The following motions were approved at the Seventh Meeting of Senate for the 2024-2025 academic year on Friday, March 14, 2025, and are subject to change upon approval of minutes at the next Senate meeting.

MOTION: (R. Raiswell/R. Gauthier) to approve the agenda as presented. CARRIED.

MOTION: (J. Sentance/N. Etkin) to approve the February 14, 2025, minutes as presented. CARRIED.

MOTION: (B. Whalen/M. Turnbull) that the motion to approve the terms of reference of the Scholarly Integrity Committee and corollary modifications to the Policy on Responsible Conduct of Research, Scholarly and Creative Work, be referred to the Research Advisory Committee for further consideration. CARRIED.

MOTION (M. Clapson/R. Raiswell) that Senate commit to review the *Policy on Responsible Conduct of Research, Scholarly and Creative Work* and *Academic Regulations* for clarity the jurisdictional lines of scope between them. CARRIED.

The following Motions 1 – 66 relate to the Sixth Curriculum report of the Academic Planning and Curriculum Committee (appended to this document).

OMNIBUS MOTION: (G. Naterer /S. Myers) that motions 1 and 2 be approved as noted below. CARRIED.

1. To add Economics 3100: The Economics of Immigration to the Calendar.
(See details in the attached Curriculum Report – Pages 5-8)

2. To create the new course POLS 2040 Climate Change Policy and Politics.
(See details in the attached Curriculum Report – Pages 9-14)

OMNIBUS MOTION: (G. Naterer/M. Turnbull) that motions 3-8 be approved as noted below. CARRIED.

3. That ED-3630 be deleted as proposed.
(See details in the attached Curriculum Report – Page 16)

4. That ED-3730 be deleted as proposed.
(See details in the attached Curriculum Report – Page 17)

5. That the course, ED-3760 (Facilitating Adult Learning in Diverse Classrooms) be created as proposed.
(See details in the attached Curriculum Report – Pages 18-20)

6. That the course description and course name for ED-3680 be updated as proposed.
(See details in the attached Curriculum Report – Pages 21-22)

7. That the course description for ED-3640 be updated as proposed.
(See details in the attached Curriculum Report – Pages 23-24)

8. That the program description for the Certificate in Adult Education be updated as proposed.
(See details in the attached Curriculum Report – Pages 25-26)

OMNIBUS MOTION: (G. Naterer /A. Hsiao) that motions 9-26 be approved as noted below. CARRIED.

9. To update the course description for ENGN 1210 Engineering Communications.
(See details in the attached Curriculum Report – Pages 29-30)

10. To update the course description for ENGN 1220 Engineering Analysis.
(See details in the attached Curriculum Report – Pages 31-32)

11. To update the course description for ENGN 1230 Engineering Mechanics I: Statics.
(See details in the attached Curriculum Report – Pages 33-34)

12. To update the course description for ENGN 1310 Computer Programming with Engineering Applications.
(See details in the attached Curriculum Report – Pages 35-36)

13. To update the course description for ENGN 1340 Engineering Mechanics II: Dynamics.
(See details in the attached Curriculum Report – Pages 37-38)

14. To update the course description for ENGN 2130 Statistics for Engineering Applications.
(See details in the attached Curriculum Report – Pages 39-40)

15. To update the course description for ENGN 2210 Engineering Projects I.
(See details in the attached Curriculum Report – Pages 41-42)

16. To update the course description for ENGN 2220 Engineering Projects II.
(See details in the attached Curriculum Report – Pages 43-44)

17. To update the course description for ENGN 2610 Thermo Fluids I: Thermodynamics.
(See details in the attached Curriculum Report – Pages 45-46)

18. To update the course description for ENGN 3220 Engineering Measurements.
(See details in the attached Curriculum Report – Page 47)

19. To update the course description for ENGN 3630 Thermofluids III: Heat Transfer and Thermodynamic Cycles.
(See details in the attached Curriculum Report – Page 48)

20. To update the course description for ENGN 3710 Project-Based Professional Practice I.
(See details in the attached Curriculum Report – Pages 49-50)

21. To update the course description for ENGN 3720 Project-Based Professional Practice II.
(See details in the attached Curriculum Report – Pages 51-52)

22. To update the course description for ENGN 3820 System Dynamics with Simulation.
(See details in the attached Curriculum Report – Pages 53-54)

23. To update the course description for ENGN 4210 Facilitated Study and Experimental Practice.
(See details in the attached Curriculum Report – Pages 55-56)

24. To update the course description for ENGN 4710 Project-Based Professional Practice III.
(See details in the attached Curriculum Report – Pages 57-58)

25. To update the course description for ENGN 4720 Project-Based Professional Practice IV.
(See details in the attached Curriculum Report – Pages 59-60)

26. To update the course description for ENGN 4850 Computational Methods for Engineering Design.
(See details in the attached Curriculum Report – Pages 61-62)

OMNIBUS MOTION: (G. Naterer /M. Sweeney-Nixon) that motions 27-43 be approved as noted below.
CARRIED.

27. That a new calendar entry for Graduate Program Admissions into the Master of Cleantech
Leadership and Transformation in the Faculty of Graduate Studies, be approved as proposed.
(See details in the attached Curriculum Report – Pages 64-66)

28. That a new course titled "Cleantech Fundamentals I" be approved as proposed.
(See details in the attached Curriculum Report – Pages 67-71)

29. That a new calendar entry for Program Regulations - Graduate Studies, for the Master of
Cleantech Leadership and Transformation program in the Faculty of Graduate Studies, be approved
as proposed.
(See details in the attached Curriculum Report – Pages 72-76)

30. That a new course titled "Environmental Ethics and Social Responsibility" be approved as proposed.
(See details in the attached Curriculum Report – Pages 77-80)

31. That a new calendar entry for Graduate Programs and Courses for the Master of Cleantech Leadership
and Transformation in the Faculty of Graduate Studies, be approved as proposed.
(See details in the attached Curriculum Report – Pages 81-88)

32. That a new course titled "Cleantech Governance, Regulation, Policy and Politics" be approved as
proposed.
(See details in the attached Curriculum Report – Pages 89-93)

33. That a new course titled "Cleantech Fundamentals II" be approved as proposed.
(See details in the attached Curriculum Report – Pages 94-98)

34. That a new course titled "Indigenous Worldviews of Environmental Sustainability" be approved as
proposed.
(See details in the attached Curriculum Report – Pages 99-103)

35. That a new course titled "Economics and Policy Analysis of Cleantech" be approved as proposed.
(See details in the attached Curriculum Report – Pages 104-108)

36. That a new course titled "Project Management for Cleantech Transformation" be accepted as
proposed.

(See details in the attached Curriculum Report – Pages 109-112)

37. That a new course titled "Leadership Skills for Cleantech Transformation" be approved as proposed.
(See details in the attached Curriculum Report – Pages 113-116)

38. That a new course titled "Orientation to Cleantech Capstone Project" be approved as proposed.
(See details in the attached Curriculum Report – Pages 117-119)

39. That a new course titled "Innovation and Entrepreneurship for Cleantech Transformation" be approved as proposed.
(See details in the attached Curriculum Report – Pages 120-123)

40. That a new course titled "Cleantech Capstone Project I" be approved as proposed.
(See details in the attached Curriculum Report – Pages 124-128)

41. That a new course titled "Cleantech Capstone Project II" be approved as proposed.
(See details in the attached Curriculum Report – Pages 129-132)

42. That a new course titled "Sustainability Policy: Prioritizing Communities" be approved as proposed.
(See details in the attached Curriculum Report – Pages 133-136)

43. That a new course titled "Energy Technologies for Sustainable Neighbourhoods" be approved as proposed.
(See details in the attached Curriculum Report – Pages 137-140)

OMNIBUS MOTION: (G. Naterer /A. Weenie) that motion 44 be approved as noted below. CARRIED.

44. To approve the course description changes to IKE 1040.
(See details in the attached Curriculum Report – Pages 142-143)

OMNIBUS MOTION: (G. Naterer /N. Etkin) that motions 44-66 be approved as noted below. CARRIED.

45. To approve the deletion of course ACC 3080 Reducing Greenhouse Gas Emissions (Climate Mitigation) as proposed.
(See details in the attached Curriculum Report – Page 146)

46. To approve the new course proposal for ACC 4100 Precision Agriculture for Climate Resilience as proposed.
(See details in the attached Curriculum Report – Pages 147-151)

47. To approve the course title change and course description change for ACC 2020 Canadian Climate Change Policy and Politics as proposed.
(See details in the attached Curriculum Report – Pages 152-153)

48. To approve the Pre-requisite change for ACC 3010 Global Climate Systems and Science as proposed.
(See details in the attached Curriculum Report – Page 154)

49. To approve the Pre-requisite change for ACC 3020 Climate Futures and Modelling as proposed.

(See details in the attached Curriculum Report – Page 155)

50. To approve the Pre-requisite Addition/Change for ACC 3030 Climate Change Monitoring as proposed.
(See details in the attached Curriculum Report – Page 156)

51. To approve the Pre-requisite Addition/Change for ACC 3040 Climate Change Statistics in R as proposed.
(See details in the attached Curriculum Report – Page 157)

52. To approve the Pre-requisite change for ACC 3050 Renewable Energy and Clean Technologies as proposed.
(See details in the attached Curriculum Report – Page 158)

53. To approve the Pre-requisite Addition/Change for ACC 3060 Remote Sensing and Climate Change as proposed.
(See details in the attached Curriculum Report – Page 159)

54. To Approve the Pre-requisite Addition/Change for ACC 3090 Geographic Information Systems for Climate Change as proposed.
(See details in the attached Curriculum Report – Page 160)

55. To approve the Course Description and Pre-requisite changes for ACC 3100 Climate Change Impacts on Biodiversity and Ecosystems as proposed.
(See details in the attached Curriculum Report – Page 161)

56. To approve the title change, course description change and prerequisite change for ACC 3120 Canadian Climate Change Management as proposed.
(See details in the attached Curriculum Report – Pages 162-163)

57. To approve the Course Title and Pre-requisite changes for ACC 3140 Carbon Pricing Mechanisms as proposed.
(See details in the attached Curriculum Report – Page 164)

58. To approve the Pre-requisite Addition/Change for ACC 4010 Climate Coastal Science as proposed.
(See details in the attached Curriculum Report – Page 165)

59. To approve the Pre-requisite Addition/Change for ACC 4020 Uncertainty and Probability in Climate Change as proposed.
(See details in the attached Curriculum Report – Page 166)

60. To approve the Pre-requisite Addition/Change for ACC 4040 Virtual Reality and Climate Change as proposed.
(See details in the attached Curriculum Report – Page 167)

61. To approve the Pre-requisite Addition/Change for ACC 4060 Measuring Your Carbon Footprint through Carbon Accounting as proposed.
(See details in the attached Curriculum Report – Page 168)

62. To approve the Pre-requisite Addition/Change for ACC 4070 Climate Extremes as proposed.
(See details in the attached Curriculum Report – Page 169)

63. To approve a title, course description, and pre-requisite changes to ACC 4080 CLIMATE CHANGE IMPACTS AND ADAPTATION as proposed.
(See details in the attached Curriculum Report – Pages 170-171)

64. To approve the Prerequisite change for ACC 4120 International Climate Diplomacy as proposed.
(See details in the attached Curriculum Report – Page 172)

65. To approve the new Calendar Entry entitled Requirements for a Minor in Applied Climate Change and Adaptation" as proposed.
(See details in the attached Curriculum Report – Page 173)

66. To approve the Calendar Entry Change for the sections entitled "Requirements for Applied Climate Change and Adaptation" as proposed.
(See details in the attached Curriculum Report – Pages 174-178)

MOTION: (A. MacKenzie/A. Braithwaite) to extend Senate for 15 minutes. CARRIED.

MOTION: (A. Weenie/M. Turnbull) that Senate approve in principle, the Bachelor of Arts in Indigenous Studies program at the University of Prince Edward Island, with the addition of the external review written assessment letter to the proposal. CARRIED.

MOTION: (M. A. McMahon) to adjourn the Senate meeting at 5:15 pm. CARRIED.

SUMMARY OF MOTION'S

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22 Requirements for ACC   Calendar Entry Change   174-178

Summary of Motions

Faculty of Arts

#	Type of Motion	Motion
1.	New Course Proposal	ECON 3100
2.	New Course Proposal	POLS 2040

NEW COURSE PROPOSAL

Motion # 1

Faculty/School: **Arts**

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

MOTION: To add Economics 3100: The Economics of Immigration to the Calendar

Course Number and Title	Economics 3100 The Economics of Immigration
Description	This course examines the causes and economic consequences of Immigration and Mobility. Topics covered include the patterns of international immigration, determinants of immigration, immigrant selection and assimilation, fiscal and labour market effects of immigration, and the effects on the source and destination countries
Cross-Listing	
Prerequisite/Co-Requisite	Prerequisites: EC 2030 and 2040
Credit(s)	3
Notation	

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

Anticipated Enrolment: 25-30   **Is there an Enrolment Cap:** No
If there is an enrolment limit, please explain.

Rationale for New Course: : Our ability to offer this course is based on the expertise of a relatively new faculty member. It has been offered successfully as a directed studies course. Immigration is a core economic issue for both Canada and PEI and should be covered within an economics program.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: Expands our catalogue of electives.

Resources Required: No new resources

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

NEW COURSE PROPOSAL   Motion # 1

Authorization	*Date:*
Departmental Approval: Jason Stevens	November 7, 2024
Faculty/School Approval: Arts Curriculum committee	February 3, 2025
Faculty Dean's Approval: Sharon Myers	February 3, 2025
Graduate Studies Dean's Approval: n/a	n/a
Registrar's Office Approval: Darcy McCardle	February 5, 2025

NEW COURSE PROPOSAL

Motion # 1

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

Economics 3100, the Economics of Immigration
To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:

- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
    - Over 15,000 print books
    - Over 200,000 ebooks
    - Over 10,000 peer-reviewed journals across many packages
    - EconLit with Full Text (EBSCO) research database, also integrated into OneSearch discovery service -
        - Over 54 million resources matching "economic*" and available online or print, including over 15 million news articles, over 17 million journal articles, almost 1 million books/book chapters
            - Over 400,000 match "economic* AND (immigra* OR emigrat*)"
- Interdisciplinary packages that include content that support this course
    - Elsevier ScienceDirect journals package (CRKN)
    - Wiley journals package (CRKN)
    - Oxford University Press journals package (CRKN)
    - Springer-Nature journals package (CRKN)
    - EBSCO North America ebooks package
    - Proquest Academic Complete ebooks package
    - Academic Videos Online (Proquest)
    - O'Reilly Online Learning
    - CANSIM - Canadian Socio-Economic Information (via CHASS)
    - CBCA Complete (Proquest)
    - Gale Academic OneFile
    - Taylor & Francis Humanities and Social Sciences journals (CRKN) and EBA package
    - HeinOnline
    - Business Source Complete (EBSCO)
    - Canada Commons ebook package
    - Cambridge Ebooks EBA package
    - Academic Search Complete (EBSCO)
    - JSTOR Archives (CRKN, scholarly journal articles) and EBA
    - Eureka.cc (news sources)

New resources needed to support this proposal: N/A
Summary of additional budget allocation required: N/A

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there will be a loss of resources needed for this course.

NEW COURSE PROPOSAL   Motion # 1

Date Received by Liaison/Collections Librarian	Jan 6, 2025
Name of Librarian to be Contacted with Questions	Melissa Belvadi
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	Jan 14, 2025

NEW COURSE PROPOSAL

Motion # 2

Faculty/School: **Arts**

Department/Program(s): **Political Science**

MOTION: **To create the new course POLS 2040 Climate Change Policy and Politics.**

Course Number and Title	POLS 2040 Climate Change Policy and Politics
Description	This course surveys how climate change emerges as a political issue; which state and non-state actors are involved in climate change policy making; who gains and who loses from climate change policies; and what policy strategies and tools can mitigate and help adapt to the impacts of climate change across different government jurisdictions. The students will learn about dealing with complexity in climate policymaking including the questions around political economy of decarbonization and international cooperation around the issue. By studying different approaches to climate change policy, the students will better understand the policymaking process. Three hours a week; Three Semester hours.
Cross-Listing	ACC-2020 Climate Change Policy and Politics
Prerequisite/Co-Requisite	None
Credit(s)	3
Notation	

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

Anticipated Enrolment: 20   **Is there an Enrolment Cap:** Yes
If there is an enrolment limit, please explain.

Rationale for New Course: This course has been offered as a POLS Special Topics course but should be a stand-alone course. It is part of the regular teaching load for Dr. Yuliya Raschupkina and an important course for our environmental policy stream

Effective Term: FALL 2025

Implications for Other Programs: As a special topic course, this has been cross listed with ACC 2020 for several years now, so no "new" implications

Impact on Students Currently Enrolled: None

Resources Required: Already being taught by tenured faculty member

NEW COURSE PROPOSAL   **Motion # 2**

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

If yes, please explain.

Authorization	Date:
Departmental Approval: Don Desserud	December 9, 2024
Faculty/School Approval: Arts Curriculum Committee	Feb 3, 2025
Faculty Dean's Approval: Sharon Myers	FEB 3, 2025.
Graduate Studies Dean's Approval: N/A	N/A
Registrar's Office Approval: Darcy McCardle.	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL   Motion # 2

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - **Books, e-books, and articles:**
    Relevant subject headings include:
    - Climate Policy (266,983 results)
    - Environmental Management (8,397,631)
    - Climate Policy - Environmental Management (53,940)
    - Climate Change – government (147,548)
    - Climate Change – political parties (17,550)
    - Climate Change – political movements (1,464)
    - Climate Change – media (38,452)
    - Climate Change Issues – International treaties (233)
    - Climate Policy – International treaties (1,200)
    - Climate Change Issues - regulatory agencies (19)
    - Climate Policy – regulatory agencies (121)
    - Climate Policy - Coastal erosion (210)
    - Climate Policy - Climate-change refugees (612)
    - Climate Policy – Drought (2,921)
    - Climate Policy – Flood Management (1,506)
    - Climate Policy – Ocean Warming (315)
    - International treaties - Greenhouse gas emissions (126)
    - Regulatory Agencies - Greenhouse gas emissions and climate change (92)
    - International treaties - Ocean warming (46)
    - International treaties – Drought (559)

  - **Databases:**
    - CAB Abstracts (via EBSCOhost)
    - CAB Abstracts (via CAB Direct)
    - Canadian Business & Current Affairs
    - Academic Collection Complete (Proquest)
    - Academic Search Complete
    - Scopus
    - Earth, Atmospheric & Aquatic Science Database
    - Google Scholar
    - Medline Ultimate
    - Federal Science Library (formerly WAVES)
    - DOAJ: Directory of Open Access Journals
    - Gale In Context: Global Issues
    - Google Dataset Search
    - Ingenta
    - JSTOR

NEW COURSE PROPOSAL   **Motion # 2**

- o   Knoema
- o   Oxford Academic
- o   ScienceDirect
- o   Springer LINK
- o   Statista
- o   Web of Science (Backfile)
- o   Wiley Online
- o   ACUP/Ebound through ScholarsPortal
- o   Agricola (via National Agricultural Library)
- o   Annual Review of Political Science
- o   Canada Commons
- o   CanLII full text of Canadian laws, cases, regulations
- o   EBSCOhost
- o   Gale Academic OneFile
- o   Gale Databases (all)
- o   Gale eBooks
- o   Gale General OneFile
- o   Gale In Context: Environmental Studies
- o   Gale OneFile: Environmental Studies and Policy
- o   GeoRef
- o   GreenFile
- o   National Geographic Society Publications Index
- o   National Sea Grant Depository
- o   Project MUSE
- o   Proquest (all databases)

- **Journals:**
  - o   Subject: <u>Climate Policy</u> (86,035 peer-reviewed)
  - o   Subject: <u>Environmental Management</u> (786,251)
  - o   Subject: <u>Climate Change</u> (951,245 peer-reviewed)
  - o   Subject: <u>Climate Change and government</u> (26,961 peer-reviewed)
  - o   Subject: <u>Climate Policy and International treaties</u> (328 peer-reviewed)
  - o   Subject: <u>Climate Change and International treaties</u> (1,145 peer-reviewed)

- **Other online media:**
  Digital Newspapers Collections:
  - o   Eureka
  - o   Chronicling America (Library of Congress historical newspapers)
  - o   Globe & Mail: Canada's Heritage 1844-2019
  - o   IslandNewspapers.ca
  - o   Newsbank Access World News Canada
  - o   New York Times
  - o   Times Digital Archive 1785-2014
  - o   Times Online (January 1, 2000-)

NEW COURSE PROPOSAL   **Motion # 2**

- **Streaming video:**
  - NFB Campus
  - Curio ((CBC news and documentary videos)
  - Academic Videos Online (AVON)

- **Interdisciplinary packages that include content that support this course:**
  - 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.

- **Other physical media:**
  Government and NGO resources
  - Publications & data
  - Policies Database
  - Canada's Climate Plan
  - Canada – Climate Action Tracker
  - Canadian Climate Institute

- **UPEI Archives and Special Collections (UASC):**
  (These records are not in the Robertson Library Catalogue)
  - Public Forum - State of the Island Environment 2008: Looking Back, Looking Ahead (Reference code: C 1-366 : electronic record)
  - The State of the Environment on PEI 2000 (Reference code: C 1-709 & C-710: videocassette)
  - The State of the Island Environment 2004 (Reference code: C 1-713 : videocassette)
  - Sharing the Land - Balancing Heritage and Development - public forum, 2008 (Reference code: C 1-810 : electronic record)
  - Water - the Fate of Our Most Precious Resource – lecture by Marq de Villiers, 2009 (Reference code: C 1-828 : electronic record)
  - What are Fishes Telling Us About Our Environment – lecture by Dr. Michael van den Heuvel, 2009 (Reference code: C 1-841 : electronic record)

- **Library Administrative/Research Support:**
  - Liaison Librarians provide reference and instruction support to 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.
  - Political Science Librarian provides research assistance to both students and faculty as needed.

New resources needed to support this proposal:

- **Collections:**

NEW COURSE PROPOSAL   **Motion # 2**

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o It is felt that the Library has sufficient monographs and subscriptions/databases currently.

Summary of additional budget allocation required:

- First year startup: $ ____ in first fiscal year the course/program is offered
- Additional startup years: $____ in second year, $____ in third year....
- Annual: $_____ in addition to the startup figure(s) above starting in the fiscal year AFTER the year the course is first offered
  o Per-year percentage increase in annual: _____

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	December 17, 2024
Name of Librarian to be Contacted with Questions	Juanita Rossiter
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	January 8, 2025

Summary of Motions

Faculty of Arts

#	Type of Motion	Motion
1.	Course Deletion	ED-3630 be deleted as proposed
2.	Course Deletion	ED-3730 be deleted as proposed
3.	New Course Proposal	That the course, ED-3760 (Facilitating Adult Learning in Diverse Classrooms) be created as proposed
4.	Course Description Change	That the course description and course name for ED-3680 be updated as proposed
5.	Course Description Change	That the course description for ED-3640 be updated as proposed
6.	Program Description Change	That the program description for the Certificate in Adult Education be updated as proposed

CALENDAR & CURRICULUM CHANGE   Motion # 3

Revision is for a: **Course Deletion**

Faculty/School/Department: **Education**

Department/Program(s)/Academic Regulations: **Certificate in Adult Education**

MOTION: That ED-3630 be deleted as proposed

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3630 THE ADULT LEARNER This course examines the principles and processes of adult learning. Topics include learning domains, the history of adult education, personal experiences, social and cultural factors that affect learning, learning in formal and non-formal environments, professional and lifelong learning, principles and characteristics of adult learners, and Universal Design for Learning (UDL).	~~3630 THE ADULT LEARNER~~ ~~This course examines the principles and processes of adult learning. Topics include learning domains, the history of adult education, personal experiences, social and cultural factors that affect learning, learning in formal and non-formal environments, professional and lifelong learning, principles and characteristics of adult learners, and Universal Design for Learning (UDL).~~

Rationale for Change: The Certificate in Adult Education is a joint program offered by Holland College and UPEI, and quality assurance reviewers at Holland College have recommended that two existing courses (ED 3630 & 3730) be merged and the content updated to reflect current trends in adult education and to present a better balance between theory and practice than was the case in the two courses that are to be deleted. A new course, Facilitating Adult Learning in Diverse Classrooms, has been proposed for creation.

