Minutes of the Second Senate Meeting
October 12, 2012, 3:00 pm, Robertson Library Rm 235

Present: A. Abd-El-Aziz, P. Bastante, W. Bradley, D. Buck, B. Campbell, L. Chilton, G. Conboy, S. Dawson, D. Desserud, A. Duncan, R. Gilmour, K. Gottschall-Pass, F. Gray, R. Herbert, K Kielly, C. Lacroix, R. Lemm, P. MacAulay, E. MacDonald, D. MacLellan, J. Magrath, L. McDuffee, M. Sweeney-Nixon, S. Opps, L. Pack, D. Reynolds, C. Ryan, A. Smallwood, S. Thomas, M. Turnbull, K. VanGerven, B. Wagner, D. Wagner

Regrets: B. Déziel, R. Domike, I. Dowbiggin, L. Edwards N. Kujundzic, M. Leggott, M. MacInnis G. MacDonald, J. Podger, K. Tilleczek

Absent: M. Doyle, D. MacDonald, J. Mitchell, J. Willis

Guest: Betty Jeffery

Senate Asst: A. Deighan

The President called the meeting to order.

1. Approval of Agenda
Moved (M. Turnbull/E.MacDonald): to approve the agenda.
Carried.

2. Approval of Minutes of September 21, 2012
Moved (E. MacDonald/C. Lacroix): to approve the minutes of September 21, 2012.
Carried.

3. Business Arising from September 21, 2012

The preliminary enrolment report will be presented at the November Senate owing to the October 15 AAU restricted release date for enrolment data.

The President advised Senators that they have until the next Senate on November 2 to provide feedback to Dean Desserud regarding the Senate Mandates and Committees restructuring.

The President informed Senators that as no suggestions were submitted regarding a Senate retreat topic, the Steering Committee of Senate is recommending Enrolment Management. A retreat will be planned for the second semester and we propose to invite an external presenter well informed on the top to lead the retreat. The President also informed Senators that the VP Academic is currently establishing an Enrolment Management Committee.

4. President's Report

- The President welcomed Betty Jeffery, President of the Faculty Association (FA), and informed Senators that Mrs. Jeffery will be attending Senate meetings as a guest. The President informed Senators that a four year FA agreement with the university has been signed and that several people involved in the negotiations, Don Desserud, Sharon Myers, Michelle Dorsey and Betty

Jeffery, should be thanked for all their hard work and dedication. The four years of stability achieved in this agreement will allow the University to work more effectively as a unified team. Also, the President informed Senators that other collective negotiations are currently taking place and the University is approaching these negotiations in the same spirit as the FA negotiations.

- **Highlights from Egypt** (October 4-11, 2012)
- Visits:
  - Ain Shams University (Oct 7th)
  - 6th of October University (Oct 8th)
  - Arab Academy for Science & Technology (Oct 9th)
  - Misr International University (Oct 10th)
- MOU's were signed
- Special interests in Business, Engineering, Education, Nursing & Languages
- The President reiterated to Senators the importance of both domestic and international recruiting and to think about what it means for UPEI.

Copyright Issue (For Information Only)

The VP Academic, on behalf of Mark Leggott, stepped forward to inform Senators of an increase tariff cost on copyright issues and that based upon this increase, UPEI will be opting out of Access Copyright. M. Leggott will be asked to provide more information on this topic at a future meeting of Senate.

Dean of Arts Presentation

At the invitation of Senate, Dean Desserud was asked to present on the Faculty of Arts. Don Desserud was pleased to report the highlights which included: Overview of The Faculty of Arts (12 departments, 9 programmes, Honours, majors &minors, BA, BMus, BAA, MAIS), Departments; Programmes without department status, Teaching Data: Undergraduate Registrations, Faculty Complement; Recent Successes, Faculty Publications 2010, 2011 and 2012; Teaching Award winners; Recent Teaching awards, Previous award winners; Collaborative research, Conferences; Student Initiatives, Debating Society; Challenges (i.e. BA 'brand', Enrolment distribution, Need for renewal), Service role, Retention and Attrition; Initiatives, Strategy; Applied programmes, Bridging programmes (ie. Science Studies, Rhetoric, writing and culture, Women's Studies, Rural Governance in Prince Edward Island, Revamp Journalism BAA, Revamp Canadian Studies, Combine classic education with 'new' initiatives'), Risks (i.e. Declining enrollment, Island/region demographics, rising costs); Opportunities (i.e. Reorganization, Administration, Programmes, New programmes/new research = new students, summer initiatives).

The President thanked the Dean for his very thoughtful and informative presentation.

