disaster Medicine and Crisis Biology)	
Response) Biology 3/50 (Medical Biology) OR Biology	w 4750
Paramedicine 4030 (Critical Appraisal of Health Care (Basic and Clinical Immunology)	gy 4750
Literature in the Acute Care Environment) Paramedicine 4020 (Disaster Medicine and	l Crisis
Paramedicine 4040 (Current Issues in Paramedicine) Response)	
Statistics 1210 (Introductory Statistics) OR 1910 Paramedicine 4030 (Critical Appraisal of H	Iealth Care
(Introduction to Probability and Statistics) Literature in the Acute Care Environment)	1
2 Electives or Paramedicine 4900 (Honours Research Paramedicine 4040 (Current Issues in Para	
	medicine)



Motion #91

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and
	deletions indicated clearly
	(Introduction to Probability and Statistics) 2 Electives or Paramedicine 4900 (Honours Research & Thesis) 1 Final Elective

<u>Rationale for Change</u>: MPHEC recently approved the name change of the program. Inclusion of IKE 1040 is also being added to the course sequence information.

Effective Term: FALL 2024

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval:	
Faculty/School Approval: Science Council	April 26, 2023
Faculty Dean's Approval: Dr. Nola Etkin	April 26, 2023
Grad. Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle	April 26, 2023

Form Version: September 2022