Effective Term: FALL 2025

Implications for Other Programs: n/a

Impact on Students Currently Enrolled: n/a

Authorization	*Date:*
Departmental Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty/School Approval: Faculty of Education Council	January 29, 2025
Faculty Dean's Approval: Dr. Miles Turnbull, Dean	January 29, 2025
Grad. Studies Dean's Approval: Click here to enter name of approver.	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion # 4

Revision is for a: **Course Deletion**

Faculty/School/Department: **Education**

Department/Program(s)/Academic Regulations: **Certificate in Adult Education**

MOTION: ⬜ That ED-3730 be deleted as proposed

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3730 INCLUSION AND DIFFERENTIATION IN ADULT LEARNING In this course, learners are introduced to inclusive education and to strategies and practices for supporting diverse learners in adult education contexts. The course gives an overview of learning differences, social/emotional/mental health, and diagnoses that impact learning. It also provides suggestions for teaching strategies to encourage adults to learn from their strengths and increase independence. Of particular interest are the use of assistive technology, self-advocacy, principles of Universal Design for Learning (UDL), and awareness of services available to adult learners.	~~3730 INCLUSION AND DIFFERENTIATION IN ADULT LEARNING~~ ~~In this course, learners are introduced to inclusive education and to strategies and practices for supporting diverse learners in adult education contexts. The course gives an overview of learning differences, social/emotional/mental health, and diagnoses that impact learning. It also provides suggestions for teaching strategies to encourage adults to learn from their strengths and increase independence. Of particular interest are the use of assistive technology, self-advocacy, principles of Universal Design for Learning (UDL), and awareness of services available to adult learners.~~

Rationale for Change: The Certificate in Adult Education is a joint program offered by Holland College and UPEI, and quality assurance reviewers at Holland College have recommended that two existing courses (ED 3630 & 3730) be merged and the content updated to reflect current trends in adult education and to present a better balance between theory and practice than was the case in the two courses that are to be deleted. A new course, Facilitating Adult Learning in Diverse Classrooms, has been proposed for creation.

Effective Term: FALL 2025

Implications for Other Programs: n/a

Impact on Students Currently Enrolled: n/a

Authorization   *Date:*

Departmental Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty/School Approval: Faculty of Education Council	January 29, 2025
Faculty Dean's Approval: Dr. Miles Turnbull	January 29, 2025
Grad. Studies Dean's Approval: Click here to enter name of approver.	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

NEW COURSE PROPOSAL   **Motion # 5**

Faculty/School: **Education**

Department/Program(s): **Certificate in Adult Education**

MOTION: That the course, ED-3760 (Facilitating Adult Learning in Diverse Classrooms) be

created as proposed

Course Number and Title	ED 3760 Facilitating Adult Learning in Diverse Classrooms
Description	This course provides a hands-on exploration of the fundamental principles of adult learning, focusing on practical applications for diverse adult learners. Students will examine key theories of adult education, including andragogy, self-directed learning, and transformational learning, with a strong emphasis on applying these theories to create inclusive learning environments.
Cross-Listing	Click here to enter text.
Prerequisite/Co-Requisite	Click here to enter text.
Credit(s)	3
Notation	Click here to enter text.

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 30   **Is there an Enrolment Cap:** No
If there is an enrolment limit, please explain.   Click here to enter text.

Rationale for New Course: This course will be offered by UPEI as part of Holland College's Certificate in Adult Education. This certificate program was recently reviewed as part of Holland College's quality assurance process. Reviewers recommended that two existing courses (ED 3630 & 3730) be merged and the content updated to reflect current trends in adult education and to present a better balance between theory and practice than was the case in the two courses that are to be deleted.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: Normally, this new course would be taken only by new students in the Certificate program.

Resources Required: Resources Required: Teaching resources are already in the Faculty's operational budget. Since this course combines the content of two previously offered courses, which are being deleted, library resources already exist and therefore no new library costs are anticipated (see attached library assessment)..

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

NEW COURSE PROPOSAL   **Motion # 5**

If yes, please explain.   Click here to enter text.

Authorization	*Date:*
Departmental Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty/School Approval: Faculty of Education Council	January 29, 2025
Faculty Dean's Approval: Dr. Miles Turnbull, Dean	January 29, 2025
Graduate Studies Dean's Approval: Click here to enter name of approver.	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL   **Motion # 5**

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

Since the proposed course is an amalgamation of two existing Education courses, I anticipate that the library resource needs will be substantially similar to the needs of the existing courses. As in many areas, our most current resources related to this course are in electronic formats, including digital journal/database subscriptions and ebooks. We do have print materials that support the proposed course, but they are almost entirely 10+ years old. Instructors and students looking for up-to-date information should start with our online resources.

Our ability to support this course relies on our ability to maintain access to our subscription-based resources with continued sustainable funding.

Note that if future budget constraints require the Library to cancel education-focused and interdisciplinary packages such as ERIC, Education Research Complete, Gale, SAGE Premier, PsycINFO, LISTA, and our various ebook packages, there may be a loss of resources needed for this course.

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Date Received by Liaison/Collections Librarian	January 10, 2025
Name of Librarian to be Contacted with Questions	Katelyn Browne
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	January 29, 2025

CALENDAR & CURRICULUM CHANGE   Motion # 6

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

Faculty/School/Department: **Education**

Department/Program(s)/Academic Regulations: **Certificate in Adult Education**

MOTION: That the course description and course name for ED-3680 be updated as proposed

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3680 CURRICULUM DEVELOPMENT This course focuses on curriculum development beginning with needs identification, content planning and research, leading to lesson design and delivery. Students develop an understanding of provincial outcomes and standards. Students assess learners' needs, set appropriate outcomes, plan methodologies and resources, implement program plans, evaluate learning, and reflect on teaching effectiveness.	3680 ~~CURRICULUM DEVELOPMENT~~ COURSE DEVELOPMENT: DESIGNING LEARNING EXPERIENCES ~~This course focuses on curriculum development beginning with needs identification, content planning and research, leading to lesson design and delivery. Students develop an understanding of provincial outcomes and standards. Students assess learners' needs, set appropriate outcomes, plan methodologies and resources, implement program plans, evaluate learning, and reflect on teaching effectiveness.~~ <u>This course introduces students to the principles and practices of effective course development and design. The course focuses on a systematic approach to course planning and development by implementing an instructional design process. Emphasis is placed on aligning outcomes, assessment, and instructional practices for engaging students. Students will broaden their knowledge of course design and develop skills for course change and renewal.</u>

Rationale for Change: This course is offered by UPEI as part of Holland College's Certificate in Adult Education. This certificate program was recently reviewed as part of Holland College's quality assurance process. Reviewers recommended that this course be updated to reflect current trends in adult education and to present a better balance between theory and practice than was the case in the previous iteration of the course.

Effective Term: FALL 2025

Implications for Other Programs: n/a

Impact on Students Currently Enrolled: This change would apply to future students only

Authorization   *Date:*

CALENDAR & CURRICULUM CHANGE   Motion # 6

Departmental Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty/School Approval: Faculty of Education Council	January 29, 2025
Faculty Dean's Approval: Dr. Miles Turnbull, Dean	January 29, 2025
Grad. Studies Dean's Approval: Click here to enter name of approver.	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion # 7

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

Faculty/School/Department: **Education**

Department/Program(s)/Academic Regulations: **Certificate in Adult Education**

MOTION: That the course description for ED-3640 be updated as proposed

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3640 ASSESSMENT OF ADULT LEARNING This course examines general principles, processes, and techniques of assessment and evaluation that meet the needs of the instructors, learners, and stakeholders. New assessment techniques in the psychomotor domain are expected. Students develop practical experience in designing and implementing strategies for identifying learners' needs and assessing learning outcomes in the adult, technological, and/or business sectors.	3640 ASSESSMENT OF ADULT LEARNING This course ~~examines general principles, processes, and techniques of~~ introduces students to essential assessment ~~and evaluation~~ principles and practices to enhance their teaching effectiveness. ~~that meet the needs of the instructors, learners, and stakeholders. New assessment techniques in the psychomotor domain are expected. Students develop practical experience in designing and implementing strategies for identifying learners' needs and assessing learning outcomes in the adult, technological, and/or business sectors.~~ Participants will explore key topics such as formative and summative assessment, high-yield assessment techniques, effective feedback strategies, and the use of data to inform and improve instructional practices.

Rationale for Change: This course is offered by UPEI as part of Holland College's Certificate in Adult Education.This certificate program was recently reviewed as part of Holland College's quality assurance process. Reviewers recommended that this course be updated to reflect current trends in adult education and to present a better balance between theory and practice than was the case in the previous iteration of the course.

Effective Term: FALL 2025

Implications for Other Programs: n/a

Impact on Students Currently Enrolled: This change would apply to future students only

Authorization   *Date:*

Departmental Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty/School Approval: Faculty of Education Council	January 29, 2025
Faculty Dean's Approval: Dr. Miles Turnbull, Dean	January 29, 2025

CALENDAR & CURRICULUM CHANGE   **Motion # 7**

Grad. Studies Dean's Approval: Click here to enter name of approver.	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   **Motion # 8**

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

Faculty/School/Department: **Education**

Department/Program(s)/Academic Regulations: **Certificate in Adult Education (CAE)**

MOTION: That the program description for the Certificate in Adult Education be updated as proposed

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
POST-DEGREE CERTIFICATES **Certificate in Adult Education (CAE)** The Certificate in Adult Education focuses on: understanding adult education learning theory and philosophies; becoming aware of the diverse needs of adult learners; and, learning and applying the methodologies and strategies needed to teach adults. The CAE consists of 12 courses (36 semester hours). Three (six semester hour) courses are offered by Holland College, and six (three semester hour) courses are offered by UPEI. Holland College and UPEI offer the required courses on a yearly basis and the electives over a two-year period. All courses are offered in the late afternoon, early evening or weekend hours at Holland College. The UPEI courses are taught by instructors approved by the Dean of Education, UPEI. Courses are offered in each of the four academic terms. The required courses are: ED. 3110 Methods and Strategies in Adult Education I (6 semester hours) Holland College ED. 4220 Methods and Strategies: Instructional Design for Online Learning (6 semester hours) Holland College ED. 3010 Practicum in Adult Education (6 semester hours) Holland College ED. 3630 Understanding the Adult Learner (3 semester hours) UPEI ED. 3620 Communication Practices (3 semester hours) UPEI	**POST-DEGREE CERTIFICATES** **Certificate in Adult Education (CAE)** <u>The Certificate in Adult Education (CAE) is co-delivered by UPEI and Holland College. The Certificate is awarded by Holland College.</u> The Certificate in Adult Education focuses on: understanding adult education learning theory and philosophies; becoming aware of the diverse needs of adult learners; and, learning and applying the methodologies and strategies needed to teach adults. The CAE consists of 12 courses (36 semester hours). Three (six semester hour) courses are offered by Holland College, and six (three semester hour) courses are offered by UPEI. Holland College and UPEI offer the required courses on a yearly basis and the electives over a two-year period. All courses are offered in the late afternoon, early evening or weekend hours at Holland College. The UPEI courses are taught by instructors approved by the Dean of Education, UPEI. Courses are offered in each of the four academic terms. The required courses are: ED. 3110 Methods and Strategies in Adult Education I (6 semester hours) Holland College ED. 4220 Methods and Strategies: Instructional Design for Online Learning (6 semester hours) Holland College ED. 3010 Practicum in Adult Education (6 semester hours) Holland College

CALENDAR & CURRICULUM CHANGE   Motion # 8

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
ED. 3640 Assessment of Adult Learning (3 semester hours) UPEI In addition, students will select 3 additional courses from the following Adult Education electives: ED 3680 Curriculum, ED 3080 Activity-Based Learning, ED 3660 Technology, and ED 3730 Special Needs.	<u>ED 3080 Integrating Activity Based Larning in Adult Education (3 semester hours) UPEI</u> ~~ED. 3630 Understanding the Adult Learner~~ <u>ED 3XXX Facilitating Adult Learning in Diverse Classrooms</u> (3 semester hours) UPEI ED. 3620 Communication Practices (3 semester hours) UPEI ED. 3640 Assessment of Adult Learning (3 semester hours) UPEI <u>ED 3660 Educational Technology and the Adult Learner (3 semester hours) UPEI</u> <u>ED 3680 Course Development: Designing Learning Experiences (3 semester hours) UPEI</u> ~~In addition, students will select 3 additional courses from the following Adult Education electives: ED 3680 Curriculum, ED 3080 Activity-Based Learning, ED 3660 Technology, and ED 3730 Special Needs~~.

Rationale for Change: The Certificate in Adult Education is a joint program offered by Holland College and UPEI, and quality assurance reviewers at Holland College have recommended that two existing courses (ED 3630 & 3730) be merged and the content updated to reflect current trends in adult education and to present a better balance between theory and practice than was the case in the two courses that are to be deleted. The result of merging the two courses to a new course is that there are no longer electives in the program, as students would select three of three courses. The program description should be updated to reflect these requirements.

Effective Term: FALL 2025

Implications for Other Programs: n/a

Impact on Students Currently Enrolled: n/a

Authorization   *Date:*

Departmental Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty/School Approval: Faculty of Education Council	January 29, 2025
Faculty Dean's Approval: Dr. Miles Turnbull, Dean	January 29, 2025
Grad. Studies Dean's Approval: Click here to enter name of approver.	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Summary of Motions

Faculty of Engineering

#	Type of Motion	Motion
1.	Course Description Change	ENGN 1210
2.	Course Description Change	ENGN 1220
3.	Course Description Change	ENGN 1230
4.	Course Description Change	ENGN 1310
5.	Course Description Change	ENGN 1340
6.	Course Description Change	ENGN 2130
7.	Course Description Change	ENGN 2210
8.	Course Description Change	ENGN 2220
9.	Course Description Change	ENGN 2610
10.	Course Description Change	ENGN 3220
11.	Course Description Change	ENGN 3630
12.	Course Description Change	ENGN 3710
13.	Course Description Change	ENGN 3720
14.	Course Description Change	ENGN 3820
15.	Course Description Change	ENGN 4210

SUMMARY OF CHANGES FACULTY OF ENGINEERING   **Motion #'s 9-26**

16.	Course Description Change	ENGN 4710
17.	Course Description Change	ENGN 4720
18.	Course Description Change	ENGN 4850

CALENDAR & CURRICULUM CHANGE   Motion # 9

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

Faculty/School/Department: **Engineering**

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

MOTION: **To update the course description for ENGN 1210 Engineering Communications**

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
1210 ENGINEERING COMMUNICATIONS This course is the first in a series of design courses structured to foster development toward becoming a professional engineer. It provides a basic introduction to the profession, to the design process, and to the way that engineers communicate through drawing, writing, speaking, and presenting. Students learn about the engineering design process by completing simple engineering design projects in a team-based environment. There is a strong focus on writing and computer-aided drawing.	1210 ENGINEERING COMMUNICATIONS This course is the first in a series of design courses structured to foster development toward becoming a professional engineer. It provides a basic introduction to the profession, to the design process, and to the way that engineers communicate through, drawing, writing, speaking, and presenting. Students learn about the engineering design process by completing simple engineering design projects in a team-based environment. There is a strong focus on ~~writing and~~ computer-aided drawing <u>and the design process.</u>

Rationale for Change: The course description has been updated to better reflect current course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025

CALENDAR & CURRICULUM CHANGE   Motion # 9

Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion #10

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 1220 Engineering Analysis

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
1220 ENGINEERING ANALYSIS This course is the second in a series of design courses structured to foster development toward becoming a professional engineer. It further introduces the engineering design process through team-based engineering design projects. Additionally, emphasis is placed on the development of a structured problem-solving and analysis ability that can be applied to most engineering applications. Analysis topics include: basic concepts of electricity; estimation; statistics; graphing; and regression. Computer-aided tools, such as Excel and MatLab are introduced.	1220 ENGINEERING ANALYSIS This course is the second in a series of design courses structured to foster development toward becoming a professional engineer. It further introduces the engineering design process through team-based engineering design projects. Additionally, emphasis is placed on the development of structured problem-solving, ~~and analysis ability that can be applied to most engineering applications.~~ analysis, testing, interpretation, impact on design, and computer-aided design. Analysis tools and topics such as ~~include~~: basic concepts of electricity; statics; dynamics; estimation; statistics; graphing; and regression are applied to clinic projects. ~~Computer-aided tools, such as Excel and MatLab are introduced.~~ Computer-aided design focuses on 2D and 3D technical drawing using advanced CAD tools.

Rationale for Change: The course description has been updated to better reflect current tools and methods used in course delivery and to remove specific software names.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

CALENDAR & CURRICULUM CHANGE   Motion #10

Authorization   *Date:*

Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion #11

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 1230 Engineering Mechanics I: Statics

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
1230 ENGINEERING MECHANICS 1: STATICS This course focuses on the equilibrium conditions for the state of rest of particles and rigid bodies subject to forces and moments. Topics to be discussed include vector operations, equilibrium conditions, free-body diagrams, moments and couples, distributed loadings, support reactions, truss analysis, centroids, moments of inertia, products of inertia, shear and bending moment diagrams, and friction.	1230 ENGINEERING MECHANICS 1: STATICS This course focuses on the study of mechanics concerned with the equilibrium conditions ~~for the state of rest~~ of particles and rigid bodies at the state of rest and subject to forces and moments. A structured problem-solving method is introduced to identify and solve problems using appropriate theory, tools, and methodologies. Topics to be discussed include unit systems, vector operations, equilibrium conditions, free-body diagrams, moments and couples, distributed loadings, support reactions, truss analysis, centroids, moments of inertia, products of inertia, shear and bending moment diagrams, and friction.

Rationale for Change: The course description has been updated to better reflect current methods used in course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization   *Date:*

Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #11**

Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   **Motion # 12**

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 1310 Computer Programming with Engineering Applications

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
1310 COMPUTER PROGRAMMING WITH ENGINEERING APPLICATIONS This introductory course in computer programming is specifically designed for engineering students with no previous programming experience. The learning objectives are twofold: 1) to gain the ability to write scripts and solve basic engineering problems using the Matlab® numerical computing environment, 2) to introduce embedded systems and the fundamentals of interfacing and real-time programming using the Arduino open-source platform. Topics include problem solving, algorithm design, modular programming, data types and number systems, operators, functions, decision statements, loops, and arrays. The latter part of the course deals with the fundamentals of interfacing peripheral devices including sensors and actuators to design small embedded systems.	1310 COMPUTER PROGRAMMING WITH ENGINEERING APPLICATIONS This introductory course in computer programming is specifically designed for engineering students with no previous programming experience. The learning objectives are twofold: 1) to gain the ability to write scripts and solve basic engineering problems using ~~the Matlab®~~ numerical computing environment**s**, 2) to introduce embedded systems and the fundamentals of ~~interfacing and real-time~~ programming, using <u>microcontrollers</u> ~~the Arduino open-source platform~~. Topics include problem solving, algorithm design, modular programming, data types and number systems, operators, functions, decision statements, loops, and arrays. The latter part of the course deals with the fundamentals of interfacing peripheral devices including sensors and actuators to design small embedded systems.

Rationale for Change: The course description has been updated to remove specific software names.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

CALENDAR & CURRICULUM CHANGE   **Motion # 12**

Authorization   *Date:*

Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

UNIVERSITY of Prince Edward ISLAND

CALENDAR & CURRICULUM CHANGE   Motion #13

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 1340 Engineering Mechanics II: Dynamics

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
1340 ENGINEERING MECHANICS II: DYNAMICS This course is a study of mechanics concerned with the state of motion of rigid bodies that are subject to the action of forces. The course considers the kinematics and kinetics of motion applied particles and rigid bodies particularly as it relates to engineering applications and design. Topics include rectilinear and curvilinear motions, normal and tangential coordinates, dependent motion, Newton's Laws of Motion, energy and momentum methods.	1340 ENGINEERING MECHANICS II: DYNAMICS This course is a study of mechanics concerned with the state of motion <u>of particles and</u> rigid bodies that are subject to the action of forces <u>and moments</u>. The course considers the kinematics and kinetics of motion applied to particles and rigid bodies particularly as it relates to engineering applications and design. Topics include rectilinear and curvilinear motions, ~~normal and tangential coordinates~~, <u>rectangular, normal-tangential, and cylindrical coordinate systems, rotation about a fixed axis, general plane motion,</u> dependent <u>and relative</u> motion, Newton's Laws of Motion, <u>and</u> energy and momentum methods.

Rationale for Change: The course description has been updated to better reflect current topics covered in course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #13**

Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #14**

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 2130 Statistics for Engineering Applications

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
2130 STATISTICS FOR ENGINEERING APPLICATIONS This course provides an introduction to statistics through its application to engineering in the areas of reliability and experimentation. Basic statistical concepts, such as probability, descriptive measures, population distributions, and hypothesis testing will be taught in the context of engineering reliability and experimentation scenarios. Students will be introduced to fundamental concepts of reliability, such as failure and repairability rates, and analysis techniques such as reliability block diagrams and fault tree analysis. Student will also learn the basics of experimental design, including one-factor-at-a-time and factorial testing, and get hands on experience with the design, execution, analysis and interpretation of experimental results.	2130 STATISTICS FOR ENGINEERING APPLICATIONS This course provides an introduction to statistics through its application to engineering ~~in the areas of reliability and experimentation.~~ <u>with a focus in design of experiments and statistical analysis of results</u>. Basic statistical concepts, such as probability, descriptive measures, population distributions, and hypothesis testing <u>including t-Test and ANOVA</u> ~~will be~~ <u>are</u> taught in the context of engineering reliability and experimentation scenarios. ~~Students will be introduced to fundamental concepts of reliability, such as failure and repairability rates, and analysis techniques such as reliability block diagrams and fault tree analysis.~~ Student<u>s</u> ~~will~~ also learn the basics of experimental design, including one-factor-at-time and factorial testing, ~~and get hands on experience with the design, execution, analysis and interpretation of experimental results.~~ <u>quality control, regression, correlation, and interaction development.</u>

Rationale for Change: The course description has been updated to better reflect current topics covered and methods used in course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

CALENDAR & CURRICULUM CHANGE   **Motion #14**

Authorization	*Date:*
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion #15

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 2210 Engineering Projects I

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
2210 ENGINEERING PROJECTS I Combined with Engineering 2220, this course provides a complete community/industry design project experience. Emphasis is placed on strong technical design knowledge and team dynamics to facilitate learning and critical thinking. Students are encouraged to develop and apply CAD, economics, sustainability, social justice, and ethics concepts in their own community/industry design projects. Students are required to research and analyze the client's situation (internal/external) and develop detailed analytical proposals and conceptual design options. Innovative project management tools and communication skills (team/client) are also introduced to achieve project deliverables in an effective manner.	2210 ENGINEERING PROJECTS I Combined with ~~Engineering~~ ENGN 2220, this course provides a complete community/industry design project experience. Emphasis is placed on strong technical design knowledge, _technical writing_, and team dynamics to facilitate learning and critical thinking. Students are encouraged to develop and apply CAD, economics, sustainability, social justice, and ethics concepts in their own community/industry design projects. Students are required to research and analyze the ~~client's~~ _community partner's_ situation (internal/external) and develop detailed analytical proposals and conceptual design options. Innovative project management tools and communication skills (team/~~client~~ _community partner_) are also introduced to achieve project deliverables in an effective manner.