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5. Senate Reports

Nominating Report

Moved (L. Chilton/D. Desserud): approve the following names for Senate Committees:

BOARD-SENATE LIAISON COMMITTEE

Required: 1 faculty member from Senate
Laurie McDuffee (AVC)
With no further nominations from the floor, Laurie McDuffee was accepted by acclamation.

The Chair of the Nominating Committee, Lisa Chilton, also asked Senators to carefully look at Dean Dessurud's report on the Senate Committees and Mandates. Dr. Chilton informed Senators that there are issues to be addressed and any feedback would be appreciated.

First Curriculum Report

Moved (C. Lacroix/A. Duncan): to approve all motions contained in the first curriculum report

*One change was made to the first curriculum report. Various discussions took place regarding motion #10 under Senate Academic Calendar Dates 2013-2014 and a request was made to move the start date for the semester from Friday, January 3, 2013 to Monday, January 6, 2013 and a friendly amendment was made to motion #10.

Moved (R. Lemm/M. Turnbull): to add a friendly amendment to Motion #10 in the first curriculum report to change the January start date from Friday, January 3, 2013 to Monday, January 6, 2012.

Three abstentions recorded: Alan Duncan, Don Reynolds, Robert Gilmour

Carried

After the motion, an additional conversation ensued surrounding the establishment of academic calendar date. A request was made to have a broader discussion on the minimum number of teaching days at 60, the impact of snow days on the academic calendar, and the early date of convocation. The President asked the VP Academic and ARPC to look at these issues for the next meeting of Senate.

Faculty of Arts

Department of Music - 1 Motion

Motion: to approve the Minor in Music

Students wishing to receive a Minor in Music must complete a total of twenty-one semester hours of music courses, selected from the following list (or others in consultation with the Chair), with at least nine semester hours at the 200 level or above: Music 113, 114, 115, 123,

124, 201, 202, 213, 214, 215, 223, 224, 315, 412, 413, 422, or 423.

Students interested in the Minor in Music are encouraged to contact the Music Department for course advisement. Those students wishing to register for Music 113 (Music Theory) must write a diagnostic theory test to determine the level of learning support that might be needed prior to (or during) the course, and should contact the Music Department before 10 July to arrange an appropriate time to write this test.

Faculty of Science

Department of Applied Human Sciences - 1 Motion

Motion: to approve changes to prerequisites to the following Kinesiology courses

KINE 202 PREREQUISITE: Kinesiology 101 and admission to BSc Kinesiology program

KINE 232 PREREQUISITE: Kinesiology 101 and admission to BSc Kinesiology program

KINE 241 PREREQUISITE: Kinesiology 101, and admission to BSc Kinesiology program

Department of Biology - 1 Motion

Motion: to approve the following changes in Biology

Bio 121-122 Biology 121-122 ~~have been designed for the Nursing Program, and the Department of Family and Nutritional Sciences. Biology 102 and 121 are not to be taken concurrently. Credit will be allowed for the combination of Biology 101 and 121-122.~~ are restricted to students enrolled in programs offered by the School of Nursing and the Department of Applied Human Sciences

Bio 121 121 HUMAN ANATOMY
This course deals with structural levels of organization of the human body ~~and is designed for students in the Nursing program~~. The gross anatomy and histology of the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, respiratory, lymphatic, digestive, urinary and reproductive system of humans is surveyed.
PREREQUISITE: Restricted to students in the Nursing and Kinesiology programs
Three hours lecture, 2.5 hours laboratory a week

Bio 122 122 HUMAN PHYSIOLOGY
This course deals with the functioning of the human body~~, and is designed for students in the Nursing program and the Department of Family and Nutritional Sciences~~. The physiology of the integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary and reproductive systems is surveyed.
PREREQUISITE: Restricted to students in the Nursing, Kinesiology, Foods and Nutrition, and Family Science programs. ~~or Department of Family and Nutritional Sciences~~

Three hours lecture, 2.5 hours laboratory a week

Bio 331 *331 RESEARCH METHODS AND COMMUNICATIONS IN BIOLOGY
This course is an introduction to research methods and the basic principles of scientific communication, as expressed in the Biological Sciences. Lectures and assignments focus on the principles of study design; analysis, interpretation, and presentation of biological data; and the preparation of scientific papers and reports. Students critically evaluate papers in their areas of interest, and gain experience in presenting scientific information to their peers (both orally and as scientific posters).
PREREQUISITES: Biology 131 and 132, and 6 semester-hours of core Biology courses
Three hours lecture, Two hours laboratory a week
~~NOTE: For Biology majors, it is strongly recommended that Biology 331 be taken concurrently with Biology 326 or Biology 382~~

NOTE: There may be opportunities for joint projects between this course and other senior Biology lab courses to directly apply writing and researching techniques from Biology 331. Students are therefore strongly encouraged to take another lab-based biology course concurrently with Biology 331.