Rationale for Change: The course description has been updated to better reflect current methods used in course delivery and terminology has been updated to align with the program's other design project courses.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	_Date:_
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #15**

Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion #16

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 2220 Engineering Projects II

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
2220 ENGINEERING PROJECTS II Building on the work in Engineering 2210, students will complete detailed designs of their concepts, in-depth engineering analyses and develop a physical model or demonstration to support the recommended design solution. Working closely with community/industry partners and faculty, students learn how to manage a complex client oriented project, supported by accurate numerical analysis and professional documentation. Emphasis is placed on hands-on activities in a team-oriented environment to achieve an optimal working prototype, keeping in view the concepts of practicality, adoptability, economics and sustainability.	2220 ENGINEERING PROJECTS II Building on the work in ~~Engineering~~ ENGN 2210, students ~~will~~ complete detailed designs of their concepts, in-depth engineering analyses and develop a physical model or demonstration to support the recommended design solution. Working closely with community/industry partners and faculty, students learn how to manage a complex ~~client~~ community partner oriented project, supported by accurate numerical analysis and professional documentation. Emphasis is placed on hands-on activities in a team-oriented environment to achieve an optimal working prototype, keeping in view the concepts of practicality, adoptability, economics, and sustainability.

Rationale for Change: The course description has updated terminology to align with the program's other design project courses.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization   *Date:*

Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #16**

Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #17**

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 2610 Thermo Fluids I: Thermodynamics

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
2610 THERMO FLUIDS I: THERMODYNAMICS This course is designed to provide the student with a basic understanding of the fundamental concepts and principles of thermodynamics (first and second laws) and the application of these principles to engineering problems. Topics included are: the nature and forms of energy; basic concepts of systems, properties, states and processes; energy transfer as work and heat; energy and The First Law of Thermodynamics; entropy and The Second Law of Thermodynamics; and heat engine cycles. The analysis of various systems for power generation or refrigeration is also included.	2610 ~~THERMO FLUIDS~~ <u>THERMOFLUIDS</u> I: THERMODYNAMICS This course is designed to provide the student with a basic understanding of the fundamental concepts and principles of thermodynamics (first and second laws) and the application of these principles to engineering problems. Topics included are: the nature and forms of energy; basic concepts of systems, properties, states and processes; energy transfer as work and heat; energy and The First Law of Thermodynamics; entropy and The Second Law of Thermodynamics; and heat engine <u>and refrigeration</u> cycles. ~~The analysis of various systems for power generation or refrigeration is also included.~~

Rationale for Change: The course name has been grammatically changed to be consistent with the naming of the proceeding Thermofluids courses. The course description has been updated to better reflect the content covered and remove overlap in concepts covered in proceeding courses.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025

CALENDAR & CURRICULUM CHANGE   Motion #17

Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #18**

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 3220 Engineering Measurements

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3220 ENGINEERING MEASUREMENTS This course covers the basic types of measurement of many fundamental physical phenomena, including time, distance, displacements, speed, rates, force, flow, temperature, pressure, stress and strain, and frequency. An introduction to digital and analog electronics is a component of the course, but the focus is on understanding ways to sense physical parameters. This course has a significant field component.	3220 ENGINEERING MEASUREMENTS This course covers the basic types of measurement of many fundamental physical phenomena, including time, distance, displacements, speed, rates, force, flow, temperature, pressure, stress and strain, and frequency. <u>Calibration, accuracy, trueness, and precision of a measurement method are defined.</u> ~~An introduction to digital and analog electronics is a component of the course, but t~~<u>T</u>he focus is on understanding ways to sense physical parameters. This course has a significant ~~field~~ <u>lab</u> component.

Rationale for Change: The course description has been updated to better reflect the current course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization   *Date:*

Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #19**

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 3630 Thermofluids III: Heat Transfer and Thermodynamic Cycles

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3630 THERMOFLUIDS III: HEAT TRANSFER AND THERMODYNAMIC CYCLES This course advances student knowledge across the related fields of thermodynamics, fluid mechanics, and heat transfer with an emphasis on engineering applications. Heat transfer topics include: flows with friction and heat exchange, steady and unsteady heat conduction, convection and radiation phenomena; and heat exchanger analysis. Thermodynamic cycles topics include: internal combustion as it applies to power generation; air standard and vapour cycles; gas turbines; jet engine; and steam power plants.	3630 THERMOFLUIDS III: HEAT TRANSFER AND THERMODYNAMIC CYCLES This course advances student knowledge across the related fields of thermodynamics, fluid mechanics, and heat transfer with an emphasis on engineering applications. Heat transfer topics include: ~~flows with friction and heat exchange~~, steady and unsteady heat conduction, convection and radiation phenomena; and heat exchanger analysis. Thermodynamic cycles topics include: internal combustion as it applies to power generation; air standard and vapour cycles; gas turbines; jet engine; and steam power plants.

Rationale for Change: The course description has been updated to better reflect the current course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization   *Date:*

Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE

Motion #20

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 3710 Project-Based Professional Practice I

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3710 PROJECT-BASED PROFESSIONAL PRACTICE I Building on the work in previous design courses, this course is the first of a series of upper-year courses which simulates the practice of a professional engineer. Following a design-build-test approach, students work in a team-based environment to deliver design solutions to real-world industrial clients. Following best practices in project management and sustainability, students develop detailed project proposals, conceptual designs, and proofs of concepts within the ethical and safety considerations that are fundamental to the profession. Concepts are further developed into operational prototypes in Engineering 3720.	3710 PROJECT-BASED PROFESSIONAL PRACTICE I Building on ~~the work in~~ previous design courses, this ~~course~~ is the first of a series of upper-year design courses which simulate the practice of a professional engineer. <u>Professional and technical skills are developed through problem-, activity-, and project-based learning. Teams work with industry partners to develop innovative and sustainable solutions to meet their engineering challenges.</u> Following a design-build-test approach ~~students work in a team-based environment to deliver design solutions to real-world industrial clients. Following~~ <u>and</u> best practices in project management and sustainability, ~~students~~ <u>teams</u> develop detailed project proposals, conceptual designs, and proofs of concepts within the ethical and safety considerations that are fundamental to the profession. Concepts are further developed into operational prototypes in ~~Engineering~~ <u>ENGN</u> 3720.

Rationale for Change: The course description has been updated to better reflect the current methods used in course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

CALENDAR & CURRICULUM CHANGE   Motion #20

Authorization   *Date:*

Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #21**

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 3720 Project-Based Professional Practice II

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3720 PROJECT-BASED PROFESSIONAL PRACTICE II Continuing the work in Engineering 3710 and working closely with their external clients, students complete detailed designs of their concepts, build full-scale operational prototypes (where possible); carry out testing and validation of solutions in controlled laboratory and/or industrial environments (where possible), and present their final design solutions to their clients.	3720 PROJECT-BASED PROFESSIONAL PRACTICE II This is the second in a series of upper-year design courses which simulates the practice of a professional engineer and continues ~~continuing~~ the work in ~~Engineering~~ ENGN 3710 ~~and~~. Professional and technical skills are developed through problem-, activity-, and project-based learning. Working closely with their ~~external clients~~ industry partners, ~~students~~ teams complete detailed designs of their concepts and build full-scale operational prototypes (where possible). ~~; carry out t~~Testing and validation of solutions are carried out in controlled laboratory and/or industrial environments (where possible), and teams present the ~~their~~ final design solutions to their ~~clients~~ partners.

Rationale for Change: The course description has been updated to better reflect the current methods used in course delivery and terminology has been updated to align with the program's other design project courses.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

CALENDAR & CURRICULUM CHANGE   **Motion #21**

Authorization   *Date:*

Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion #22

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 3820 System Dynamics with Simulation

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
3820 SYSTEM DYNAMICS WITH SIMULATION This course introduces the analysis and control of dynamic systems, with concepts and examples drawn from all disciplines. It includes development and analysis of differential equation models for mechanical, electrical, thermal, and fluid systems, including some sensors. Systems are primarily analyzed using Laplace transforms and computer simulation methods. Analysis concepts cover first, second, and higher order differential equations, transient characteristics, transfer functions, stability, dominance, and frequency response. Properties of systems include time constant, natural and damped frequency, and damping ratio.	3820 SYSTEM DYNAMICS WITH SIMULATION This course introduces the analysis and control of dynamic systems, with concepts and examples drawn from all disciplines. It includes development and analysis of differential equation models for mechanical, electrical, thermal, and fluid systems, ~~including some sensors~~. Systems are primarily analyzed using <u>state variables</u>, Laplace transforms and computer simulation methods <u>and tools</u>. Analysis concepts cover first, second, and higher order differential equations, ~~transient characteristics~~, transfer functions, ~~stability, dominance, and frequency response~~ <u>time constants, natural and damped frequency, damping ratio, and transient response characteristics</u>. ~~Properties of systems include time constant, natural and damped frequency, and damping ratio.~~ <u>Systems control theory is introduced, including control loops, proportional-derivative-integral control, tuning, stability, and system classification.</u>

Rationale for Change: The course description has been updated to better reflect the current content and methods used in course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

CALENDAR & CURRICULUM CHANGE   **Motion #22**

Impact on Students Currently Enrolled: none

Authorization	*Date:*
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion #23

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 4210 Facilitated Study and Experimental Practice

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
4210 FACILITATED STUDY AND EXPERIMENTAL PRACTICE This course provides an individual assessment of the students' engineering knowledge to date in the context of their assigned industry-sponsored project. Students in consultation with faculty will determine knowledge and skill requirements of their project and develop a study and experimentation plan to fill gaps in the students' knowledge and experience. The content of the course will be customized to each student and his or her individual needs.	4210 FACILITATED STUDY AND EXPERIMENTAL PRACTICE This course provides an individual assessment of the student's cumulative engineering knowledge ~~to date in the context of their assigned industry-sponsored project. Students~~ in a problem-based learning environment. ~~Students~~ The student, in consultation with faculty, ~~will~~ determines the knowledge and skill requirements of their project and develops a ~~study~~ project and experimentation plan to fill gaps in the student's knowledge and experience. The content of the course ~~will be~~ is customized to ~~each student and his or her individual needs.~~ the individual needs of each student.

Rationale for Change: The course description has been updated to better reflect the current methods used in course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	Date:
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #23**

Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #24**

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 4710 Project-Based Professional Practice III

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
4710 PROJECT-BASED PROFESSIONAL PRACTICE III This course engages students in implementing the engineering design process and using product management and development tools. Student design teams work closely with industry partners to develop innovative and sustainable solutions to meet global challenges. Additionally, this course emphasizes the role of analysis, simulation and modeling in engineering design. Students further develop their professional and technical skills through activity-, project- and problem-based learning. Through the application of appropriate frameworks to their projects, students gain an appreciation for best practices and ethical behavior as well as an awareness of the role of engineers in society, in particular the concepts of engineering leadership and sustainable design.	4710 PROJECT-BASED PROFESSIONAL PRACTICE III ~~This course engages students in implementing the engineering design process and using product management and development tools.~~ <u>This is the third of a series of upper-year design courses which simulates the practice of a professional engineer.</u> ~~Student design t~~<u>T</u>eams work closely with industry partners to develop innovative and sustainable solutions to meet global challenges. <u>Students implement the engineering design process and use project management and product development tools.</u> ~~Additionally, this course emphasizes t~~<u>T</u>he role of analysis, simulation, and modeling in engineering design <u>is emphasized</u>. ~~Students further develop their professional and technical skills through activity-, project- and problem-based learning.~~ Through the application of appropriate frameworks ~~to their projects,~~ students gain an appreciation for best practices, ~~and~~ ethical behavior, ~~as well as~~ an awareness of the role of engineers in society, ~~in particular the concepts of~~ engineering leadership, and sustainable design.

Rationale for Change: The course description has been updated to better reflect the current methods used in course delivery.

Effective Term: FALL 2025

Implications for Other Programs: none

CALENDAR & CURRICULUM CHANGE   **Motion #24**

Impact on Students Currently Enrolled: none

Authorization	*Date:*
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   **Motion #25**

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 4720 Project-Based Professional Practice IV

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
4720 PROJECT-BASED PROFESSIONAL PRACTICE IV This course engages students in implementing the engineering design process and using product management and development tools. Student design teams work closely with industry partners to develop innovative and sustainable solutions to meet global challenges. Additionally, this course emphasizes the role of prototyping and manufacturing, testing and verification, design of experiments, optimization and feasibility. Students further develop their professional and technical skills through activity-, project- and problem-based learning. Through the application of appropriate frameworks to their projects, students gain an appreciation for best practices and ethical behavior as well as an awareness of the role of engineers in society, in particular the concepts of engineering leadership and sustainable design.	4720 PROJECT-BASED PROFESSIONAL PRACTICE IV This <u>final design</u> course <u>builds from ENGN 4710. Professional and technical skills are developed through problem-, activity-, and project-based learning.</u> ~~engages students in implementing the engineering design process and using product management and development tools. Student design t~~<u>T</u>eams work closely with industry partners to develop innovative and sustainable solutions to meet global challenges. ~~Additionally, this course emphasizes t~~<u>T</u>he role of prototyping and manufacturing, testing and verification, design of experiments, optimization, and feasibility <u>are emphasized.</u> Students <u>implement the engineering design process and use project management and product development tools.</u> ~~Students further develop their professional and technical skills through activity-, project- and problem-based learning.~~ Through the application of appropriate frameworks ~~to their projects,~~ students gain an appreciation for best practices, ~~and~~ ethical behavior, ~~as well as~~ an awareness of the role of engineers in society, engineering leadership**,** and sustainable design.

Rationale for Change: The course description has been updated to better reflect the current methods used in course delivery and make the language more concise.

CALENDAR & CURRICULUM CHANGE   **Motion #25**

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	*Date:*
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion #26

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

Faculty/School/Department: **Engineering**

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

MOTION: To update the course description for ENGN 4850 Computational Methods for Engineering Design

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
4850 COMPUTATIONAL METHODS FOR ENGINEERING DESIGN This course covers the numerical methods that form the basis of many engineering techniques and applies these methods to quantitative engineering design. The fundamentals of numerical approaches are reviewed, including iteration, approximation, and numerical errors. Methods are presented for numerical integration, differentiation, and nonlinear equation solving. Numerical approaches to solving differential equations are examined and their applications to numerical modelling, including finite-element analysis and computation fluid dynamics, are explored. Computational approaches to frequency-domain analysis using discrete Fourier transforms are introduced, along with related topics such as digital filtering and numerical convolution. Algorithms are presented for array and matrix computation, solving systems of equations, regression, curve fitting, and numerical optimization. Finally, these computational techniques are brought to bear on the topic of design optimization, emphasizing the transformation of real-world engineering design problems into quantitative formulations to which computational design optimization techniques can be applied.	4850 COMPUTATIONAL METHODS FOR ENGINEERING DESIGN This course covers ~~the~~ numerical methods <u>in</u> ~~that form the basis of many engineering techniques and applies these methods to quantitative~~ engineering design. The fundamentals of numerical approaches are ~~reviewed~~ <u>discussed</u>, including iteration, approximation, and numerical errors. <u>Numerical methods are presented in detail</u> for ~~numerical~~ integration, differentiation, <u>regression, interpolation, ordinary differential equations (ODEs), and partial differential equations (PDEs)</u> ~~and nonlinear equation solving. Numerical approaches to solving differential equations are examined and their applications to numerical modelling, including finite-element analysis, are explored~~. Computational approaches <u>including</u> ~~to~~ frequency-domain analysis using discrete Fourier transforms <u>and finite-element analysis</u> are introduced~~, along with related topics such as digital filtering and numerical convolution. Algorithms are presented for array and matrix computation, solving systems of equations, regression, curve fitting, and numerical optimization~~. Finally, these <u>numerical methods are applied to</u> ~~computational techniques are brought to bear on the topic of design optimization, emphasizing the transformation of~~ real-world engineering design problems. ~~into quantitative formulations to which computational design optimization techniques can be applied.~~

CALENDAR & CURRICULUM CHANGE   Motion #26

Rationale for Change: The course description has been updated to better reflect the current content covered in course delivery and the fact that certain topics were too advanced for this course and should only be covered at an introductory level.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

Authorization	*Date:*
Departmental Approval: FSDE Curriculum Committee	December 2, 2024
Faculty/School Approval: Faculty Meeting	January 8, 2025
Faculty Dean's Approval: Dr. Suzanne Kresta	January 8, 2025
Grad. Studies Dean's Approval: NA	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2024

Summary of Motions
Faculty of Graduate Studies

#	Type of Motion	Motion
1.	New Calendar Entry	MCLT
2.	New Course Proposal	CLT 6101
3.	New Course Proposal	MCLT
4.	New Course Proposal	CLT 6201
5.	New Course Proposal	MCLT
6.	New Course Proposal	CLT 6205
7.	New Course Proposal	CLT 6102
8.	New Course Proposal	CLT 6203
9.	New Course Proposal	CLT 6207
10.	New Course Proposal	CLT 6301
11.	New Course Proposal	CLT 6800
12.	New Course Proposal	CLT 7000
13.	New Course Proposal	CLT 6303
14.	New Course Proposal	CLT 7001
15.	New Course Proposal	CLT 7002
16.	New Course Proposal	CLT 7210
17.	New Course Proposal	CLT 7310

NEW CALENDAR ENTRY   Motion #27

Faculty/School: **Graduate Studies**

Department/Program(s): **Master of Cleantech Leadership and Transformation**

MOTION: That a new calendar entry for Graduate Program Admissions into the Master of Cleantech Leadership and Transformation in the Faculty of Graduate Studies, be approved as proposed.

Proposed New Calendar Entry
100 Graduate Program Admissions Master of Cleantech Leadership and Transformation (MCLT) The Master of Cleantech Leadership and Transformation (MCLT) is a transdisciplinary program that aims to produce leaders and innovators who will assist in the adoption and creation of sustainable solutions that transform the planet towards net zero. Applicants for admission to the MCLT program should have demonstrated, or have the potential to be enthusiastic, collaborative, action-oriented advocates who can bring a global perspective to a more sustainable future through an evaluation of policy and innovation with an environmental justice lens. The basic requirements and qualifications are as follows: 1. Any Bachelor's degree of four years or a Bachelor's with honours, or equivalent professional degree, from an approved university, with a minimum GPA of 3.0 or an average of 75% or higher in the in the work of the most recent 20 (60 semester hours) undergraduate courses. 2. English Language Proficiency Requirement consistent with the minimum admission requirements for All Graduate Programs and for Graduate Student Status at UPEI. 3. No prior work experience is required. However, UPEI's goal is to attract candidates with an established commitment to sustainable solutions as well as personal and professional development. Students with related work experience and the knowledge and competencies required to contribute to long-term environmentally sustainable transformations will be considered an asset.   **APPLICATION FOR ADMISSION** All documents pertaining to application for admission are to be submitted through the UPEI graduate application process. **APPLICATION CHECKLIST** • <u>Graduate Studies Application Form</u> • All Official Transcripts • English Language Proficiency Score (for applicants whose first language is not English) • Short video outlining why you are an ideal candidate (see website for further details)

NEW CALENDAR ENTRY

Motion #27

<table>
<tr><td align="center">**Proposed New Calendar Entry**</td></tr>
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• Application Fee

There is a limited number of seats in each cohort and so admission to the program is competitive. Early applications are highly recommended and will be reviewed on a rolling basis. All applications are assessed on a case-by-case basis and adjudicated only once.

TRANSCRIPTS

Official transcripts of the applicant's complete undergraduate and graduate (if any) record to date are to be sent to the Office of the Registrar. Applicants from outside North America are strongly urged to attach official statements of the grades obtained and the subject matter included. If original documentation is not in English, you must also provide a notarized English translation. This does not apply to French language universities in Canada.

ENGLISH PROFICIENCY

Students are expected to be proficient in the use of English, both written and oral, when they begin their studies at the University of Prince Edward Island. The University requires that certification of such proficiency be presented by applicants whose first language is not English or whose normal language of instruction throughout their education (as recognized by UPEI) was not English. Tests of proficiency acceptable to the University, and the minimum scores that must be obtained, are listed under the Admission requirements for all Graduate Programs and for Graduate Student Status section of the Calendar.

The program may extend a conditional offer of admission to an applicant who meets all admission requirements other than the English language proficiency requirement.

REFUSAL OF ADMISSION

Admission to the Master in Cleantech Leadership Program is a competitive process. Limitations of funds, space, facilities, or personnel may make it necessary for the University, at its discretion, to refuse admission to an otherwise acceptable applicant. Meeting minimum requirements does not guarantee admission to the program. To avoid disappointment, applicants are encouraged to submit their documents early.

Rationale for New Calendar Entry: This is a new program.

Effective Term: Fall 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: N/A. No students are enrolled as this is a new program.

NEW CALENDAR ENTRY   **Motion #27**

Resources Required: Three tenure-track faculty members will need to be hired into this program, as well as sessional instructors, support staff (Program Manager, Administrative Assistant). Support will be required from Graduate Admission in the Registrar's Office to handle admissions, and from Experiential Education and the Library in new course support. Special funding has been requested from the PEI Government.

Authorization	*Date:*
Departmental Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty/School Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Registrar's Office Approval: Darcy McCardle.	February 5, 2025

NEW COURSE PROPOSAL

Motion #28

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Cleantech Fundamentals I" be approved as proposed

Course Number and Title	CLT 6101 - Cleantech Fundamentals I
Description	This course examines fundamental concepts of climate change science, bringing students from different backgrounds onto the same page. Topics include ecosystems, biogeochemistry cycles, and greenhouse gases. The major environmental issues that need to be addressed to achieve net zero emissions will be discussed. Students will develop a solid understanding of the cleantech path to net zero and develop hopeful messaging around this.
Cross-Listing	
Prerequisite/Co-Requisite	Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor
Credit(s)	3
Notation	Lecture

This is: A Core Course **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: This Science and Technology fundamentals course offers mandatory foundation for students

Effective Term: FALL 2025

Implications for Other Programs: Access to an elective course for other Masters programs

Impact on Students Currently Enrolled: N/A

Resources Required: A new tenure-track faculty member in Environmental Studies will need to be hired to teach this course. Special funding has been requested from the PEI Government.

NEW COURSE PROPOSAL   **Motion #28**

In offering this course will UPEI require facilities or staff at other institutions: Yes
The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at UPEI campuses in St. Peters or Charlottetown.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

NEW COURSE PROPOSAL   Motion #28

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

Click here to enter text.

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books - 2015 - present
  - # of hits are not necessarily mutually exclusive
    - enviro* or climate or biodivers* or ecolog* - 1,190,480 hits
    - greenhouse gases or fossil fuels or carbon dioxide or emissions 75,929 hits
    - biogeochemical cycle - 936 hits
    - ecosystem - 86,837 hits
    - net zero or carbon neutral* - 5,423 hits
    - subject search "Communication in science" - 249 results in English
  - Journals
    - subject: Environmental Sciences 344 (196 peer-reviewed)
    - subject: Human ecology. Anthropogeography 73 (44 peer-reviewed)
  - Databases
    - Earth, Atmospheric & Aquatic Science Database
    - Gale In Context: Environmental Studies
    - GreenFile
- OERs
  - See Cleantech Fundamentals I for a non-exhaustive list of potential OERs for the program
- Other including potential Open Educational Resources (OERs)
  - The following OERs are not specifically for this course, but rather potential resources for many of the Cleantech courses. This is not an exhaustive list of related OERs:
    - Environmental Science: a Canadian perspective
    - Environmental Issues
    - Introduction to Environmental Sciences and Sustainability
    - The Environmental Politics and Policy of Western Public Lands
    - Environmental Science: an Evidence-Based Study of Earth's Natural Systems
    - Regulations and the Environment: The Canadian Environment
    - Energy and Human Ambitions on a Finite Planet
    - Climate, Justice and Energy Solutions
    - Natural Resources Sustainability: An introductory synthesis
    - Research Journeys to Net Zero
    - Sustainability: A Comprehensive Foundation
- Interdisciplinary packages that include content that support this course
  - Databases
    - Academic Search Complete
    - CAB abstracts
    - Georef
    - Scopus

- ▪ OneSearch
  - o Journal Packages
    - ▪ SAGE Premier Collection
    - ▪ Elsevier ScienceDirect
    - ▪ Wiley Online
    - ▪ Springer
    - ▪ Oxford
    - ▪ Taylor and Francis
    - ▪ Cambridge
  - o eBook packages
    - ▪ Elsevier eBooks
    - ▪ Sage Knowledge Complete
    - ▪ Springer eBooks
    - ▪ EBSCO
    - ▪ Proquest
    - ▪ JSTOR
    - ▪ Cambridge
    - ▪ Wiley
    - ▪ Elsevier
    - ▪ Taylor and Francis
- ● Physical Space in Library (other than collections, explain)
- ● Library Administrative/Research Support
  - o Liaison Librarians at the library provide reference and instruction support for both students and faculty. They supervise the collection and ensure there are adequate resources for the program.

New resources needed to support this proposal:
- ● Collections:
  - o Monographs
    - ▪ Startup funds for purchasing books/ebooks/videos to catch up collection to latest scholarship: $5,000 for each of years 1 to 3
  - o Subscriptions/Databases
    - ▪ Public Affairs Index (EBSCO) - $4500
    - ▪ Sustainability Reference Center (EBSCO) - $6000
- ● Physical Space in Library (other than collections, explain)
- ● Library Administrative/Research Support
  - o The Liaison Librarian will need to develop and maintain a subject guide of relevant resources, tools, and information for the program
- ● Other One-Time or Ongoing Library expenses (e.g. software licenses, explain)

Summary of additional budget allocation required:
- ● First year startup: $ 5000 in first fiscal year the course/program is offered
- ● Additional startup years: $5000 in second year, and $5000 in third year
- ● Annual: $ 10,500 in addition to the startup figure(s) above starting in the fiscal year the program is first offered
  - o Per-year percentage increase in annual: ____3%___

NEW COURSE PROPOSAL   **Motion #28**

We highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow.

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 23, 2024
Name of Librarian to be Contacted with Questions	Keri McCaffrey
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

NEW CALENDAR ENTRY   Motion #29

Faculty/School: **Graduate Studies**

Department/Program(s): **Master of Cleantech Leadership and Transformation**

MOTION: That a new calendar entry for Program Regulations - Graduate Studies, for the Master of Cleantech Leadership and Transformation program in the Faculty of Graduate Studies, be approved as proposed.

Proposed New Calendar Entry
102 Program Regulations – Graduate Studies **Master of Cleantech Leadership and Transformation**   **1. GLOSSARY OF TERMS**   a. Master of Cleantech Leadership and Transformation (MCLT): degree granted for successful completion of the requirements for Master of Cleantech Leadership and Transformation degree as listed in the regulations.   b. Academic Director of the Cleantech Program: a Faculty Member who has administrative responsibility for the coordination of the MCLT program.   c. Cleantech Coordinating Committee: an interdisciplinary standing committee formed to oversee the MCLT program. This committee will work with the UPEI Faculty of Graduate Studies to ensure all policies and guidelines are fulfilled. The mandate of the committee may include: i. establishing and periodically reviewing the goals and objectives of the MCLT program; ii. reviewing applications from prospective students and recommending acceptance or rejection; iii. making recommendations to the Dean of Graduate Studies concerning creation, deletion, or modification of graduate programs and courses; iv. directing the coordination of graduate courses in the Cleantech program; v. reviewing academic records of graduate students and recommending to the Dean of Graduate Studies the awarding of a degree or courses of action in the event of substandard performance, including dismissal from the program;

NEW CALENDAR ENTRY   **Motion #29**

Proposed New Calendar Entry

vi. recommending changes to the Graduate Studies Academic Calendar.

2. ENROLMENT AND REGISTRATION

Procedures

Applicants must receive formal notification from the Office of the Registrar that they have been accepted into the program before registering as graduate students in the MCLT program. See the Admissions section in the calendar that applies to the MCLT program. Students will register continually each semester in the courses outlined in their MCLT program. In exceptional circumstances where a graduate student finds it necessary to interrupt their studies they may apply for a Leave of Absence, per Graduate Academic Regulations. A student who fails to register as required will be deemed to have withdrawn from the program. Students should refer to the Academic Calendar.

Registration Changes

Changes in student registration such as deletion or addition of courses must be approved by the Academic Director (with input as required by the MCLT Coordinating Committee) and formal approvals of the University when required. Please check the UPEI web sites for the most recent program updates.

Except where credits are granted by special permission for courses outside of program, credits will only be given for courses listed on the student's registration form or authorized through an official change of registration.

In exceptional cases, the MCLT Coordinating Committee and the Dean of Graduate Studies may consider flexibility in courses for applicants. This means that students deemed to have significant learning in a particular area may normally be allowed one course exemption which is to be substituted with another approved course. Appropriate documentation will be required to consider course exemption.

Students should discuss course selection with the Program Manager or Academic Director.

NEW CALENDAR ENTRY

Proposed New Calendar Entry

Withdrawal from the Program

Students wishing to withdraw from the program should consult with the Academic Director. Students may withdraw from a program by notifying the Office of the Registrar using the appropriate form. Regular semester deadlines will apply to this process.

Discontinuing a Course

Students must discuss course discontinuations with the Academic Director. Discontinuations must be requested and processed by the published deadlines.

Incomplete Courses

A student who fails to complete all components of a course due to circumstances, such as illness, may be granted permission for incomplete (INC) status in the course. Students must submit such a request to the Academic Director before the end date for the course. The Director will seek advice from the professor concerned as to granting the incomplete status. Students should refer to the Graduate Academic Regulation that governs INC grades.

Re-registrations and Course Re-takes

Students who fail a course in the MCLT program may re-take the course once more. If the course is failed after the second attempt, the student will be dismissed from the MCLT program.

Re-enrolment in the Program

Re-enrolment in the program can occur but is subject to re-application and a statement explaining why re-admission should be permitted. The MCLT Committee will review these materials for approval. Students will be required to pay all applicable fees and any fee increases that have occurred between the time of

Proposed New Calendar Entry

their last enrolment and re-enrolment. Credit for courses previously completed will be re-evaluated and applied to the program requirements where appropriate.

3. PROGRAM EXPECTATIONS

The MCLT Program is a professional degree program that employs a cohort model. Students' full engagement is vital to the success of the program and the experience of other students in the class.

Class attendance is expected. A student who is unable to attend, or who will be late for a class, due to an emergency or extenuating circumstance should inform the course instructor as soon as the circumstance becomes known. Unapproved absences may negatively affect a student's grade, in accordance with the policy set out in the course syllabus.

4. GRADES

Grade Requirements

A minimum grade of 60% is required to pass a course and an overall average of 75% is required to complete the program and obtain a degree.

Transcripts of Records

Official transcripts of the student's academic record are available through the Registrar's Office. Transcripts will be sent to other universities, to prospective employers, or to others outside the University only upon formal request by the student.

5. GRADUATION REQUIREMENTS

To be awarded the Master of Cleantech Leadership and Transformation degree, a graduate student must:

i. successfully complete the program of studies as set out at the time of admission into the program or as agreed to by the MCLT Coordinating Committee,

ii. complete and submit an Application for Graduation form, and

NEW CALENDAR ENTRY   Motion #29

Proposed New Calendar Entry
iii. meet all other University regulations. In addition, students must have paid all fees owed to the University and returned all library resources.

Rationale for New Calendar Entry: This is a new program.

Effective Term: Fall 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: N/A. No students are enrolled as this is a new program.

Resources Required: Three tenure-track faculty members will need to be hired into this program, as well as sessional instructors, support staff (Program Manager, Administrative Assistant). Support will be required from Graduate Admission in the Registrar's Office to handle admissions, and from Experiential Education and the Library in new course support. Special funding has been requested from the PEI Government.

Authorization	*Date:*
Departmental Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty/School Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Registrar's Office Approval: Darcy McCardle.	February 5, 2025.

NEW COURSE PROPOSAL

Motion #30

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Environmental Ethics and Social Responsibility" be approved as proposed.

Course Number and Title	CLT 6201 - Environmental Ethics and Social Responsibility
Description	This course explores key debates concerning: the moral significance of nature; basic moral theories; moral relativism, objectivism, and pragmatism; Indigenous perspectives on human-nature relations, ethical assessment of new technologies including impacts on human health and behavior, biodiversity, water conservation and climate change; the question of why humans have degraded their environments, including economic and political causes; the concepts of space, place, and ecological identity; ethical limitations of economic-driven decision-making and cost-benefit analysis; professional ethics and social responsibility; environmental justice, environmental racism, Reconciliation, and key debates in the ethics of climate change (individual, intergenerational, and international responsibilities; just transitions, geoengineering).
Cross-Listing	
Prerequisite/Co-Requisite	Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor
Credit(s)	3
Notation	Lecture

This is: A Core Course

Grade Mode: Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: Offered in the first semester, this core course encourages students early in the program to consider the ethical terrain within which sustainable technology and policy are implemented.

Effective Term: FALL 2025

NEW COURSE PROPOSAL   **Motion #30**

Implications for Other Programs: Access to an elective course for other Masters programs

Impact on Students Currently Enrolled: N/A

Resources Required: A sessional instructor will need to be hired to teach this course. Special funding has been requested from the PEI Government for this program.

In offering this course will UPEI require facilities or staff at other institutions: Yes
The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

NEW COURSE PROPOSAL

Motion #30

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

Click here to enter text.

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books
    - (moral or morality or ethics or ethical or "social responsibility") AND (enviro* or climate or biodivers* or ecolog*) - **92,219 total hits**
      - AND (health or "quality of life") - <u>13,527 total hits</u> (within the first search)
      - AND (indigenous or native or aboriginal or racism or justice or race) - <u>16,669 total hits</u> (within the first search)
      - AND (tech or technology or politic* or econom*) - <u>51,404 total hit</u>s (within the first search)
  - Journals
    - subject: Environmental Sciences 344 (196 peer-reviewed)
    - subject: Human ecology. Anthropogeography 73 (44 peer-reviewed)
    - subject: Environmental technology. Sanitary engineering 281 (177 peer-reviewed)
    - subject: Ethics 102 (71 peer-reviewed)
    - keyword search: Title, Contains environmental ethics 5 (3 peer-reviewed)
    - keyword search: Title, Contains environmental economics 16 (11 peer-reviewed)
  - Databases
    - EconLit with Full Text
    - Earth, Atmospheric & Aquatic Science Database
    - Gale In Context: Environmental Studies
    - GreenFile
    - Business Source Complete
    - PhilPapers
- OERs
  - See Cleantech Fundamentals I for a non-exhaustive list of potential OERs for the program
- Interdisciplinary packages that include content that support this course
  - Databases
    - Academic Search Complete
    - CAB abstracts
    - Georef
    - Scopus
    - OneSearch
    - Statista
  - Journal Packages
    - JSTOR
    - Project MUSE
    - SAGE Premier Collection
    - Elsevier ScienceDirect

- - - Wiley Online
  - o eBook packages
    - Elsevier eBooks
    - Sage Knowledge Complete
    - Springer eBooks
- Physical Space in Library (other than collections, explain)
- Library Administrative/Research Support
  - o Liaison Librarians at the library provide reference and instruction support for both students and faculty. They supervise the collection and ensure there are adequate resources for the program.

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	June 21, 2024
Name of Librarian to be Contacted with Questions	Keri McCaffrey
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	July 17, 2024

NEW CALENDAR ENTRY   **Motion #31**

Faculty/School: **Graduate Studies**

Department/Program(s): **Master of Cleantech Leadership and Transformation**

MOTION: That a new calendar entry for Graduate Programs and Courses for the Master of Cleantech Leadership and Transformation in the Faculty of Graduate Studies, be approved as proposed.

Proposed New Calendar Entry
Master of Cleantech Leadership and Transformation (MCLT) Taking an inquiry-based learning approach, this program follows a cohort-model and provides students a unique and valuable opportunity to develop the skills, knowledge, and strategic mindset, through applied learning, to bridge traditional and emerging knowledge systems and drive cleantech innovation for a sustainable future. **STRUCTURE OF PROGRAM:** Graduate students will register in the interdisciplinary MCLT program under the Dean of Graduate Studies. The program requires students to take courses in the Fall, Winter, and Summer semesters continuously. In addition to the "General Regulations for Graduate Programs", the following regulations apply specifically to the Master of Cleantech Leadership and Transformation degree. **PROGRAM REQUIREMENTS:** Students enrolled in the MCLT program are required to complete a total of 36 credit hours (12 courses) including a capstone project. The components of the degree program include eleven core courses (33 credit hours), one elective course (3 credit hours), and Orientation to the Capstone Project (0 credit hours). Students have the opportunity to complete the MCLT program in sixteen months. Students must complete all required courses within three (3) years of being admitted to the program and meet graduation requirements within four (4) years of being admitted to the program (exceptions may be made by permission of the Dean). **The courses required for the MCLT are as follows:** CLT 6101 Cleantech Fundamentals I

NEW CALENDAR ENTRY   **Motion #31**

Proposed New Calendar Entry
CLT 6102 Cleantech Fundamentals II

CLT 6201 Environmental Ethics & Social Responsibility

CLT 6203 Indigenous Worldviews on Environmental Sustainability

CLT 6205 Cleantech Governance, Regulation, Policy and Politics

CLT 6207 Economics and Policy Analysis of Cleantech

CLT 6301 Project Management for Cleantech Transformation

CLT 6303 Innovation and Entrepreneurship for Cleantech Transformation

CLT 6800 Leadership Skills for Cleantech Transformation

CLT 7000 Orientation to Cleantech Capstone Project

CLT 7001 Cleantech Capstone Project I

CLT 7002 Cleantech Capstone Project II

In addition to completing all required courses, students must complete one of the following elective courses:

CLT 7210 Sustainable Communities and Policy

CLT 7310 Energy Technologies for Sustainable Neighbourhoods

CLEANTECH COURSES

CLT 6101 Cleantech Fundamentals I

This course examines fundamental concepts of climate change science, bringing students from different backgrounds onto the same page. Topics include ecosystems, biogeochemistry cycles, and greenhouse gases. The major environmental issues that need to be addressed to achieve net zero emissions will be discussed. Students will develop a solid understanding of the cleantech path to net zero and develop hopeful messaging around this.

PREREQUISITE: Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor

HOURS OF CREDIT: 3

NEW CALENDAR ENTRY   **Motion #31**

Proposed New Calendar Entry

CLT 6102 Cleantech Fundamentals II

This course builds on Cleantech Fundamentals I by examining the path to net zero energy. Students will first gain a solid understanding of energy systems, major energy technologies underlying energy supply and consumption, their applications, and their integration with the electric grid. This course also introduces emerging clean energy technologies and policies impacting the development, deployment, and utilization of these technologies to address environmental issues. The role of big data, AI tech innovations, and other hot topics in the net zero energy path and energy security will be discussed.

PREREQUISITE: CLT 6101 - Cleantech Fundamentals I or permission of instructor

HOURS OF CREDIT: 3

CLT 6201 Environmental Ethics & Social Responsibility

This course explores key debates concerning: the moral significance of nature; basic moral theories; moral relativism, objectivism, and pragmatism; Indigenous perspectives on human-nature relations, ethical assessment of new technologies including impacts on human health and behavior, biodiversity, water conservation and climate change; the question of why humans have degraded their environments, including economic and political causes; the concepts of space, place, and ecological identity; ethical limitations of economic-driven decision-making and cost-benefit analysis; professional ethics and social responsibility; environmental justice, environmental racism, Reconciliation, and key debates in the ethics of climate change (individual, intergenerational, and international responsibilities; just transitions, geoengineering).

PREREQUISITE: Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor

HOURS OF CREDIT: 3

CLT 6203 Indigenous Worldviews on Environmental Sustainability

This graduate-level course discusses Indigenous worldview and philosophy to respond to the impacts of climate change. It explores the integration of Indigenous Knowledges with Western Knowledges to advance unique approaches to island and global environmental sustainability in the context of climate change.

PREREQUISITE: Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor

HOURS OF CREDIT: 3

NEW CALENDAR ENTRY   **Motion #31**

Proposed New Calendar Entry

CLT 6205 Cleantech Governance, Regulation, Policy and Politics

An introduction to clean technology governance, regulation, policy and politics, the first half focuses on Canada, as students examine the role that various levels of government play in relation to existing constitutional, administrative and regulatory frameworks. The second half employs a comparative perspective exploring case studies from several jurisdictions' settings, both developed and developing, looking at approaches of deploying cleantech projects. Students examine ideas, policy actors and institutions involved. We will address significant questions around efforts to support the transition towards net zero via the creation of a policy environment which lends itself to successful cleantech projects. Students will undertake a detailed analysis of a cleantech project, producing a well-researched policy product.

PREREQUISITE: Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor

HOURS OF CREDIT: 3

CLT 6207 Economics and Policy Analysis of Cleantech

This interdisciplinary course merges economics and political science to analyze cleantech-related issues within the framework of public policy, defined as 'anything a government chooses to do or not to do.' A primary goal is to understand the factors influencing policy decisions, particularly institutions, context, and decision-making processes. The economic aspect of the course focuses on the tension between economic activities and environmental sustainability, exploring how economic practices lead to environmental degradation and what regulatory actions can balance economic growth with environmental sustainability. Politically, the course examines the roles of different government structures in Canada in policy development, evaluating the effectiveness of policies like carbon pricing and subsidies. Students will develop skills to critically assess government policies in environmental economics, understanding the interplay between economic theories and political realities.

PREREQUISITE: CLT 6205 - Cleantech Governance, Regulation, Policy, and Politics or permission of instructor

HOURS OF CREDIT: 3

CLT 6301 Project Management for Cleantech Transformation

This course will introduce students to project management knowledge, tools, and techniques to effectively manage projects within the rapidly evolving landscape of sustainable and clean technologies. Throughout the course, students will be exposed to sustainable environmental, social, and governance (ESG) principles and practices using lectures, case studies, and facilitated discussion. Students will develop a

NEW CALENDAR ENTRY

Motion #31

Proposed New Calendar Entry

comprehensive understanding of project management principles while integrating ESG frameworks into project planning, stakeholder analysis, and engagement, execution, and evaluation by focusing on various project management concepts, guidelines, and practices for the leaders of sustainable and clean technology initiatives.

PREREQUISITE: Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor

HOURS OF CREDIT: 3

CLT 6303 Innovation and Entrepreneurship for Cleantech Transformation

This course looks at efforts of innovation and entrepreneurship in cleantech. These efforts are described and assessed in the context of innovation management and entrepreneurial ecosystems. The role of entrepreneurial thinking, innovative organizational culture, portfolio management, engagement of stakeholders, collaboration with partners, mitigation of technological risks, and interactions with investors are taught both in theory and using case studies relevant to cleantech. The course utilizes real-world learning techniques such as case studies, guest speakers, and project/venture plans.

PREREQUISITE: Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor

HOURS OF CREDIT: 3

CLT 6800 Leadership Skills for Cleantech Transformation

This course provides students with an overview of major leadership theories and opportunities to develop and practice their interpersonal skills in preparation for leadership in influential cleantech roles. Topics covered include leadership styles, followership and empowerment, change management and agency, influence and persuasion, effective communication, and conflict management. Students will reflect on their own leadership style and hone their leadership and interpersonal skills through interactive case discussions, role plays, and presentations. Key areas of skill development include self-awareness, critical thinking, adaptability, persuasion, conflict management, and communication.

PREREQUISITE: Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor

HOURS OF CREDIT: 3

CLT 7000 Orientation to Cleantech Capstone Project

NEW CALENDAR ENTRY   **Motion #31**

Proposed New Calendar Entry

The orientation module is an engaging and informative overview designed to prepare students for their Capstone Project experience. It will provide insights from industry and community leaders in cleantech, guidance on how to best prepare for the Capstone Project courses and networking opportunities. The course grade will be on a pass/fail basis.

PREREQUISITE: Acceptance into the Master of Cleantech Leadership and Transformation Program AND permission of instructor

HOURS OF CREDIT: 0

CLT 7001 Cleantech Capstone Project I

This course is the first of a two-part Capstone Project series where students will have the opportunity to begin their teamwork on a real-life project with a community or industry partner. Students will focus on the initial stages of the Capstone Project which include developing a project proposal, generating research questions, conducting a literature review, environmental scan, and needs assessment, reviewing research ethics guidelines, and developing the project's research methodology. Supported by a series of workshops and seminars on topics like proposal writing, literature searching and citation, time management, and peer workshopping and feedback, emphasizing partnership development and engagement.

PREREQUISITE: CLT 7000 or permission of the instructor

HOURS OF CREDIT: 3

CLT 7002 Cleantech Capstone Project II

This course is the second of a two-part Capstone Project series focusing on the development and completion of the team project which will culminate in a final report and presentation, with an analysis of findings and recommendations for the community or industry partner. In addition to the Capstone Project, students will individually write a leadership development portfolio reflecting on how course workshops and seminars have informed their knowledge, skills, attitudes, and identity as leaders. Supported by workshops and seminars focusing on teamwork skills, stakeholder engagement, community entry practices, and communication skills, while also providing a discussion forum for students to learn from and engage with leaders in cleantech.

PREREQUISITE: CLT 7001 - Capstone Project I

HOURS OF CREDIT: 3

Elective Courses (1 required)

CLT 7210 Sustainable Communities and Policy

NEW CALENDAR ENTRY   Motion #31

Proposed New Calendar Entry
The course advances students' understanding of the concept of sustainable development (SD) by introducing the history of the concept and different ways of measuring sustainability. The course touches upon the main factors that influence policy decisions and outcomes regarding SD (i.e., the role of power, economic interests, expertise, public opinion, resources, and technological innovation). Focusing on 'community energy systems' [CES] as a practical strategy for advancing sustainability. CES necessitates deep public involvement in development processes, as well as a fair and localized distribution of project outcomes. The CES development paradigm will be explored as a strategy for mitigating externalities associated with all energy sources, as well as a means to achieve distributive, procedural, recognition, and other forms of energy justice. PREREQUISITE: Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor HOURS OF CREDIT: 3   CLT 7310 Energy Technologies for Sustainable Neighbourhoods This course offers a comprehensive exploration of sustainable community planning and renewable energy integration. Students will delve into historical perspectives and contemporary challenges, analyzing urban sprawl and sustainable built environment forms, with an emphasis on clean energy and nature-based solutions. The curriculum covers the integration of diverse renewable sources, microgrids, and energy storage technologies, enhancing grid reliability and resiliency. Through a collaborative approach, students will learn to integrate renewable energy into existing Canadian buildings and neighborhoods. By combining planning, renewable energy, and healthy community principles, students will receive a holistic perspective on sustainable communities and energy systems. PREREQUISITE: CLT 6102 - Cleantech Fundamentals II or permission of instructor HOURS OF CREDIT: 3

Rationale for New Calendar Entry: This is a new program.

Effective Term: Fall 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: N/A. No students are enrolled as this is a new program.

Resources Required: Three tenure-track faculty members will need to be hired into this program, as well as sessional instructors, support staff (Program Manager, Administrative Assistant). Support will be required from Graduate Admission in the Registrar's Office to handle admissions, and from Experiential Education and the Library in new course support. Special funding has been requested from the PEI Government.