Bio 382 *382 EVOLUTIONARY BIOLOGY
This course is designed to provide students with a better understanding of evolution and how it applies to other biology courses and to their lives in general. We first trace the rise of evolutionary thought, examining the evidence for different evolutionary processes. We then more closely examine the mechanisms that result in evolutionary change. Subsequently, we look at the history of life and examine topics such as speciation, great moments in evolution, human evolution and extinction. Lastly, we deal with the diverse areas of study that benefit from an understanding of evolution.
PREREQUISITE: Biology 222 or Biology 223
Three hours lecture, three hours laboratory a week
~~NOTE: For Biology majors, it is strongly recommended that Biology 382 be taken concurrently with Biology 331~~

Faculty of Science – Graduate Studies - 1 Motion

Motion: to make changes to PhD Calendar Entry

PhD-Environmental Sciences candidacy exam

Corrections to the description of the
PhD-ESC (Environmental Sciences)
candidacy exam in the Faculty of Science

Propose changes Underlined

Faculty of Science PhD Programs in
Molecular and Macromolecular Sciences (MMS) and Environmental Sciences (ESC)

Candidacy examination

The student will then distribute copies of a detailed thesis proposal (MMS) or an original essay (ESC) to the Candidacy Examination Committee and the Faculty of Science Graduate Studies Committee. The latter will schedule a mutually agreeable time and place for the exam. This proposal (MMS) or essay (ESC) must be received at least three weeks prior to the scheduled exam.

The expanded thesis proposal (MMS) should address not only the research plan, but also how the student's courses in both MMS and Business relate to the proposed work. The essay (ESC) should address a topic considered relevant to ESC as identified in advance by the Candidacy Examination Committee.

The examination begins with a formal presentation by the student not to exceed 30 minutes followed by the candidate being asked to respond to questions from the Examination Committee on topics related to the proposed area of research or essay and general topics in the student's field ~~(1-2 hours)~~. The questions, while broad in scope, will invariably focus on the student's research proposal and will evaluate the student's expertise in their field.

School of Business - 1 Motion

Motion: to approve the following changes within the Master of Business Administration

MBA Bus 801	* Remove 'Upon completion of all course work' and start with: *A student undertakes an independent signature project to provide him or her with the opportunity to use the management concepts and tools acquired to date.*
MBA Bus 607	Under the prerequisites *602* should be included in the list
MBA Bus 601	MANAGEMENT ***OF*** PEOPLE & ORGANIZATIONS
MBA	(words bolded and italicized should be changed in calendar)

Pg. 293; A) Structure of the program:

The *Executive ~~style~~ MBA* program is designed for working people. The program structure will be flexible to fit students' needs as much as possible. For example, ~~6-week courses with meetings on weekends and/or evenings~~ *classes held every other week on Fridays and Saturdays will accommodate working students*. Students will normally enroll in ***four courses per semester*** and form small, self-managed teams to work on projects, thus enabling them to learn from each others' backgrounds and experiences.
The first year of studies will focus on enhancing managerial skills and understanding functional business topics. Students will be able to *take ~~two~~ four courses in each of the fall and winter ~~and spring/summer~~ semesters*.

The second year of studies will focus on the development and application of more strategic perspectives and application within a dynamic global business environment. In year two, students will be able to take ~~two~~ *four courses* in ~~*each of*~~ *the fall* ~~*and winter*~~ *semester*. The signature project is normally started in year one of the Program and is completed in the *winter semester* of the second year.

MBA

Pg. 293; B) Program Requirements:

Students enrolled in the MBA program are required to complete a total of 42 credit hours (14 courses) comprised of required courses, specialization courses, and a signature project. Students have the opportunity to complete the MBA program in ***twenty-~~three~~ months***. They must complete all required courses within six years of being admitted to the program.

MBA

Page 259, 2. Enrolment and Registration; Academic Credit from Outside the Program; 2nd paragraph

Students who wish to request a course credit transfer must have ~~the approval of the MBA Committee and the Dean of the School of Business~~ *prior approval of Director of the MBA Program.* They must complete a Permission to Transfer form and submit it to the Office of the Registrar. Students may take and receive credit for up to 9 semester hours of course work from academic units outside the School of Business. All course work must be at the graduate level.