NEW CALENDAR ENTRY   **Motion #31**

Authorization   *Date:*

Departmental Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty/School Approval: Click here to enter name of approver.	Click here to select approval date.
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Registrar's Office Approval: Darcy McCardle.	February 5, 2025

UNIVERSITY
of Prince Edward
ISLAND

NEW COURSE PROPOSAL

Motion #32

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Cleantech Governance, Regulation, Policy and Politics" be

approved as proposed.

Course Number and Title	CLT 6205 - Cleantech Governance, Regulation, Policy, and Politics.
Description	An introduction to clean technology governance, regulation, policy and politics, the first half focuses on Canada, as students examine the role that various levels of government play in relation to existing constitutional, administrative and regulatory frameworks. The second half employs a comparative perspective exploring case studies from several jurisdictions' settings, both developed and developing, looking at approaches of deploying cleantech projects. Students examine ideas, policy actors and institutions involved. We will address significant questions around efforts to support the transition towards net zero via the creation of a policy environment which lends itself to successful cleantech projects. Students will undertake a detailed analysis of a cleantech project, producing a well-researched policy product.
Cross-Listing	
Prerequisite/Co-Requisite	Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor
Credit(s)	3
Notation	Lecture

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: The first of two core courses on governance, policy, and regulations to be delivered sequentially, early in the program, with an elective for advanced policy exploration offered in the final semester.

Effective Term: FALL 2025

UNIVERSITY of Prince Edward ISLAND

NEW COURSE PROPOSAL   Motion #32

Implications for Other Programs: Access to an elective course for other Masters programs

Impact on Students Currently Enrolled: N/A

Resources Required: A new tenure-track faculty member in the Faculty of Arts will need to be hired to teach this course. Special funding has been requested from the PEI Government.

In offering this course will UPEI require facilities or staff at other institutions: Yes
The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

NEW COURSE PROPOSAL   *Motion #32*

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - **Print books, ebooks & articles:**
    Relevant subject headings include:
    - Clean technologies (1,229,261)
    - Clean technologies -- governance (5,421)
    - Clean technology governance -- Canada (226)
    - Clean technologies -- environmental policy (62,003)
    - Clean technologies – regulations and laws (18,003)
    - Clean technology regulation -- Canada (1,285)
    - Clean technology policy -- Canada (2,788)
    - Clean technology -- policy environment (25,090)
    - Clean technology politics -- Canada (232)
    - Clean technologies -- Canada (44,279)
    - Clean technologies -- Regulatory frameworks (1,822)
    - Clean technologies -- Regulatory frameworks -- Canada (74)
    - Clean technologies -- Regulatory frameworks -- International (545)
    - Clean technologies -- Regulatory bodies -- Natural gas (76)
    - Clean technologies -- Regulatory bodies -- Nuclear (62)
    - Clean technologies -- Regulatory bodies -- Hydro (8)
    - Clean technologies -- Regulatory bodies -- Wind (40)
    - Clean technologies -- Regulatory bodies -- Solar (42)
    - Clean technology -- net zero (6,746)
    - Net zero transitions (29,430)
    - Clean energy sources (255,213)

  - **Databases:**
    - Academic Search Complete
    - Annual Review of Political Science
    - Business Source Complete
    - CanLII full text of Canadian laws, cases, regulations
    - Canada Commons
    - EconLit with Full Text
    - Gale In Context: Environmental Studies
    - Gale OneFile: Environmental Studies and Policy
    - GeoRef
    - Google Scholar
    - GreenFile
    - HeinOnline Canadian Core
    - Scopus
    - Social Science Research Network (SSRN)

NEW COURSE PROPOSAL   **Motion #32**

- Statista

- **Journals:**
    - Subject: Clean technologies (5,954 peer-reviewed)
    - Subject: Clean technologies and environmental policy (232 peer-reviewed)
    - Subject: Clean technology governance (21 peer-reviewed)
    - Subject: Clean technology and regulatory frameworks (22 peer-reviewed)
    - Subject: Clean technology and net zero (24 peer-reviewed)

- **Streaming video**
    - NFB Campus (National Film Board)
      Examples include: The Great Clean-Up, Freshwater World, Paradise Lost.
    - Curio (CBC news and documentary videos)
      Includes segments from the CBC National News, and episodes of The Nature of Things concerning clean technologies.
    - Academic Videos Online (AVON: 4,150 hits for videos concerning clean technologies.

- **Interdisciplinary packages that include content that support this course:**
    - 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.

- **Other physical media**
    - Clean technologies [videorecording] (DVD) - UPEI Media Centre
    - Government and NGO resources
        - Publications & data
        - Policies Database
        - Pembina Institute
        - Clean Energy Canada
        - Canada Cleantech

- **Other online media**
    - Eureka
    - Newsbank

- **UPEI Archives and Special Collections (UASC)**
    - UASC holdings include ten audiocassettes that document the UPEI Forum on Energy held on February 25 and 26, 1982 held in the UPEI Science Centre. Conference attendees contributed a wide variety of expertise from the energy and industrial sectors home to PEI. Sponsored by UPEI with the assistance of the R.H.W. Foundation.These UASC records are not in the Robertson Library catalog.

- Library Administrative/Research Support

NEW COURSE PROPOSAL   **Motion #32**

- - Liaison Librarians provide reference and instruction support to 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:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel the interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 23, 2024
Name of Librarian to be Contacted with Questions	Juanita Rossiter
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

NEW COURSE PROPOSAL

Motion #33

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Cleantech Fundamentals II" be approved as proposed.

Course Number and Title	CLT 6102 - Cleantech Fundamentals II
Description	This course builds on Cleantech Fundamentals I by examining the path to net zero energy. Students will first gain a solid understanding of energy systems, major energy technologies underlying energy supply and consumption, their applications, and their integration with the electric grid. This course also introduces emerging clean energy technologies and policies impacting the development, deployment, and utilization of these technologies to address environmental issues. The role of big data, AI tech innovations, and other hot topics in the net zero energy path and energy security will be discussed.
Cross-Listing	
Prerequisite/Co-Requisite	Prerequisite: CLT 6101 - Cleantech Fundamentals I or permission of instructor.
Credit(s)	3
Notation	Lecture

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: This Science & Technology course builds on Cleantech Fundamentals I to provide knowledge of environmental issues and clean, sustainable solutions broadly

Effective Term: WINTER 2026

Implications for Other Programs: Access to an elective course for other Masters programs

Impact on Students Currently Enrolled: N/A

NEW COURSE PROPOSAL

Motion #33

Resources Required: A new tenure-track faculty member in Environmental Studies will need to be hired to teach this course. Special funding has been requested from the PEI Government.

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

The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the UPEI campuses in St. Peters or Charlottetown.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL   Motion #33

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books - 2015 - present
  - # of hits are not necessarily mutually exclusive
    - cleantech OR "clean technology" OR "net zero" OR "green technology" OR "renewable energy" - 1,648,086 hits
      - AND policy OR policies OR law OR laws OR legislation OR regulation 8,288 hits (within the previous search results)
    - energy AND supply OR consumption 107,201 hits
      - AND policy OR policies OR law OR laws OR legislation OR regulation 20,692 hits (within previous search results)
    - (clean OR green) AND energy 41,964 hits
      - AND policy OR policies OR law OR laws OR legislation OR regulation 7,914 hits (within previous search results)
    - greenhouse gases or fossil fuels or carbon dioxide or emissions 75,929 hits
    - net zero or carbon neutral* - 5,423 hits
  - Journals
    - subject: Environmental Sciences 344 (196 peer-reviewed)
    - subject: Human ecology. Anthropogeography 73 (44 peer-reviewed)
    - subject: Renewable energy sources 54 (34 peer-reviewed)
    - subject: Energy conservation 16 (8 peer-reviewed)
    - subject: Environmental technology.283 (194 peer-reviewed)
  - Databases
    - Earth, Atmospheric & Aquatic Science Database
    - Gale In Context: Environmental Studies
    - GreenFile
    - IEEE
- OERs
  - See Cleantech Fundamentals I for a non-exhaustive list of potential OERs for the program
- Interdisciplinary packages that include content that support this course
  - Databases
    - Academic Search Complete
    - CAB abstracts
    - Georef
    - Scopus
    - OneSearch
    - CBCA
    - Project MUSE
    - O'Reilly Online Learning
  - Journal Packages
    - SAGE Premier Collection

NEW COURSE PROPOSAL   Motion #33

- ▪ Elsevier ScienceDirect
- ▪ Wiley Online
- ▪ Springer
- ▪ Oxford
- ▪ Taylor and Francis
- ▪ Cambridge
  - o eBook packages
    - ▪ Elsevier eBooks
    - ▪ Sage Knowledge Complete
    - ▪ Springer eBooks
    - ▪ EBSCO
    - ▪ Proquest
    - ▪ JSTOR
    - ▪ Cambridge
    - ▪ Wiley
    - ▪ Elsevier
    - ▪ Taylor and Francis
- ● Physical Space in Library (other than collections, explain)
- ● Library Administrative/Research Support
  - o Liaison Librarians at the library provide reference and instruction support for both students and faculty. They supervise the collection and ensure there are adequate resources for the program.

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 23, 2024
Name of Librarian to be Contacted with Questions	Keri McCaffrey
Approved by University Librarian or Designate	Donald Moses

NEW COURSE PROPOSAL

Motion #33

Date Approved by UL or Designat	August 5, 2024

NEW COURSE PROPOSAL

Motion #34

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Indigenous Worldviews of Environmental Sustainability" be approved as proposed.

Course Number and Title	CLT 6203 - Indigenous Worldviews of Environmental Sustainability
Description	This graduate-level course discusses Indigenous worldview and philosophy to respond to the impacts of climate change. It explores the integration of Indigenous Knowledges with Western Knowledges to advance unique approaches to island and global environmental sustainability in the context of climate change.
Cross-Listing	
Prerequisite/Co-Requisite	Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor
Credit(s)	3
Notation	Lecture

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: Indigenous approaches to sustainability will be taught in this core course and indigenous philosophies will also permeate throughout the entire curriculum.

Effective Term: WINTER 2026

Implications for Other Programs: Potential elective for MAIS students. This area was deemed a gap in the MAIS program and the course was developed in collaboration with MAIS and IKERAS.

Impact on Students Currently Enrolled: N/A

Resources Required: A sessional instructor will need to be hired to teach this course. Special funding has been requested from the PEI Government for this program.

NEW COURSE PROPOSAL   **Motion #34**

In offering this course will UPEI require facilities or staff at other institutions: Yes
The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	January 20, 2025
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	January 20. 2025
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

CLT 6203 - Indigenous Worldviews of Environmental Sustainability

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books
    - Relevant subject headings include:
      - Climate change (17,550)
      - Climate change mitigation (1,678)
      - Indigenous Knowledge (817)
      - Indigenous ways of knowing (7)
      - Traditional ecological knowledge (360)
      - Traditional ecological knowledge -- Canada (22)
  - Databases
    - American Indian History Collection
    - *Bibliography of Indigenous Peoples in North America*
    - *Earth, Atmospheric & Aquatic Science Collection*
    - *Encyclopedia of Native-American History*
    - *Gale Onefile: Environmental Studies and Policy*
    - *GeoRef*
    - *HeinOnline Canadian Core*
    - *Indigenous Peoples of North America*
    - *Informit Indigenous Collection*
    - *Academic Search Complete* (EBSCO)
    - *MLA International Bibliography* (EBSCO)
    - *America: History & Life* (EBSCO)
    - *SocIndex with Full Text* (EBSCO)
    - *CBCA (Canadian Business & Current Affairs)* (Proquest)
    - *Canada Commons, Canadian Electronic Library* (thousands of ebooks, tens of thousands of public documents)
    - *Frontier Life: Borderlands, Settlement & Colonial Encounters* (Adam Matthew Digital, historical archive)
    - *CANSIM @ CHASS* - Statistics Canada's socioeconomic database
  - Journal Subscriptions
    - The Library provides access to a number of key journals in this field. See 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); Indigenous Peoples Outside Canada (2 video) and more
    - Curio (CBC news and documentary videos)
      - Provides access to theme collections including Residential Schools (38 videos), Truth and Reconciliation in Canada (22 videos), Indigenous Youth

(38 videos), Indigenous Governance (34 videos), Indigenous Language Revitalization (25 videos), and more.
- ▪ Academic Videos Online
  - ■ Access to over 2475 videos with search term "Indigenous"
- ● Interdisciplinary packages that include content that support this course
  - ■ 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
  - o 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 collections, explain)
- ● Library Administrative/Research Support
  - o 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:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	January 21, 2025
Name of Librarian to be Contacted with Questions	Keri McCaffrey

Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	January 21, 2025

UNIVERSITY of Prince Edward ISLAND

NEW COURSE PROPOSAL   **Motion #35**

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Economics and Policy Analysis of Cleantech" be approved

as proposed.

Course Number and Title	CLT 6207 - Economics and Policy Analysis of Cleantech
Description	This interdisciplinary course merges economics and political science to analyze cleantech-related issues within the framework of public policy, defined as 'anything a government chooses to do or not to do.' A primary goal is to understand the factors influencing policy decisions, particularly institutions, context, and decision-making processes. The economic aspect of the course focuses on the tension between economic activities and environmental sustainability, exploring how economic practices lead to environmental degradation and what regulatory actions can balance economic growth with environmental sustainability. Politically, the course examines the roles of different government structures in Canada in policy development, evaluating the effectiveness of policies like carbon pricing and subsidies. Students will develop skills to critically assess government policies in environmental economics, understanding the interplay between economic theories and political realities.
Cross-Listing	
Prerequisite/Co-Requisite	Prerequisite: CLT 6205 - Cleantech Governance, Regulation, Policy, and Politics or permission of instructor.
Credit(s)	3
Notation	Lecture

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: The second of two courses on governance, policy, and regulation to be delivered sequentially, early in the program.
Effective Term: WINTER 2026

Implications for Other Programs: Access to an elective course for other Masters programs

Impact on Students Currently Enrolled: N/A

Resources Required: A new tenure-track faculty member in the Faculty of Arts will need to be hired to teach this course. Special funding has been requested from the PEI Government.

In offering this course will UPEI require facilities or staff at other institutions: Yes
The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - **Print books, ebooks & articles:**
    Relevant subject headings include:
    - Cleantech -- public policy (2,733)
    - Cleantech -- policy decisions (777)
    - Cleantech -- decision-making process (376)
    - Environmental sustainability -- economic activities (106,813)
    - Economic practices -- environmental degradation (21,944)
    - Regulatory actions -- economic growth (5,739)
    - Regulatory actions -- environmental sustainability (4,101)
    - Canada -- carbon pricing (7,709)
    - Canada -- carbon pricing and subsidies (169)
    - Canada -- environmental economics (146,282)
    - Canada -- environmental economics -- government policy (18,392)

  - **Databases:**
    - Academic Search Complete
    - Business Source Complete
    - CAB Abstracts (via CAB Direct)
    - CAB Abstracts (via EBSCOHOST)
    - CanLII full text of Canadian laws, cases, regulations
    - CANSIM - Canadian Socio-Economic Information (via CHASS)
    - Canada Commons
    - EconLit with Full Text
    - EconPapers (part of RePec)
    - Gale In Context: Environmental Studies
    - Gale OneFile: Environmental Studies and Policy
    - Gale OneFile: Economics and Theory
    - GeoRef
    - Google Scholar
    - GreenFile
    - HeinOnline Canadian Core
    - Scopus
    - Social Science Research Network (SSRN)
    - Springer LINK
    - Work Bank Open Knowledge

  - **Journals:**
    - Subject: Cleantech economics (12 peer-reviewed)
    - Subject: Cleantech policies (11 peer-reviewed)
    - Subject: Environmental sustainability (71,646 peer-reviewed)
    - Subject: Environmental economics (292,834 peer-reviewed)

UNIVERSITY of Prince Edward ISLAND

Sixth Curriculum Report
February 25, 2025 (APCC)
March 14, 2025 (Senate)

NEW COURSE PROPOSAL

Motion # 35

- Subject: <u>Carbon pricing</u> (10,682 peer-reviewed)

  - **Streaming video**
    - <u>NFB Campus (National Film Board)</u>
      Examples include: <u>The Battle of Rabaska - Chronicle of an Environmental Conflict</u>, <u>Pipelines, Power and Democracy</u>, and <u>Forbidden Forest</u>.
    - <u>Curio</u> (CBC news and documentary videos)
      Examples include: <u>The Degrowth Paradigm</u>, <u>Creatures of Convenience</u>, and <u>Industrial Waste</u>.
    - <u>Academic Videos Online</u> (AVON): <u>18183</u> hits for videos concerning "clean technologies and public policy."

  - **Interdisciplinary packages that include content that support this course:**
    - 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.

  - **Other physical media**
    - <u>Clean technologies [videorecording] (DVD)</u> - UPEI Media Centre
    - <u>Government and NGO resources</u>
      - <u>Publications & data</u>
      - <u>Policies Database</u>
      - <u>Pembina Institute</u>
      - <u>Clean Energy Canada</u>
      - <u>Canada Cleantech</u>

  - **Other online media**
    - <u>Eureka</u>
    - <u>Newsbank</u>

  - **Other: UPEI Archives and Special Collections (UASC)**
    - UASC holdings include ten audiocassettes that document the UPEI Forum on Energy held on February 25 and 26, 1982 held in the UPEI Science Centre. Conference attendees contributed a wide variety of expertise from the energy and industrial sectors home to PEI. Sponsored by UPEI with the assistance of the R.H.W. Foundation.These UASC records are not in the Robertson Library catalog.

- **Library Administrative/Research Support**
  - Liaison Librarians provide reference and instruction support to 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:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	June 20, 2024
Name of Librarian to be Contacted with Questions	Juanita Rossiter
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

NEW COURSE PROPOSAL

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Project Management for Cleantech Transformation" be

accepted as proposed.

Course Number and Title	CLT 6301 - Project Management for Cleantech Transformation
Description	This course will introduce students to project management knowledge, tools, and techniques to effectively manage projects within the rapidly evolving landscape of sustainable and clean technologies. Throughout the course, students will be exposed to sustainable environmental, social, and governance (ESG) principles and practices using lectures, case studies, and facilitated discussion. Students will develop a comprehensive understanding of project management principles while integrating ESG frameworks into project planning, stakeholder analysis, and engagement, execution, and evaluation by focusing on various project management concepts, guidelines, and practices for the leaders of sustainable and clean technology initiatives.
Cross-Listing	
Prerequisite/Co-Requisite	Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor
Credit(s)	3
Notation	Lecture

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: The first of two core management courses to be offered midway through the program.

Effective Term: SUMMER 2026

Implications for Other Programs: Access to an elective course for other Masters programs

Impact on Students Currently Enrolled: N/A

Resources Required: A sessional instructor will need to be hired to teach this course. Special funding has been requested from the PEI Government for this program.

In offering this course will UPEI require facilities or staff at other institutions: Yes
The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books
    Based on OneSearch results, 2015-Present, Books, available online & print
    - DE "project management--Standards" - 96 results
      - Includes an unlimited user ebook copy of *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)* 7th ed.
    - SU "project management" - 3421 results
    - (ESG OR "environmental, social and governance" OR sustainab* OR "cleantech" OR "clean technology") AND "project management" - 652 results
    - (ESG OR "environmental, social and governance" OR sustainab* OR "cleantech" OR "clean technology") AND "project planning" - 67 results
    - (ESG OR "environmental, social and governance" OR sustainab* OR "cleantech" OR "clean technology") AND (stakeholder* AND project) - 1040 results
    - (ESG OR "environmental, social and governance" OR sustainab* OR "cleantech" OR "clean technology") AND project execution - 140 results
    - (ESG OR "environmental, social and governance" OR sustainab* OR "cleantech" OR "clean technology") AND "project evaluation" - 66 results

  - Journals
    Based on Publication Finder - Title Search
    - project management - 17 journals, 9 peer-reviewed
    - sustainable management - 19 journals, 14 peer-reviewed
    - business ethics - 21 journals, 14 peer-reviewed

  - Video Streaming
    - Audio Cine Films
    - Criterion-on-Demand
    - NFB Campus
    - Kanopy
    - O'Reilly Higher Education
    - SAGE Research Methods Video: Practical Research and Academic Skills

  - Databases
    - Business Source Complete
    - Business Insights Global
    - Gale OneFile
    - Academic Search Complete
    - PsycInfo
    - Canadian Business and Current Affairs (CBCA)
    - CAB Abstracts
    - Scopus
    - O'Reilly Online Learning

- ▪ Wiley Online
- ▪ Canada Commons

- ● Interdisciplinary packages that include content that support this course
  - o Ebook packages: Ebsco, Proquest, JStor, Wiley, Cambridge, Elsevier, and Project Muse.
  - o Journal packages: Elsevier (ScienceDirect), Wiley, Springer, Oxford, Sage, Taylor and Francis, and Project Muse

- ● Physical Space in Library (other than collections, explain): na

- ● Library Administrative/Research Support :
  - o The Subject Librarian provides research consultation and instruction support to both students and faculty

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 15 2014
Name of Librarian to be Contacted with Questions	Keltie MacPhail
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 6, 2024

NEW COURSE PROPOSAL   Motion #37

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Leadership Skills for Cleantech Transformation" be approved as proposed.

Course Number and Title	CLT 6800 - Leadership Skills for Cleantech Transformation
Description	This course provides students with an overview of major leadership theories and opportunities to develop and practice their interpersonal skills in preparation for leadership in influential cleantech roles. Topics covered include leadership styles, followership and empowerment, change management and agency, influence and persuasion, effective communication, and conflict management. Students will reflect on their own leadership style and hone their leadership and interpersonal skills through interactive case discussions, role plays, and presentations. Key areas of skill development include self-awareness, critical thinking, adaptability, persuasion, conflict management, and communication.
Cross-Listing	
Prerequisite/Co-Requisite	Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor
Credit(s)	3
Notation	Lecture

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: This leadership course will be delivered during the third semester to prepare students for two capstone project courses that will follow in which collaboration, leadership, and communication are ingrained.

Effective Term: FALL 2025

Implications for Other Programs: Access to an elective course for other Masters programs

NEW COURSE PROPOSAL   **Motion #37**

Impact on Students Currently Enrolled: N/A

Resources Required: A new tenure-track faculty member in Business will need to be hired to teach this course. Special funding has been requested from the PEI Government.

In offering this course will UPEI require facilities or staff at other institutions: Yes
The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	

Form Version: September 2023

NEW COURSE PROPOSAL   Motion #37

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

Click here to enter text.

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books
    (Results from OneSearch (no specific search field selected), limited to books from 2015-present)
    - (leadership N3 style) – 1323 results
    - Followership – 229 results
    - "change management" – 2752 results
    - ("conflict management" OR "conflict resolution") AND ((leadership OR management)) – 2289 results
    - ((leadership OR management) AND ((communication N3 (style OR skills OR strateg*))) – 1423 results

  - Journals
    (Results from Publication Finder, title search)
    - Leadership – 120 journals, 67 peer-reviewed
    - Change Management – 5 journals, 5 peer-reviewed
    - Conflict Management – 7 journals, 4 peer-reviewed

  - Databases
    - Business Source Complete
    - Business Insights Global
    - Gale OneFile (Business, Small Business Collection/Entrepreneurship)
    - Academic Search Complete
    - PsycInfo
    - Canadian Business and Current Affairs (CBCA)
    - Gale OneFile (Communications and Mass Media, Environmental Studies and Policy, Psychology)
    - CAB Abstracts
    - Scopus
    - Sage Research Methods
    - Eureka/Newsbank
    - O'Reilly Online Learning
    - Wiley Online
    - Canada Commons

- Interdisciplinary packages that include content that support this course
  - Ebook packages: Ebsco, Proquest, JStor, Wiley, Cambridge, Elsevier, and Project Muse.
  - Journal packages: Elsevier (ScienceDirect), Wiley, Springer, Oxford, Sage, Taylor and Francis, and Project Muse

- Physical Space in Library (other than collections, explain): na

NEW COURSE PROPOSAL   Motion #37

- Library Administrative/Research Support
  - The Subject Librarian provides research consultation and instruction support to both students and faculty

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 15, 2024
Name of Librarian to be Contacted with Questions	Keltie MacPhail
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

NEW COURSE PROPOSAL

Motion #38

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Orientation to Cleantech Capstone Project" be approved as

proposed.

Course Number and Title	CLT 7000 - Orientation to Cleantech Capstone Project
Description	The orientation module is an engaging and informative overview designed to prepare students for their Capstone Project experience. It will provide insights from industry and community leaders in cleantech, guidance on how to best prepare for the Capstone Project courses and networking opportunities. The course grade will be on a pass/fail basis.
Cross-Listing	
Prerequisite/Co-Requisite	Acceptance into the Master of Cleantech Leadership and Transformation Program AND permission of instructor
Credit(s)	0
Notation	Lecture

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

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students, and so we will cap it at 24 students.

Rationale for New Course: This introduction to the Capstone Project courses could potentially be anywhere from one day to one week and will offer students introductions to various capstone projects that are available.

Effective Term: SUMMER 2026

Implications for Other Programs: None

Impact on Students Currently Enrolled: N/A

Resources Required: A sessional instructor will need to be hired to teach this course. Special funding has been requested from the PEI Government for this program.

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

NEW COURSE PROPOSAL   Motion #38

The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization   Date:

Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:

> Per discussions with the CleanTech team, the orientation is a one-day session to prep students for the upcoming Capstone Courses.
>
> An orientation session would most likely include an introduction to OneSearch discovery service, Refworks, Grammarly, Interlibrary Loans, and other means of getting assistance through the library. Additionally, any of the resources listed in the APCC forms for other CleanTech courses could be considered for inclusion in this orientation, please consult the CleanTech APCC forms for detailed lists of relevant collections resources and interdisciplinary packages.

- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
- Interdisciplinary packages that include content that support this course
- Physical Space in Library (other than collections, explain)
- Library Administrative/Research Support:
    - an introductory session with a Librarian would most likely be a part of the Capstone Orientation day.

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 16 2024
Name of Librarian to be Contacted with Questions	Keltie MacPhail
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

NEW COURSE PROPOSAL

Motion #39

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Innovation and Entrepreneurship for Cleantech

Transformation" be approved as proposed

Course Number and Title	CLT 6303 - Innovation and Entrepreneurship for Cleantech Transformation
Description	This course looks at efforts of innovation and entrepreneurship in cleantech. These efforts are described and assessed in the context of innovation management and entrepreneurial ecosystems. The role of entrepreneurial thinking, innovative organizational culture, portfolio management, engagement of stakeholders, collaboration with partners, mitigation of technological risks, and interactions with investors are taught both in theory and using case studies relevant to cleantech. The course utilizes real-world learning techniques such as case studies, guest speakers, and project/venture plans.
Cross-Listing	
Prerequisite/Co-Requisite	Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor
Credit(s)	3
Notation	Lecture

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: The second of two core management courses to be offered midway through the program.

Effective Term: SUMMER 2026

Implications for Other Programs: Access to an elective course for other Masters programs

Impact on Students Currently Enrolled: N/A

NEW COURSE PROPOSAL   **Motion #39**

Resources Required: A sessional instructor will need to be hired to teach this course. Special funding has been requested from the PEI Government for this program.

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

The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL   Motion # 39

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
    - Books
      (Results from OneSearch (no specific search field selected), limited to books from 2015-present)
        - ((entrepreneur* AND (cleantech OR "clean technology" OR "net zero" OR "green technology" OR "renewable energy")) – 541 results
        - (innovation AND (cleantech OR "clean technology" OR "net zero" OR "green technology" OR "renewable energy")) – 4688 results
        - (("innovation management" OR "innovation strategy" OR "innovation process") AND (cleantech OR "clean technology" OR "net zero" OR "green technology" OR "renewable energy")) – 64 results
    - Journals
        (Results from Publication Finder, title search)
        - Entrepreneur* - 108 journals, 51 peer-reviewed
        - Entrepreneurship AND Innovation – 12 journals, 8 peer-reviewed
        - Innovation AND sustainable – 10 journals, 2 peer-reviewed
    - Video Streaming
        - Audio Cine Films
        - Criterion-on-Demand
        - NFB Campus
        - Kanopy
        - O'Reilly Higher Education
        - SAGE Research Methods Video: Practical Research and Academic Skills
    - Databases
        - Business Source Complete
        - Business Insights Global
        - Statista
        - Gale OneFile (Business, Hospitality & Tourism, Small Business Collection/Entrepreneurship)
        - Canadian Patent Database
        - United States Patent and Trademark Office
- Interdisciplinary packages that include content that support this course
        - Academic Search Complete
        - PsycINFO
        - Gale InContext: Environmental Studies
        - Gale OneFile (Communications and Mass Media, Environmental Studies and Policy)
        - CAB Abstracts
        - Canadian Business & Current Affairs (CBCA)
        - Scopus
        - CANSIM

NEW COURSE PROPOSAL   Motion # 39

- ▪ Sage Research Methods
- ▪ EconLit with FullText
- ▪ Eureka/Newsbank
- ▪ O'Reilly Online Learning
- ▪ Springer LINK
- ▪ Wiley Online
- ▪ Canada Commons
- Physical Space in Library (other than collections, explain): Na
- Library Administrative/Research Support:
  - o The Subject Librarian provides research consultation and instruction support to both students and faculty.

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 21, 2024
Name of Librarian to be Contacted with Questions	Keltie MacPhail
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

NEW COURSE PROPOSAL   Motion # 40

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Cleantech Capstone Project I" be approved as proposed.

Course Number and Title	CLT 7001 - Cleantech Capstone Project I
Description	This course is the first of a two-part Capstone Project series where students will have the opportunity to begin their teamwork on a real-life project with a community or industry partner. Students will focus on the initial stages of the Capstone Project which include developing a project proposal, generating research questions, conducting a literature review, environmental scan, and needs assessment, reviewing research ethics guidelines, and developing the project's research methodology. Supported by a series of workshops and seminars on topics like proposal writing, literature searching and citation, time management, and peer workshopping and feedback, emphasizing partnership development and engagement.
Cross-Listing	
Prerequisite/Co-Requisite	Prerequisite: CLT 7000 or permission of the instructor
Credit(s)	3
Notation	Lecture

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students and so we will cap this course to the number of students in the program.

Rationale for New Course: Capstone project courses will begin midway through the program, where student teams collaborate with industry and community partners to provide solutions to sustainable challenges.

Effective Term: SUMMER 2026

Implications for Other Programs: None

Impact on Students Currently Enrolled: N/A

NEW COURSE PROPOSAL   Motion # 40

Resources Required: A new tenure-track faculty member in Business will need to be hired to teach this course. Special funding has been requested from the PEI Government.

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

The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL   **Motion # 40**

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books
    Based on OneSearch results for Available Online & Print, Books, from 2015-Present
    - "literature review" AND guide or manual OR handbook - 449 results
    - DE "Research--Methodology--Handbooks, manuals, etc" - 10 results
    - "research methodology" - 4590 results
    - DE "Needs assessment" - 205 results

  - Databases/Research Tools (research methodology focussed)
    - Sage Research Methods
    - Sage Research Methods Foundations
    - Sage Research Methods Practical Research and Academic Skills (Video Collection)
    - Refworks
    - Grammarly

  - Databases (interdisciplinary or subject focussed research databases)
    - Academic Search Complete
    - Annual Review of Political Science
    - ACUP via Scholars Portal
    - Business Insights Global
    - Business Plans Handbook
    - Business Source Complete
    - CAB Abstracts
    - CAB Ebooks
    - Canada Commons
    - CANSIM
    - CanLII full text
    - Canadian Business and Current Affairs
    - Earth, Atmospheric & Aquatic Science Database
    - EconLit
    - EconPapers
    - Eureka/Newsbank
    - Federal Science Library
    - Gale Academic OneFile
    - Gale in Context (Environmental Studies, Global Issues, Opposing Viewpoints, Science, Academic, Agriculture, Business, Communication & Mass Media, Justice, Women's Issues, Diversity Studies, Economics & Theory, Entrepreneurship, Environmental Studies & Policy, Hospitality & Tourism, Gender Studies, LegalTrac, News, Psychology)
    - Gale Virtual Reference Library

NEW COURSE PROPOSAL   **Motion # 40**

- GeoRef
- GreenFile
- HeinOnline Canadian Core
- Independent Voices
- Indigenous Peoples of North America
- Informit Indigenous Collection
- InfoTrac Newsstand
- Ingenta
- iPortal
- Jstor
- O'Reilly Online Learning
- Oxford Academic
- PhilPapers
- Project Muse
- PsycARTICLES
- PsycINFO
- Sage Premier Collection
- ScienceDirect
- Scopus
- Social Sciences Research Network (SSRN)
- Springer LINK
- Statista
- Transport Research International Documentation
- Wiley Online
- Women in Politics: bibliographic database
- Women's Studies International

- Interdisciplinary packages that include content that support this course
  - Ebook packages: Ebsco, Proquest, JStor, Wiley, Cambridge, Elsevier, and Project Muse.
  - Journal packages: Elsevier (ScienceDirect), Wiley, Springer, Oxford, Sage, Taylor and Francis, and Project Muse

- Physical Space in Library (other than collections, explain)

- Library Administrative/Research Support: The Subject Librarian provides research consultation and instruction support to both students and faculty

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

NEW COURSE PROPOSAL   Motion # 40

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 15 2024
Name of Librarian to be Contacted with Questions	Keltie MacPhail
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

NEW COURSE PROPOSAL   **Motion #41**

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Cleantech Capstone Project II" be approved as proposed.

Course Number and Title	CLT 7002 - Cleantech Capstone Project II
Description	This course is the second of a two-part Capstone Project series focusing on the development and completion of the team project which will culminate in a final report and presentation, with an analysis of findings and recommendations for the community or industry partner. In addition to the Capstone Project, students will individually write a leadership development portfolio reflecting on how course workshops and seminars have informed their knowledge, skills, attitudes, and identity as leaders. Supported by workshops and seminars focusing on teamwork skills, stakeholder engagement, community entry practices, and communication skills, while also providing a discussion forum for students to learn from and engage with leaders in cleantech.
Cross-Listing	
Prerequisite/Co-Requisite	Prerequisite: CLT 7001 - Capstone Project I
Credit(s)	3
Notation	Lecture

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students and so we will cap this course to the number of students in the program.

Rationale for New Course: Following the completion of Leadership Skills and Capstone I, Capstone II will see the culmination of a report and presentation with recommendations and viable solutions.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: N/A

NEW COURSE PROPOSAL   **Motion #41**

Resources Required: A new tenure-track faculty member in Business will need to be hired to teach this course. Special funding has been requested from the PEI Government.

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

The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	August 7, 2024
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL   Motion #41

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books
    (Results from OneSearch (no specific search field selected unless otherwise noted), limited to books from 2015-present)
    - (leadership N3 style) – 1323 results
    - ((leadership OR management) AND ((communication N3 (style OR skills OR strateg*))) – 1423 results
    - "leadership development" - 1031 results
    - "stakeholder engagement" - 627 results
    - SU "Portfolios in education" - 319 results

  - Journals
    (Results from Publication Finder, title search)
    - Leadership – 120 journals, 67 peer-reviewed
    - Communication - 144 journals, 625 peer-reviewed

  - Databases
    - Academic Search Complete
    - ACUP Scholars Portal
    - Business Plans Handbook
    - Business Source Complete
    - Business Insights Global
    - Gale OneFile (Business, Small Business Collection/Entrepreneurship)
    - Academic Search Complete
    - PsycInfo
    - CAB Abstracts
    - CAB Ebooks
    - Earth, Atmospheric & Aquatic Science Database
    - GreenFile
    - GeoRef
    - Canadian Business and Current Affairs (CBCA)
    - Gale OneFile (Environmental Studies, Global Issues, Opposing Viewpoints, Science, Academic, Agriculture, Business, Communication & Mass Media, Justice, Women's Issues, Diversity Studies, Economics & Theory, Entrepreneurship, Environmental Studies & Policy, Hospitality & Tourism, Gender Studies, LegalTrac, News, Psychology)
    - Scopus
    - Science D
    - Eureka/Newsbank
    - O'Reilly Online Learning

NEW COURSE PROPOSAL   Motion #41

- ▪ Wiley Online
- ▪ Canada Commons
- Interdisciplinary packages that include content that support this course
  - o Ebook packages: Ebsco, Proquest, JStor, Wiley, Cambridge, Elsevier, and Project Muse.
  - o Journal packages: Elsevier (ScienceDirect), Wiley, Springer, Oxford, Sage, Taylor and Francis, JSTOR and Project Muse

- Physical Space in Library (other than collections, explain) na

- Library Administrative/Research Support:The Subject Librarian provides research consultation and instruction support to both students and faculty

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 15 2024
Name of Librarian to be Contacted with Questions	Keltie MacPhail
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

NEW COURSE PROPOSAL   **Motion #42**

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Sustainability Policy: Prioritizing Communities" be

approved as proposed.

Course Number and Title	CLT 7210 Sustainability Policy: Prioritizing Communities
Description	The course advances students' understanding of the concept of sustainable development (SD) by introducing the history of the concept and different ways of measuring sustainability. The course touches upon the main factors that influence policy decisions and outcomes regarding SD (i.e., the role of power, economic interests, expertise, public opinion, resources, and technological innovation). Focusing on 'community energy systems' [CES] as a practical strategy for advancing sustainability. CES necessitates deep public involvement in development processes, as well as a fair and localized distribution of project outcomes. The CES development paradigm will be explored as a strategy for mitigating externalities associated with all energy sources, as well as a means to achieve distributive, procedural, recognition, and other forms of energy justice.
Cross-Listing	
Prerequisite/Co-Requisite	Acceptance into the Master of Cleantech Leadership and Transformation Program or permission of instructor
Credit(s)	3
Notation	Lecture

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

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (MAIS, MSc) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: Building on the two core policy courses, this elective course will allow for advanced exploration of policy and will be offered in the final semester.

Effective Term: FALL 2025

NEW COURSE PROPOSAL   **Motion #42**

Implications for Other Programs: Access to an elective course for other Masters programs

Impact on Students Currently Enrolled: N/A

Resources Required: A new tenure-track faculty member in the Faculty of Arts will need to be hired to teach this course. Special funding has been requested from the PEI Government.

In offering this course will UPEI require facilities or staff at other institutions: Yes
The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL   Motion #42

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books - 2015 - present
    - sustainable development - 149,810 hits
      - AND policy or policies or law or laws or legislation or regulation - 40,905 hits (within previous search)
    - sustainable development goals or sdg or sdgs - 37,694 hits
    - measur* OR assess* OR eval* OR analy* AND sustainabil* - 98,832 hits
    - "community energy systems" OR (communit* AND energy AND (system OR program)) - 8,154 hits
  - Journals
    - subject: Environmental Sciences 344 (196 peer-reviewed)
    - subject: Human ecology. Anthropogeography 73 (44 peer-reviewed)
    - subject: Renewable energy sources 54 (34 peer-reviewed)
    - subject: Energy conservation 16 (8 peer-reviewed)
    - subject: Environmental technology.283 (194 peer-reviewed)
  - Databases
    - Earth, Atmospheric & Aquatic Science Database
    - Gale In Context: Environmental Studies
    - GreenFile
    - IEEE
    - Business Source Complete
    - Canada Commons
- OERs
  - See Cleantech Fundamentals I for a non-exhaustive list of potential OERs for the program
- Interdisciplinary packages that include content that support this course
  - Databases
    - Academic Search Complete
    - CAB abstracts
    - Georef
    - Scopus
    - OneSearch
    - CBCA
    - Project MUSE
    - O'Reilly Online Learning
  - Journal Packages
    - SAGE Premier Collection
    - Elsevier ScienceDirect
    - Wiley Online
    - Springer
    - Oxford

NEW COURSE PROPOSAL   Motion #42

- ▪ Taylor and Francis
- ▪ Cambridge
- ▪ JSTOR - Sustainability Collection
  - o eBook packages
    - ▪ Elsevier eBooks
    - ▪ Sage Knowledge Complete
    - ▪ Springer eBooks
    - ▪ EBSCO
    - ▪ Proquest
    - ▪ JSTOR
    - ▪ Cambridge
    - ▪ Wiley
    - ▪ Elsevier
    - ▪ Taylor and Francis
- ● Physical Space in Library (other than collections, explain)
- ● Library Administrative/Research Support
  - o Liaison Librarians at the library provide reference and instruction support for both students and faculty. They supervise the collection and ensure there are adequate resources for the program.

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	July 23, 2024
Name of Librarian to be Contacted with Questions	Keri McCaffrey
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

NEW COURSE PROPOSAL   **Motion #43**

Faculty/School: **Graduate Studies**

Department/Program(s): **Masters in Cleantech Leadership & Transformation**

MOTION: That a new course titled "Energy Technologies for Sustainable Neighbourhoods" be approved as proposed.

Course Number and Title	CLT 7310 - Energy Technologies for Sustainable Neighbourhoods
Description	This course offers a comprehensive exploration of sustainable community planning and renewable energy integration. Students will delve into historical perspectives and contemporary challenges, analyzing urban sprawl and sustainable built environment forms, with an emphasis on clean energy and nature-based solutions. The curriculum covers the integration of diverse renewable sources, microgrids, and energy storage technologies, enhancing grid reliability and resiliency. Through a collaborative approach, students will learn to integrate renewable energy into existing Canadian buildings and neighbourhoods. By combining planning, renewable energy, and healthy community principles, students will receive a holistic perspective on sustainable communities and energy systems.
Cross-Listing	
Prerequisite/Co-Requisite	Prerequisite: CLT 6102 - Cleantech Fundamentals II, or permission of instructor.
Credit(s)	3
Notation	Lecture

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

Anticipated Enrolment: 24

Is there an Enrolment Cap: Yes
This program is intended to have cohorts of 24 students. Given the important topic, other UPEI graduate students (e.g. MSc Engineering) may find value in taking this course, therefore, we will cap it at 30 students. This is a number we believe will be effective for pedagogical reasons.

Rationale for New Course: Building on the two core management courses, this elective course, offered in the final semester, will allow for advanced critical thinking and problem-solving skills in this key area of cleantech.

Effective Term: FALL 2025

NEW COURSE PROPOSAL   **Motion #43**

Implications for Other Programs: Access to an elective course for other Masters programs

Impact on Students Currently Enrolled: N/A

Resources Required: An instructor will be needed to teach this course. Some options are a sessional instructor or a new hire in FSDE, such as a Cleantech Research Chair. Special funding has been requested from the PEI Government for this program.

In offering this course will UPEI require facilities or staff at other institutions: Yes
The intention is for this program to be delivered at the newly built Cleantech Academy in Georgetown, however, courses could be delivered at the St. Peters or Charlottetown campuses.

Authorization	*Date:*
Departmental Approval:	
Faculty/School Approval:	
Faculty Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Graduate Studies Dean's Approval: Dr. Marva Sweeney-Nixon	February 3, 2025
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL

Motion #43

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books
    - (sustainabl* OR renewabl*) AND (communit* or neighbourhood or city or town or urban) AND (planning or plan or organi* or program or guidelines or protocol or develop*) - 92,475 hits
    - 2015 - present
      - renewable AND energy OR source OR resource OR power OR electricity AND integrat* OR implemen* OR adopt* OR applicat* - 21,768 hits
  - Journals
    - subject: Environmental Sciences 344 (196 peer-reviewed)
    - subject: Human ecology. Anthropogeography 73 (44 peer-reviewed)
    - subject: Renewable energy sources 54 (34 peer-reviewed)
    - subject: Energy conservation 16 (8 peer-reviewed)
    - subject: Environmental technology 283 (194 peer-reviewed)
  - Databases
    - Earth, Atmospheric & Aquatic Science Database
    - Gale In Context: Environmental Studies
    - GreenFile
    - IEEE
- OERs
  - See Cleantech Fundamentals I for a non-exhaustive list of potential OERs for the program
- Interdisciplinary packages that include content that support this course
  - Interdisciplinary packages that include content that support this course
    - Databases
      - Academic Search Complete
      - CAB abstracts
      - Georef
      - Scopus
      - OneSearch
      - Project MUSE
      - O'Reilly Online Learning
    - Journal Packages
      - SAGE Premier Collection
      - Elsevier ScienceDirect
      - Wiley Online
      - Springer
      - Oxford
      - Taylor and Francis
      - Cambridge
      - JSTOR - Sustainability Collection

NEW COURSE PROPOSAL   **Motion #43**

- ▪ eBook packages
  - ▪ Elsevier eBooks
  - ▪ Sage Knowledge Complete
  - ▪ Springer eBooks
  - ▪ EBSCO
  - ▪ Proquest
  - ▪ JSTOR
  - ▪ Cambridge
  - ▪ Wiley
  - ▪ Elsevier
  - ▪ Taylor and Francis
- Physical Space in Library (other than collections, explain)
- Library Administrative/Research Support
  - o Liaison Librarians at the library provide reference and instruction support for both students and faculty. They supervise the collection and ensure there are adequate resources for the program.

New resources needed to support this proposal:

New resources needed to support this course and the entire Cleantech Program are identified in the APCC for Cleantech Fundamentals I.

Summary of additional budget allocation required:

In the Cleantech Fundamentals I APCC, we highlighted resources the library needs to support the entire program including this course. First-year costs are $10,500, and annual costs the following year are anticipated at $10,815 (+3% annual increase). We have not yet determined the anticipated additional staffing costs that will be required to support library instruction. In addition, we have identified and would strongly recommend the purchase of additional one-time resources of $5000 in each of years one through three to support the full program when it is offered and should the budget allow

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there may be a loss of resources needed for this course.

Date Received by Liaison/Collections Librarian	Click here to select date received.
Name of Librarian to be Contacted with Questions	Keri McCaffrey
Approved by University Librarian or Designate	Donald Moses
Date Approved by UL or Designate	August 5, 2024

Summary of Motions

Faculty of IKERAS

#	Type of Motion	Motion
1.	Course Description Change	IKE 1040

CALENDAR & CURRICULUM CHANGE   Motion # 44

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

Faculty/School/Department: **IKERAS**

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

MOTION: To approve the course description change for IKE 1040

Reproduction of Current Calendar Entry	Proposed revision with changes underlined and deletions indicated clearly
IKE-1040 INDIGENOUS TEACHINGS OF TURTLE ISLAND This course is an introduction to the various Nations on Turtle Island. It will be a combination of classroom and culturally-based learning. Anchored in L'nu (Mi'kmaq) knowledge, students will learn about ceremony, protocol, Elders and traditional teachers. In turn, these will help foster a mental, physical, emotional and spiritual understanding of Indigenous worldviews and ways of knowing. This course also introduces Canada's history of genocide and cultural assimilation imposed upon Indigenous Peoples. It will discuss why anyone living in Canada needs to know this history.	IKE-1040 INDIGENOUS TEACHINGS OF TURTLE ISLAND With respect to the traditional and unceded territory of Epekwitk (PEI) and Mi'kma'ki, this course is an introduction to the ~~various Nations on Turtle Island~~ three groups of Indigenous peoples recognized in Canada. ~~It will be a combination of classroom and culturally-based learning.~~ Anchored in ~~L'nu (Mi'kmaq)~~ Indigenous knowledges, students will learn about ceremon~~y~~ies, protocol~~s~~, ~~Elders and~~ traditional~~s teachers.~~, and cultures. ~~In turn, these will help fostering a mental, physical, emotional and spiritual understanding of Indigenous worldviews and ways of knowing.~~ This course further ~~also~~ introduces Canada's history of colonization ~~genocide~~ and cultural assimilation policies. ~~imposed upon Indigenous Peoples. It will discuss why anyone living in Canada needs to know this history~~ These will help to begin fostering an understanding of Indigenous worldviews and fulfill the University of Prince Edward Island's commitment to the Truth and Reconciliation Commission's Calls to Action.

Rationale for Change: This change to the course description accomplished two improvements: 1) It now better reflects course content and objectives to be inclusive of Canadian Indigenous groups, 2) The course has developed and adapted in response to student and community need and feedback, as well as growth of the IKERAS Faculty and their respective subject matter expertise.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: none

CALENDAR & CURRICULUM CHANGE

Motion # 44

Authorization	*Date:*
Departmental Approval: Angelina Weenie/Faculty of IKERAS	January 16, 2025
Faculty/School Approval: IKERAS	January 16, 2025
Faculty Dean's Approval: Angelina Weenie	January 16, 2025
Grad. Studies Dean's Approval: Click here to enter name of approver.	Click here to select approval date.
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Summary of Motions

Faculty of Science

#	Type of Motion	Motion
1.	Course Deletion	ACC 3080
2.	New Course Proposal	ACC 4100
3.	Course Title & Course Description Change	ACC 2020
4.	Pre-req addition/Change	ACC 3010
5.	Pre-req addition/Change	ACC 3020
6.	Pre-req addition/Change	ACC 3030
7.	Pre-req addition/Change	ACC 3040
8.	Pre-req addition/Change	ACC 3050
9.	Pre-req addition/Change	ACC 3060
10.	Pre-req addition/Change	ACC 3090
11.	Course Description Change	ACC 3100
12.	Course Description Change	ACC 3120
13.	Course Description Change	ACC 3140
14.	Pre-req addition/Change	ACC 4010
15.	Pre-req addition/Change	ACC 4020
16.	Pre-req addition/Change	ACC 4040
17.	Pre-req addition/Change	ACC 4060
18.	Pre-req addition/Change	ACC 4070

SUMMARY OF CHANGES FACULTY OF SCIENCE   Motion #'s 45-66

19.	Course Description Change	ACC 4080
20.	Course Description Change	ACC 4120
21.	New Calendar Entry	Requirements for a Minor
22.	Calendar Entry Change	Requirements for Applied Climate Change and Adaptation

CALENDAR & CURRICULUM CHANGE   Motion # 45

Revision is for a: **Course Deletion**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the course deletion of ACC 3080 Reducing Greenhouse Gas Emissions (Climate Mitigation) as proposed.**

| 3080 REDUCING GREENHOUSE GAS EMISSIONS (CLIMATE MITIGATION)
This course will examine the human sources of greenhouse gas emissions to determine the best approaches for meeting a "safe" or "below dangerous level" of atmospheric concentrations of these gases. Students will assess how to stabilize atmospheric CO2 concentration at no greater than 450ppmv without replacing existing nuclear power capacity as it retires and without resorting to carbon capture and storage.
PREREQUISITE: ENV 3110 and ACC 3020; Admission to the ACC Program
Three hours a week; Three semester hours | ~~3080 REDUCING GREENHOUSE GAS EMISSIONS (CLIMATE MITIGATION)~~
~~This course will examine the human sources of greenhouse gas emissions to determine the best approaches for meeting a "safe" or "below dangerous level" of atmospheric concentrations of these gases. Students will assess how to stabilize atmospheric CO2 concentration at no greater than 450ppmv without replacing existing nuclear power capacity as it retires and without resorting to carbon capture and storage.~~
~~PREREQUISITE: ENV 3110 and ACC 3020; Admission to the ACC Program~~
~~Three hours a week; Three semester hours~~ |

Rationale for Change: Course contains overlapping material as ACC 4080. Combined the 2 courses into one course. ACC 3080 to be deleted.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: Students with ACC 3080 as a requirement will require substitution of a free elective for this requirement (complemented by completion of the ACC 4080 requirement).

Authorization	Date:
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	February 5, 2025

NEW COURSE PROPOSAL   Motion # 46

Faculty/School: **Science**

Department/Program(s): **School of Climate Change and Adaptation**

MOTION: To approve the new course proposal for ACC 4100 Precision Agriculture for Climate Resilience as proposed.

Course Number and Title	ACC 4100 Precision Agriculture for Climate Resilience
Description	This course explores the role of precision agriculture in developing climate resilience in North American agricultural systems. Students will work on hands-on projects, engage in discussions, and collaborate to explore adaptive strategies and innovative solutions to promote sustainable food production. The course also emphasizes developing both technical and professional skills for effective problem-solving in real-world contexts, preparing students for practical application in the field.
Cross-Listing	No
Prerequisite/Co-Requisite	Admission to the Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor
Credit(s)	3
Notation	Click here to enter text.

This is: A Core Course   **Grade Mode:** Numeric (Standard)

Anticipated Enrolment: 40   **Is there an Enrolment Cap:** No
If there is an enrolment limit, please explain.

Rationale for New Course: The addition of ACC 4100 as a required course, this course has been taught as a directed studies course for previous years, students feedback on the course is very good, this course is also approved as a writing intensive course which is required for our students to graduate.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: This course can be taught within the regular teaching load of the existing faculty; no additional resources are required.

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

NEW COURSE PROPOSAL   Motion # 46

If yes, please explain.

Authorization	Date:
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Graduate Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	February 5, 2025

Form Version: September 2023

NEW COURSE PROPOSAL   Motion # 46

LIBRARY RESOURCE REQUIREMENTS FOR A NEW COURSE PROPOSAL

ACC 4100 Precision Agriculture for Climate Resilience

To be completed by the liaison and/or collections librarian.
Note that the submitting program is required to allow the library staff two weeks to complete this.

Existing resources:
- Collections – Print books, Ebooks, other physical media, other online media, subscriptions, other
  - Books - onesearch - books and ebooks filter, past 10 years, available print and online
    - "climate change" or "global warming" or "climate crisis"- Results: 59,608
      - AND agriculture or farming - Results: 9,267 (within the previous search)
    - "precision agriculture" - Results: 1,452
    - "food security" or "food insecurity" or hunger or poverty or "food desert" or food swamp" - Results: 52,388
      - AND agriculture or farming - Results: 8,315 (within the previous search)
    - "climate resilien*" OR "climate stabil*" OR "climate change adapt*" - Results 17,548
      - AND agriculture or farming - Results: 4119 (within the previous search)
  - Journals - publication finder journals - subject
    - agriculture - 2288 journals (1629 peer-reviewed)
    - environmental sciences - 387 journals (309 peer-reviewed)
    - environmental technology - 306 journals (241 peer-reviewed)
  - Databases - subject specific
    - Earth, Atmospheric & Aquatic Science Database
    - Gale In Context: Environmental Studies
    - GreenFile
    - EconLit with Full Text
    - Compendex
    - Canada Commons
    - Agricola
- Potential Open Education Resources
  - This is not an exhaustive list of related OERs:
    - Precision Agriculture Technology for Crop Farming
    - Environmental Science: a Canadian perspective
    - Environmental Issues
    - Environmental Science: an Evidence-Based Study of Earth's Natural Systems
    - Regulations and the Environment: The Canadian Environment
- Interdisciplinary packages that include content that support this course
  - Databases
    - CAB Abstracts
    - Scopus
    - GeoRef
    - CBCA
    - Academic Search Complete

NEW COURSE PROPOSAL   Motion # 46

- ▪ Blackwell Synergy -- See Wiley Online
  - ○ Journal Packages
    - ▪ SAGE Premier Collection
    - ▪ Elsevier ScienceDirect
    - ▪ Wiley Online
    - ▪ Springer
    - ▪ Oxford
    - ▪ Taylor and Francis
    - ▪ Cambridge
    - ▪ JSTOR - Sustainability Collection
  - ○ eBook packages
    - ▪ Elsevier eBooks
    - ▪ Sage Knowledge Complete
    - ▪ Springer eBooks
    - ▪ EBSCO
    - ▪ Proquest
    - ▪ JSTOR
    - ▪ Cambridge
    - ▪ Wiley
    - ▪ Elsevier
    - ▪ Taylor and Francis
- ● Physical Space in Library (other than collections, explain)
- ● Library Administrative/Research Support
  - ○ Liaison Librarians at the library provide reference and instruction support for both students and faculty. They supervise the collection and ensure there are adequate resources for the program.

New resources needed to support this proposal:
- ● Collections:
  - ○ Monographs
  - ○ Subscriptions/Databases
  - ○ Other including potential Open Educational Resources (OERs)
- ● Physical Space in Library (other than collections, explain)
- ● Library Administrative/Research Support
- ● Other One-Time or Ongoing Library expenses (e.g. software licenses, explain)

Summary of additional budget allocation required:
- ● First year startup: $ __0__ in first fiscal year the course/program is offered
- ● Additional startup years: $__0__ in second year, $__0__ in third year....
- ● Annual: $__0_____ in addition to the startup figure(s) above starting in the fiscal year AFTER the year the course is first offered
  - ○ Per-year percentage increase in annual: _0_____

Note that if future budget constraints require the Library to cancel interdisciplinary packages listed above, there will be a loss of resources needed for this course.

NEW COURSE PROPOSAL   **Motion # 46**

Date Received by Liaison/Collections Librarian	January 19, 2025
Name of Librarian to be Contacted with Questions	Keri McCaffrey
Approved by University Librarian or Designate	Donald Moses
Date Approved by the University Library or Designate	January 21, 2025

CALENDAR & CURRICULUM CHANGE   Motion # 47

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the course title change and course description change for ACC 2020 Canadian Climate Change Policy and Politics as proposed.**

2020 CANADIAN CLIMATE CHANGE POLICY AND POLITICS This course surveys how climate change is understood and responded to by governments, political parties, political movements, and the media. Specific topics also covered in this course include the impact of international treaties and regulatory agencies dealing with climate change issues, such as greenhouse gas emissions, ocean warming, drought and flood management, coastal erosion, and climate-change refugees. Three hours a week; Three semester hours	2020 ~~CANADIAN~~ CLIMATE CHANGE POLICY AND POLITICS ~~This course surveys how climate change is understood and responded to by governments, political parties, political movements, and the media. Specific topics also covered in this course include the impact of international treaties and regulatory agencies dealing with climate change issues, such as greenhouse gas emissions, ocean warming, drought and flood management, coastal erosion, and climate-change refugees.~~ This course surveys how climate change emerges as a political issue; which state and non-state actors are involved in climate change policy making; who gains and who loses from climate change policies; and what policy strategies and tools can mitigate and help adapt to the impacts of climate change across different government jurisdictions. The students will learn about dealing with complexity in climate policymaking including the questions around political economy of decarbonization and international cooperation around the issue. By studying different approaches to climate change policy, the students will better understand the policymaking process. Cross-listed with POLS 2040 Three hours a week; Three Semester hours.

Rationale for Change: Title change, and description change to provide a more accurate course description and to broaden the students scope of knowledge.

Effective Term: FALL 2025

Implications for Other Programs: None

CALENDAR & CURRICULUM CHANGE   Motion # 47

Impact on Students Currently Enrolled: None

Authorization	*Date:*
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion # 48

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: To approve the Pre-requisite change for ACC 3010 Global Climate Systems and Science as proposed

3010 GLOBAL CLIMATE SYSTEMS AND SCIENCE The course will examine the natural greenhouse effect, and the human contribution to it; how astronomical forces influence the Earth's climate and their cycles; properties of the atmosphere that influence climate; greenhouse gases; and paleological indicators of climate including ice cores, tree rings, sediment cores, etc.; how these indicators are collected; and what they tell us about past temperature changes. PREREQUISITE: ENV 3110; Admission to the ACC Program Three hours a week; Three semester hours	3010 GLOBAL CLIMATE SYSTEMS AND SCIENCE The course will examine the natural greenhouse effect, and the human contribution to it; how astronomical forces influence the Earth's climate and their cycles; properties of the atmosphere that influence climate; greenhouse gases; and paleological indicators of climate including ice cores, tree rings, sediment cores, etc.; how these indicators are collected; and what they tell us about past temperature changes. PREREQUISITE: ~~ENV 3110~~; Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor Three hours a week; Three semester hours

Rationale for Change: ENV 3110 prerequisite not required, and the addition of Minor required additional prerequisite clarification.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	*Date:*
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion # 49

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Pre-requisite change for ACC 3020 Climate Futures and Modelling as proposed.**

3020 CLIMATE FUTURES AND MODELLING Students will gain the knowledge and tools necessary to validate climate model outputs against historical observations and produce regional climate change projections. The course will examine greenhouse gas emissions scenarios and their driving of climate models as well as the Intergovernmental Panel on Climate Change's Special Report on Emission Scenarios and the new approaches to future scenarios. PREREQUISITE: ENV 3110; Admission to the ACC Program Three hours a week, alternating classroom and laboratory; Three semester hours	3020 CLIMATE FUTURES AND MODELLING Students will gain the knowledge and tools necessary to validate climate model outputs against historical observations and produce regional climate change projections. The course will examine greenhouse gas emissions scenarios and their driving of climate models as well as the Intergovernmental Panel on Climate Change's Special Report on Emission Scenarios and the new approaches to future scenarios. PREREQUISITE: ~~ENV 3110~~; Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor Three hours a week, alternating classroom and laboratory; Three semester hours

Rationale for Change: Prerequisite ENV 3110 not required, and the addition of Minor required additional prerequisite clarification.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion # 50

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Pre-requisite Addition/Change for ACC 3030 Climate Change Monitoring as proposed.**

3030 CLIMATE CHANGE MONITORING Students will be given the opportunity to understand how the components of climate are monitored instrumentally, the history of written climate archives, and how climate records are organized. They will plan and set up a climate station that reports to a UPEI climate database, access online climate records, quality control climate records, analyze climate trends, and calculate climate indices. PREREQUISITE: ACC 1020; Admission to the ACC Program Three hours lecture, three hours laboratory a week; Three semester hours	3030 CLIMATE CHANGE MONITORING Students will be given the opportunity to understand how the components of climate are monitored instrumentally, the history of written climate archives, and how climate records are organized. They will plan and set up a climate station that reports to a UPEI climate database, access online climate records, quality control climate records, analyze climate trends, and calculate climate indices. PREREQUISITE: ACC 1020; Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor Three hours lecture, three hours laboratory a week; Three semester hours

Rationale for Change: Revise the prerequisite to allow students enrolled in the minor to take the course

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	February 5, 2025

CALENDAR & CURRICULUM CHANGE   Motion # 51

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Pre-requisite Addition/Change for ACC 3040 Climate Change Statistics in R as proposed**

3040 CLIMATE CHANGE STATISTICS IN R The R language is widely used among climatologists for data analysis and provides a wide variety of statistical (linear and nonlinear modelling, classical statistical tests, time-series analysis, classification, clustering, etc.) and graphical techniques, and is highly extensible. This course will provide an introduction to computer programming in R and how to use R for effective climate data analysis. PREREQUISITE: MATH 1910 or MATH 1120, CS 1910 and STAT 1910; Admission to the ACC Program Three hours lecture, three hours laboratory; Three semester hours	3040 CLIMATE CHANGE STATISTICS IN R The R language is widely used among climatologists for data analysis and provides a wide variety of statistical (linear and nonlinear modelling, classical statistical tests, time-series analysis, classification, clustering, etc.) and graphical techniques, and is highly extensible. This course will provide an introduction to computer programming in R and how to use R for effective climate data analysis. PREREQUISITE: MATH 1910 or MATH 1120, CS 1910 and STAT 1910; Admission to the ~~ACC Program~~ <u>Applied Climate Change and Adaptation degree program</u> Three hours lecture, three hours laboratory; Three semester hours

Rationale for Change: Revise the prerequisite for consistency

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 52

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Pre-requisite change for ACC 3050 Renewable Energy and Clean Technologies as proposed.**

3050 RENEWABLE ENERGY AND CLEAN TECHNOLOGIES	3050 RENEWABLE ENERGY AND CLEAN TECHNOLOGIES
This course examines sustainability theory and green technology, beginning with an examination of the historical context for the physical, environmental, technological, economic and political aspects of traditional energy systems and energy transitions. Students will then be introduced to different types of renewable energy technology and how they can work as a replacement for conventional technologies.	This course examines sustainability theory and green technology, beginning with an examination of the historical context for the physical, environmental, technological, economic and political aspects of traditional energy systems and energy transitions. Students will then be introduced to different types of renewable energy technology and how they can work as a replacement for conventional technologies.
PREREQUISITE: ACC 1020 and PHYS 2630; Admission to the ACC Program	PREREQUISITE: ~~ACC 1020 and PHYS 2630;~~ Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor
Three hours a week, field trips; Three semester hours	Three hours a week, field trips; Three semester hours

Rationale for Change: Removing of the Pre-requisites ACC 1020, PHYS 2630 as they are not required, the addition of Minor required additional prerequisite clarification. The course is now in our course sequence for 2nd year which provides a good course balance for our students.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	*Date:*
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 53

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Pre-requisite Addition/Change for ACC 3060 Remote Sensing and Climate Change as proposed.**

3060 REMOTE SENSING AND CLIMATE CHANGE An emerging approach to enhancing participation, building awareness and influencing behaviour is the use of 3D landscape visualization to depict past and future scenarios. This course will examine forms of climate change visualization that integrates analytical capabilities of GIS-based software with emotionally-rich and intuitive media and how they are utilized in climate change impact assessment and decision making. PREREQUISITE: CS 1910; Admission to the ACC Program Three hours lecture, three hours laboratory per week; Three semester hours	3060 REMOTE SENSING AND CLIMATE CHANGE An emerging approach to enhancing participation, building awareness and influencing behaviour is the use of 3D landscape visualization to depict past and future scenarios. This course will examine forms of climate change visualization that integrates analytical capabilities of GIS-based software with emotionally-rich and intuitive media and how they are utilized in climate change impact assessment and decision making. PREREQUISITE: ~~CS 1910~~; Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor Three hours lecture, three hours laboratory per week; Three semester hours

Rationale for Change: The removal of prerequisite CS 1910 as it is not required for this course. Revise the prerequisite to allow students enrolled in the minor to take the course

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 54

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: To Approve the Pre-requisite Addition/Change for ACC 3090 Geographic Information Systems for Climate Change as proposed.

| 3090 GEOGRAPHIC INFORMATION SYSTEMS FOR CLIMATE CHANGE
Geographic Systems are used in planning, facilities management, resource management, business, and applied research applications. The common thread in this diverse range of applications is the need to store, manipulate, and analyze spatial data. Students will learn how to create their own maps, analyze geographic problems, and apply techniques to improve understanding of climate change.

PREREQUISITE: Admission to the ACC Program

Three hours on-line and three hours laboratory; Three semester hours | 3090 GEOGRAPHIC INFORMATION SYSTEMS FOR CLIMATE CHANGE
Geographic Systems are used in planning, facilities management, resource management, business, and applied research applications. The common thread in this diverse range of applications is the need to store, manipulate, and analyze spatial data. Students will learn how to create their own maps, analyze geographic problems, and apply techniques to improve understanding of climate change.

PREREQUISITE: Admission to the ~~ACC Program~~ <u>Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor</u>

Three hours <u>lecture</u> ~~on-line~~ and three hours laboratory; Three semester hours |

Rationale for Change: Revise the prerequisite to allow students enrolled in the minor to take the course

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 55

Revision is for a: **Course Description Change and Prerequisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Course Description and Pre-requisite changes for ACC 3100 Climate Change Impacts on Biodiversity and Ecosystems as proposed.**

| 3100 CLIMATE CHANGE IMPACTS ON BIODIVERSITY AND ECOSYSTEMS
This course will assess biodiversity conservation and ecosystem integrity policy responses to global climate change; integrate our knowledge of likely future changes on biodiversity and ecosystems; guide the design of adaptation strategies; and establish a framework for future collaborative research on climate change and biodiversity and ecosystems. A field component of the course will establish a biodiversity-monitoring plot using methods developed by The Smithsonian Institution.

PREREQUISITE: BIO 3270; Admission to the ACC Program

Three hours a week with three hours field/laboratory work; Three semester hours | 3100 CLIMATE CHANGE IMPACTS ON BIODIVERSITY AND ECOSYSTEMS
This course will assess biodiversity conservation and ecosystem integrity policy responses to global climate change; integrate our knowledge of likely future changes on biodiversity and ecosystems; guide the design of adaptation strategies; and establish a framework for future collaborative research on climate change and biodiversity and ecosystems. There will be a field component embedded in this course. ~~A field component of the course will establish a biodiversity-monitoring plot using methods developed by The Smithsonian Institution.~~

PREREQUISITE: ~~BIO 3270~~; Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor

Three hours a week with three hours field/laboratory work; Three semester hours |

Rationale for Change: Generalizing and modernizing content of lab field content. Prerequisite BIO 3270 not required; the addition of Minor required additional prerequisite clarification.

Effective Term: FALL 2025

Implications for Other Programs: none

Impact on Students Currently Enrolled: None

Authorization	*Date:*
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 56

Revision is for a: **Course Title Change, Course Description Change, Prerequisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the title change, course description change and prerequisite change for ACC 3120 Canadian Climate Change Management as proposed**

3120 CANADIAN CLIMATE CHANGE MANAGEMENT	3120 ~~CANADIAN~~ CLIMATE CHANGE ~~MANAGEMENT~~ POLICY IN CANADA
This course introduces approaches to environmental management in Canada focused on climate change aspects. Specifically, the course will examine various environmental laws, regulations, policies and legislation; the application of legislation to proposed projects; the principles and fundamentals of completing environmental audits; and the mainstreaming of adaptation into government programming.	~~This course introduces approaches to environmental management in Canada focused on climate change aspects. Specifically, the course will examine various environmental laws, regulations, policies and legislation; the application of legislation to proposed projects; the principles and fundamentals of completing environmental audits; and the mainstreaming of adaptation into government programming.~~
PREREQUISITE: ACC 2020; Admission to the ACC Program	The course focuses on Canadian domestic and international policy and politics in the realm of climate change examining the questions of political institutions; climate change related legislation; policy making and the impacts of climate change on economy, communities and the environment in Canada. The course will also introduce students to a policy analysis framework and will guide them through writing a policy memo to a government official on a climate change solution of their choice.
Three hours a week; Three semester hours	PREREQUISITE: ACC 2020; Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor
	Three hours a week; Three semester hours

Rationale for Change: Title and description change to provide accuracy of the course. The addition of Minor required additional prerequisite clarification.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

CALENDAR & CURRICULUM CHANGE   Motion # 56

Authorization	*Date:*
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 57

Revision is for a: **Course Title Change and Prerequisite Addition/Change**

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Course Title and Pre-requisite changes for ACC 3140 Carbon Pricing Mechanisms as proposed.**

3140 CARBON PRICING MECHANISMS AND BUSINESS RISK ASSESSMENTS This interdisciplinary course will provide an understanding of business in the era of climate change by examining the implementation of carbon pricing systems and the need for adaptation measures to address the changing physical and regulatory environments. Specialized activities will focus on the critical role of understanding climate change in business risk assessment using a business sector of each student's choice. PREREQUISITE: ENV 3110; Admission to the ACC Program Three hours a week; Three semester hours	3140 CARBON PRICING MECHANISMS ~~AND BUSINESS RISK ASSESSMENTS~~ This interdisciplinary course will provide an understanding of business in the era of climate change by examining the implementation of carbon pricing systems and the need for adaptation measures to address the changing physical and regulatory environments. Specialized activities will focus on the critical role of understanding climate change in business risk assessment using a business sector of each student's choice. PREREQUISITE: ~~ENV 3110~~; Admission to the ~~ACC Program~~ <u>Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor</u> Three hours a week; Three semester hours

Rationale for Change: Title change to for more precision and accuracy, removal of pre-requisite ENV 3110 as it is not required for this course, and the addition of Minor required additional prerequisite clarification.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

UNIVERSITY *of* Prince Edward **ISLAND**

CALENDAR & CURRICULUM CHANGE   Motion # 58

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Pre-requisite Addition/Change for ACC 4010 Climate Coastal Science as proposed.**

4010 CLIMATE COASTAL SCIENCE This course will examine the impacts of global climate change on the oceans and their implications on fisheries and aquaculture; the influence of ocean basins on climate and the development of coasts; and the use of littoral zones in the assessment of the effects of coastal risks and hazards on shorelines. Students will assess the vulnerability of the local fishery to climate impacts and develop adaptation options. PREREQUISITE: PHYS 2630; Admission to the ACC Program Three hours a week; Three semester hours	4010 CLIMATE COASTAL SCIENCE This course will examine the impacts of global climate change on the oceans and their implications on fisheries and aquaculture; the influence of ocean basins on climate and the development of coasts; and the use of littoral zones in the assessment of the effects of coastal risks and hazards on shorelines. Students will assess the vulnerability of the local fishery to climate impacts and develop adaptation options. PREREQUISITE: ~~PHYS 2630~~; Admission to the ~~ACC Program~~ <u>Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor</u> Three hours a week; Three semester hours

Rationale for Change: The removal of the pre-requisite PHYS 2630 as is not required for this course. Revise the prerequisite to allow students enrolled in the minor to take the course

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 59

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: To approve the Pre-requisite Addition/Change for ACC 4020 Uncertainty and Probability in Climate Change as proposed

4020 UNCERTAINTY AND PROBABILITY IN CLIMATE CHANGE	4020 UNCERTAINTY AND PROBABILITY IN CLIMATE CHANGE
Probability theory is a mathematical framework that allows us to describe and analyze random phenomena in the world around us. This course will examine and demonstrate the use of basic concepts such as random experiments, probability axioms, conditional probability, law of total probability, single and multiple random variables, moment-generating functions and random vectors in climate change science assessments.	Probability theory is a mathematical framework that allows us to describe and analyze random phenomena in the world around us. This course will examine and demonstrate the use of basic concepts such as random experiments, probability axioms, conditional probability, law of total probability, single and multiple random variables, moment-generating functions and random vectors in climate change science assessments.
PREREQUISITE: STAT 1910 and ACC 3060; Admission to the ACC Program	PREREQUISITE: STAT 1910 and ACC 3060; Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program
Three lecture hours, three hours laboratory per week; Three semester hours	Three lecture hours, three hours laboratory per week; Three semester hours

Rationale for Change: Revise the prerequisite for consistency Revise the prerequisite for consistency

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	*Date:*
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 60

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Pre-requisite Addition/Change for ACC 4040 Virtual Reality and Climate Change as proposed.**

4040 VIRTUAL REALITY AND CLIMATE CHANGE An emerging approach to enhancing participation and building awareness is the use of 3D landscape visualization to depict past and future scenarios. Following an introduction on the basics and essentials of the Unity gaming software, students will use the imagery data acquired by the drone in ACC 3040 to develop a 3D interactive sea-level rise tool. PREREQUISITE: CS 1910, ACC 3040, ACC 3050 and ACC 3060; Admission to the ACC Program Three lecture hours, three hours laboratory per week; Three semester hours	4040 VIRTUAL REALITY AND CLIMATE CHANGE An emerging approach to enhancing participation and building awareness is the use of 3D landscape visualization to depict past and future scenarios. Following an introduction on the basics and essentials of the Unity gaming software, students will use the imagery data acquired by the drone in ACC 3040 to develop a 3D interactive sea-level rise tool. PREREQUISITE: CS 1910, ACC 3040, ACC 3050 and ACC 3060; Admission to the ~~ACC Program~~ <u>Applied Climate Change and Adaptation degree program</u> Three lecture hours, three hours laboratory per week; Three semester hours

Rationale for Change: Revise the prerequisite for consistency

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	*Date:*
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 61

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Pre-requisite Addition/Change for ACC 4060 Measuring Your Carbon Footprint through Carbon Accounting as proposed.**

| 4060 MEASURING YOUR CARBON FOOTPRINT THROUGH CARBON ACCOUNTING
This course will examine greenhouse gas emissions accounting and reporting. Students will design and execute greenhouse gas emissions inventories, employing skills including the identification of analysis boundaries, acquisition of data, calculation of emissions levels, and reporting. As a final exercise, the students will also calculate the carbon footprint of individual businesses, companies or public organizations.

PREREQUISITE: ACC 3140; Admission to the ACC Program

Three hours a week; Three semester hours | 4060 MEASURING YOUR CARBON FOOTPRINT THROUGH CARBON ACCOUNTING
This course will examine greenhouse gas emissions accounting and reporting. Students will design and execute greenhouse gas emissions inventories, employing skills including the identification of analysis boundaries, acquisition of data, calculation of emissions levels, and reporting. As a final exercise, the students will also calculate the carbon footprint of individual businesses, companies or public organizations.

PREREQUISITE: ~~ACC 3140~~; Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor

Three hours a week; Three semester hours |

Rationale for Change: The removal of the pre-requisite ACC 3140 as it is not required for this course. Revise the prerequisite to allow students enrolled in the minor to take the course

Effective Term: FALL 2024

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 62

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Pre-requisite Addition/Change for ACC 4070 Climate Extremes as proposed.**

4070 CLIMATE EXTREMES	4070 CLIMATE EXTREMES
This course will examine the data used to monitor and understand climate extremes; the factors and mechanisms that determine the characteristics of climate extremes; Atlantic Region droughts, floods, heavy precipitation events, heat waves, cold spells, tropical and extra-tropical storms, and ocean waves; specialized tools such as IDF curves; and the influence of temporal considerations in adaptation planning.	This course will examine the data used to monitor and understand climate extremes; the factors and mechanisms that determine the characteristics of climate extremes; Atlantic Region droughts, floods, heavy precipitation events, heat waves, cold spells, tropical and extra-tropical storms, and ocean waves; specialized tools such as IDF curves; and the influence of temporal considerations in adaptation planning.
PREREQUISITE: STAT 1910 and ACC 3030; Admission to the ACC Program	PREREQUISITE: STAT 1910 and ACC 3030; Admission to the ~~ACC Program~~ <u>Applied Climate Change and Adaptation degree program</u>
Three hours a week; Three semester hours	Three hours a week; Three semester hours

Rationale for Change: Revise the prerequisite for consistency

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	*Date:*
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE **Motion # 63**

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: To approve a title, course description, and pre-requisite changes to ACC 4080 CLIMATE CHANGE IMPACTS AND ADAPTATION as proposed

4080 CLIMATE CHANGE IMPACTS AND ADAPTATION Adaptation strategies, limits to adaptation, and approaches to adaptation planning will be covered. Students will use regional scenarios of future climate change and the guidelines set by the Intergovernmental Panel on Climate Change to conduct a rapid assessment of climate change impacts and potential adaptation strategies for the PEI economy and ecology, designated for a local entity. PREREQUISITE: ACC 3020 and ACC 3030; Admission to the ACC Program Three hours a week; Three semester hours	4080 CLIMATE CHANGE IMPACTS, <u>MITIGATION</u> AND ADAPTATION ~~Adaptation strategies, limits to adaptation, and approaches to adaptation planning will be covered. Students will use regional scenarios of future climate change and the guidelines set by the Intergovernmental Panel on Climate Change to conduct a rapid assessment of climate change impacts and potential adaptation strategies for the PEI economy and ecology, designated for a local entity.~~ <u>This course will explore various impacts of climate change from multiple perspectives, such as loss of biodiversity, extreme weather events, impacts on agriculture and food security, water scarcity, human health, economic consequences, etc. Furthermore, students will quantify human sources of greenhouse gas emissions to determine the best approaches for meeting a "safe" or "below dangerous level" of atmospheric concentrations of these gases, which will help cushion the impacts. Students will also use regional & global scenarios of future climate change, and the guidelines set by the Intergovernmental Panel on Climate Change to rapidly assess climate change potential adaptation strategies for the PEI & worldwide economy and ecology.</u> PREREQUISITE: ~~ACC 3020 and ACC 3030;~~ Admission to the ~~ACC Program~~ <u>Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor</u> Three hours a week; Three semester hours

Rationale for Change: Two courses combined into one course as some overlap of the course content. Title

CALENDAR & CURRICULUM CHANGE   Motion # 63

and description change to provide an accurate course description. The removal of pre-requisites ACC 3020 and ACC 3030 as they are not required for this course, and the addition of Minor requires additional prerequisite clarification.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 64

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: **To approve the Prerequisite change for ACC 4120 International Climate Diplomacy as proposed.**

4120 INTERNATIONAL CLIMATE DIPLOMACY	4120 INTERNATIONAL CLIMATE DIPLOMACY
This course provides an historical and analytical view for understanding international environmental relations, examines international environmental agreements and their implications for Canada, identifies the main actors and how they address global environmental problems, and explores environmental governance. Students will take on the role of countries in the United Nations and negotiate a climate agreement. PREREQUISITE: ACC 2020; Admission to the ACC Program Three hours a week; Three semester hours	This course provides an historical and analytical view for understanding international environmental relations, examines international environmental agreements and their implications for Canada, identifies the main actors and how they address global environmental problems, and explores environmental governance. Students will take on the role of countries in the United Nations and negotiate a climate agreement. PREREQUISITE: ACC 2020; Admission to the ~~ACC Program~~ Applied Climate Change and Adaptation degree program OR enrollment in the Applied Climate Change and Adaptation Minor Three hours a week; Three semester hours

Rationale for Change: The addition of Minor required additional prerequisite clarification

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization	Date:
Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Grad. Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 65

Faculty/School: **Science**

Department/Program(s): **School of Climate Change and Adaptation**

MOTION: To approve the new Calendar Entry entitled Requirements for a Minor in Applied Climate Change and Adaptation" as proposed

Proposed New Calendar Entry
REQUIREMENTS FOR A MINOR IN APPLIED CLIMATE CHANGE AND ADAPTATION Students may obtain a degree with a minor in Climate Change and Adaptation by successfully completing the following courses: ACC 1010 or ACC 1040 ACC 1020 ACC 2020 ACC 2030 ACC 3050 **AND** Two of the ACC 3rd or 4th year courses excluding following courses: ACC 2160, ACC 3160, ACC 3040, ACC 4020, ACC 4040, and ACC 4070

Rationale for New Calendar Entry: This will promote our program and allow students across all programs with interest in climate change and adaptation to learn more. This Minor program will be a good addition to the Faculty of Science.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Resources Required: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
Graduate Studies Dean's Approval: N/A	
Registrar's Office Approval: Darcy McCardle	

CALENDAR & CURRICULUM CHANGE   Motion # 66

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

Faculty/School/Department: **Science**

Department/Program(s)/Academic Regulations: **School of Climate Change and Adaptation**

MOTION: To approve the Calendar Entry Change for the sections entitled "Requirements for Applied Climate Change and Adaptation" as proposed

REQUIREMENTS FOR APPLIED CLIMATE CHANGE AND ADAPTATION	REQUIREMENTS FOR <u>BACHELOR OF</u> APPLIED CLIMATE CHANGE AND ADAPTATION
Students following this degree program must complete 126/127 semester hours of required courses. (**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.**)	Students following this degree program must complete 126/127 semester hours of required courses. (**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.**)
REQUIRED COURSES FOR APPLIED CLIMATE CHANGE AND ADAPTATION • ACC 1010 Introduction to PEI's Living Climate Lab • ACC 1020 Introduction to Climate Adaptation Tools and Technologies • ACC 1040 Introduction to Climate Change • ACC 2020 Canadian Climate Change Policy and Politics • ACC 2030 Indigenous Knowledge and Climate Change • ACC 2160 Work Integrated Learning I • ACC 3010 Global Climate Systems and Science • ACC 3020 Climate Futures and Modelling • ACC 3030 Climate Change Monitoring • ACC 3040 Climate Change Statistics in R • ACC 3050 Renewable Energy and Clean Technologies • ACC 3060 Remote Sensing and Climate Change • ACC 3080 Reducing Greenhouse Gas Emissions (Climate Mitigation) • ACC 3090 Geographic Information Systems for Climate Change	~~REQUIRED COURSES FOR APPLIED CLIMATE CHANGE AND ADAPTATION~~ • ~~ACC 1010 Introduction to PEI's Living Climate Lab~~ • ~~ACC 1020 Introduction to Climate Adaptation Tools and Technologies~~ • ~~ACC 1040 Introduction to Climate Change~~ • ~~ACC 2020 Canadian Climate Change Policy and Politics~~ • ~~ACC 2030 Indigenous Knowledge and Climate Change~~ • ~~ACC 2160 Work Integrated Learning I~~ • ~~ACC 3010 Global Climate Systems and Science~~ • ~~ACC 3020 Climate Futures and Modelling~~ • ~~ACC 3030 Climate Change Monitoring~~ • ~~ACC 3040 Climate Change Statistics in R~~ • ~~ACC 3050 Renewable Energy and Clean Technologies~~ • ~~ACC 3060 Remote Sensing and Climate Change~~ • ~~ACC 3080 Reducing Greenhouse Gas Emissions (Climate Mitigation)~~ • ~~ACC 3090 Geographic Information Systems for Climate Change~~

CALENDAR & CURRICULUM CHANGE   Motion # 66

• ACC 3100 Climate Change Impacts on Biodiversity and Ecosystems • ACC 3120 Canadian Climate Change Management • ACC 3140 Carbon Pricing Mechanisms and Business Risk Assessments • ACC 3160 Work Integrated Learning II • ACC 4010 Climate Coastal Science • ACC 4020 Uncertainty and Probability in Climate Change • ACC 4040 Virtual Reality and Climate Change • ACC 4060 Measuring Your Carbon Footprint through Carbon Accounting • ACC 4070 Climate Extremes • ACC 4080 Climate Change Impacts and Adaptation • ACC 4120 International Climate Diplomacy • Two ACC electives at the 4000 level	• ~~ACC 3100 Climate Change Impacts on Biodiversity and Ecosystems~~ • ~~ACC 3120 Canadian Climate Change Management~~ • ~~ACC 3140 Carbon Pricing Mechanisms and Business Risk Assessments~~ • ~~ACC 3160 Work Integrated Learning II~~ • ~~ACC 4010 Climate Coastal Science~~ • ~~ACC 4020 Uncertainty and Probability in Climate Change~~ • ~~ACC 4040 Virtual Reality and Climate Change~~ • ~~ACC 4060 Measuring Your Carbon Footprint through Carbon Accounting~~ • ~~ACC 4070 Climate Extremes~~ • ~~ACC 4080 Climate Change Impacts and Adaptation~~ • ~~ACC 4120 International Climate Diplomacy~~ • ~~Two ACC electives at the 4000 level~~
REQUIRED COURSES FROM OTHER DEPARTMENTS **Biology** BIO 1010 Current Issues in Environmental Biology BIO 3270 Field Coastal Ecology **Chemistry** CHEM 1110 General Chemistry I CHEM 2020 Environmental Chemistry **Environmental Studies** ENV 1010 Introduction to Environmental Studies ENV 2120 Earth's Physical Environment ENV 3110 Understanding Climate Change **Mathematical & Computational Sciences** MATH 1120 Calculus for Managerial, Social and Life Sciences OR MATH 1910 Single Variable Calculus I CS 1910 Computer Science I STAT 1910 Introduction to Probability and Statistics	~~**REQUIRED COURSES FROM OTHER DEPARTMENTS**~~ ~~**Biology**~~ ~~BIO 1010 Current Issues in Environmental Biology~~ ~~BIO 3270 Field Coastal Ecology~~ ~~**Chemistry**~~ ~~CHEM 1110 General Chemistry I~~ ~~CHEM 2020 Environmental Chemistry~~ ~~**Environmental Studies**~~ ~~ENV 1010 Introduction to Environmental Studies~~ ~~ENV 2120 Earth's Physical Environment~~ ~~ENV 3110 Understanding Climate Change~~ ~~**Mathematical & Computational Sciences**~~ ~~MATH 1120 Calculus for Managerial, Social and Life Sciences OR MATH 1910 Single Variable Calculus I~~ ~~CS 1910 Computer Science I~~ ~~STAT 1910 Introduction to Probability and Statistics~~

CALENDAR & CURRICULUM CHANGE   Motion # 66

Physics PHYS 2630 Atmospheric and Ocean Physics **UPEI Courses & Writing Intensive Course** **One of:** UPEI 1010 Writing Studies UPEI 1020 Engaging Ideas and Cultural Contexts UPEI 1030 Engaging University Contexts and Experience; AND One writing intensive course; AND IKE 1040 Indigenous Teachings **COURSE SEQUENCE** The following is the sequence for completion of courses.	~~**Physics**~~ ~~PHYS 2630 Atmospheric and Ocean Physics Climate Physics~~ ~~**UPEI Courses & Writing Intensive Course**~~ ~~**One of:**~~ ~~UPEI 1010 Writing Studies~~ ~~UPEI 1020 Engaging Ideas and Cultural Contexts~~ ~~UPEI 1030 Engaging University Contexts and Experience; AND~~ ~~One writing intensive course; AND~~ ~~IKE 1040 Indigenous Teachings~~ ~~**COURSE SEQUENCE**~~ ~~The following is the sequence for completion of courses.~~

YEAR 1
• ACC 1010 Introduction to PEI's Living Climate Lab
• ACC 1020 Introduction to Climate Adaptation Tools and Technologies
• ACC 1040 Introduction to Climate Change
• BIO 1010 Current Issues in Environmental Biology
• CHEM 1110 General Chemistry I
• CS 1910 Computer Science I
• ENV 1010 Introduction to Environmental Studies
• MATH 1120 Calculus for Managerial, Social and Life Sciences; or 1910 Single Variable Calculus I
• IKE 1040 Indigenous Teachings of Turtle Island
• One of the following UPEI courses:
    ○ UPEI 1010 Writing Studies
    ○ UPEI 1020 Engaging Ideas and Cultural Contexts
    ○ UPEI 1030 Engaging University Contexts and Experiences
YEAR 2
• ACC 2020 Impacts of Canadian Climate Policy and Politics
	YEAR 1
	
	• ACC 1010 Introduction to PEI's Living Climate Lab
	• ACC 1020 Introduction to Climate Adaptation Tools and Technologies
	• ACC 1040 Introduction to Climate Change
	• BIO 1010 Current Issues in Environmental Biology
	• CHEM 1110 General Chemistry I
	• ~~CS 1910 Computer Science I~~
	• ~~ENV 1010 Introduction to Environmental Studies~~
	• MATH 1120 Calculus for Managerial, Social and Life Sciences; or 1910 Single Variable Calculus I
	• IKE 1040 Indigenous Teachings of Turtle Island
	• One of the following UPEI courses:
	    ○ UPEI 1010 Writing Studies
	    ○ UPEI 1020 Engaging Ideas and Cultural Contexts
	    ○ UPEI 1030 Engaging University Contexts and Experiences
	• <u>Two Electives</u>
	YEAR 2

CALENDAR & CURRICULUM CHANGE   Motion # 66

- ACC 2030 Indigenous Knowledge and Climate Change
- BIO 3270 Field Coastal Ecology
- CHEM 2020 Environmental Chemistry
- ENV 2120 Earth's Physical Environment
- ENV 3110 Understanding Climate Change
- PHYS 2630 Climate Physics
- STAT 1910 Introduction to Probability and Statistics
- Two electives

SUMMER SESSION
- ACC 2160 Work Integrated Learning I

YEAR 3
- ACC 3010 Global Climate Systems and Science
- ACC 3020 Climate Futures and Modelling
- ACC 3030 Climate Change Monitoring
- ACC 3040 Climate Change Statistics in R
- ACC 3050 Renewable Energy and Clean Technologies
- ACC 3060 Remote Sensing and Climate Change
- ACC 3090 Geographic Information Systems for Climate Change
- ACC 3100 Climate Change Impacts on Biodiversity and Ecosystems
- ACC 3120 Canadian Climate Change Management
- ACC 3140 Carbon Pricing Mechanisms and Business Risk Assessments

SUMMER SESSION
- ACC 3160 Work Integrated Learning II

YEAR 4
- ACC 3080 Reducing Greenhouse Gas Emissions (Climate Mitigation)
- ACC 4010 Climate Coastal Science

- ACC 2020 ~~Impacts of Canadian~~ Climate Change Policy and Politics
- ACC 2030 Indigenous Knowledge and Climate Change
- <u>CS 1910 Computer Science I</u>
- <u>ACC 3050 Renewable Energy and Clean Technologies</u>
- ~~BIO 3270 Field Coastal Ecology~~
- CHEM 2020 Environmental Chemistry
- ENV 2120 Earth's Physical Environment
- ~~ENV 3110 Understanding Climate Change~~
- PHYS 2630 Climate Physics
- STAT 1910 Introduction to Probability and Statistics
- Two electives

SUMMER SESSION
- ACC 2160 Work Integrated Learning I

YEAR 3

- ACC 3010 Global Climate Systems and Science
- ACC 3020 Climate Futures and Modelling
- ACC 3030 Climate Change Monitoring
- ACC 3040 Climate Change Statistics in R
- ~~ACC 3050 Renewable Energy and Clean Technologies~~
- ~~ACC 3060 Remote Sensing and Climate Change~~
- ACC 3090 Geographic Information Systems for Climate Change
- ACC 3100 Climate Change Impacts on Biodiversity and Ecosystems
- ACC 3120 ~~Canadian~~ Climate Change ~~Management~~ <u>Policy in Canada</u>
- ACC 3140 Carbon Pricing Mechanisms ~~and Business Risk Assessments~~
- <u>Two Electives</u>

SUMMER SESSION
- ACC 3160 Work Integrated Learning II

YEAR 4
- ~~ACC 3080 Reducing Greenhouse Gas Emissions (Climate Mitigation)~~

CALENDAR & CURRICULUM CHANGE

Motion # 66

• ACC 4020 Uncertainty and Probability in Climate Change • ACC 4040 Virtual Reality and Climate Change • ACC 4060 Measuring Your Carbon Footprint through Carbon Accounting • ACC 4070 Climate Extremes • ACC 4080 Climate Change Impacts and Adaptation • ACC 4120 International Climate Diplomacy • Two ACC electives at the 4000 level	• ACC 4010 Climate Coastal Science • ACC 4020 Uncertainty and Probability in Climate Change • ACC 4040 Virtual Reality and Climate Change • ACC 4060 Measuring Your Carbon Footprint through Carbon Accounting • ACC 4070 Climate Extremes • ACC 4080 Climate Change Impacts ~~and,~~ Mitigation and Adaptation • ACC 4120 International Climate Diplomacy • <u>ACC 3060 Remote Sensing and Climate Change</u> • <u>ACC 4100 Precision Agriculture for Climate Resilience</u> • ~~Two ACC electives at the 4000 level~~ <u>One elective</u>

Rationale for Change: The proposed changes provide more clarity for the program, and it removes unnecessary duplication of the calendar.

Effective Term: FALL 2025

Implications for Other Programs: None

Impact on Students Currently Enrolled: None

Authorization   *Date:*

Departmental Approval: Aitazaz Farooque	December 6, 2024
Faculty/School Approval: Science Council	January 10, 2025
Faculty Dean's Approval: Nola Etkin	January 10, 2025
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