School of Nursing - 1 Motion

Motion: to approve changes to admission criteria for Master of Nursing

Removal of the following requirement from the admission criteria for the Master of Nursing. ~~Normally have an equivalent of a minimum of two years of nursing practice within the last five years for the Thesis stream.~~

Faculty of Veterinary Medicine

Department of Health Management - 1 Motion

Motion: to approve changes to the following courses

VHM 349	Delete
VHM 347	Change course title to 'Equine Anesthesia,~~and~~ Surgery & Lameness'
	This elective ~~lecture~~ course provides detailed descriptions of ~~the~~ anatomy, physiology, anesthetic protocols, and surgical techniques for common surgical and lameness conditions encountered in equine practice

Change from 1 credit hour to 1.5 credit hours

Change from 5 week module of 3 lectures per week to five week module of 4 lectures per week

Miscellaneous

Academic Regulation #13 - 1 Motion

Motion: to approve changes to Academic Regulation #13

13. EXAMINATION REGULATIONS

a) Restrictions on Testing: No tests or examinations of any kind are to be held during the two-week period preceding the final day of classes, nor during any reading period, without the permission of the Chair and the appropriate Dean. In-class presentations and practical laboratory examinations scheduled on the course outline are exempted.

b) Special [final] examinations: Under exceptional circumstances [severe illness, jury duty, personal or family tragedy], students may request a Aspecial examination@ outside of the final examination period. Students must make application to the Registrar ~~or~~ within 48 hours ~~of~~ following a missed examination. Appropriate documentation must be submitted with the application. The Registrar will consult with the ~~instructor, Department Chair, and~~ Dean on receipt of any such application and will communicate the decision to the student ~~(as per Senate decision, September 2001).~~ Decisions on applications for Special Examinations are subject to appeal (see Regulation #12).

Academic Regulation #19 - 1 Motion

Motion: to approve changes to Academic Regulation #19

When it has been certified that a student has met all of the requirements for a degree, the degree standing is determined on the basis of academic performance in ~~Third and Fourth years~~ the final 60 semester hours of credit . The grades obtained in the final 60 semester hours of credit required for the degree are averaged, with degree standing accorded as follows:

80% or higher - first class standing

70-79.9% - second class standing

50-69.9% - pass standing

After a degree has been awarded, the recipient's transcript will indicate if first or second class standing was achieved.

Senate Dates 2013-2014 - 1 Motion

Motion: to approve the following academic dates for 2013-2014

UPEI Calendar Dates (First Semester)
1st Academic Semester - **SEPTEMBER - DECEMBER 2013**
All programs except Veterinary Medicine

SEPTEMBER 2013

4 Wednesday	Classes Begin
13 Friday	**FINAL DAY FOR LATE REGISTRATION, FOR CHANGING COURSES OR SECTIONS, FOR CANCELLATION OF COURSES OR SECTIONS, FOR CANCELLATION OF COURSES WITH FULL REFUND; FINAL DAY FOR PAYMENT OF FEES OR FORMAL ARRANGEMENT WITH THE ACCOUNTING OFFICE TO PAY LATE**.
~~Last full week of September~~	~~Founder's Day and Homecoming Celebrations~~
30 Monday	Last day for discontinuing courses - 60% refund

OCTOBER 2013

7 Mon - 8 Tues	Deans' Honours & Awards Night. **REMINDER** - no tests or exams are to be held on the Monday evening to Wednesday portion of the first week in October, when the Deans' Annual Honours and Awards ceremonies are held.
14 Monday	Thanksgiving Day. No classes
31 Thursday	**Final Date** to apply to graduate Last day for discontinuing courses - 40% refund. **No discontinuations after this date**

NOVEMBER 2013

11 Monday	Remembrance Day. No classes
12 Tuesday	**Student Development Day. No classes**
29 Friday	Final Day of First Semester classes. **Deadline** for application for second semester

DECEMBER 2013

4-14 (Wed-Sat)	**EXAMINATIONS**. **Note:** No examinations will be held during the period 18 November to 29 November inclusive without the permission of the Chair and appropriate Dean.
18 Wednesday	End of first semester. Course grades to be submitted to Registrar's Office by noon on this date.

60 teaching days

2nd Academic Semester **JANUARY - MAY 2014**
All programs except Veterinary Medicine

JANUARY 2014

3 Friday	Classes begin
17 Friday	**FINAL DAY FOR LATE REGISTRATION, FOR CHANGING COURSES OR SECTIONS, FOR CANCELLATION OF COURSES OR SECTIONS, FOR CANCELLATION OF COURSES WITH FULL REFUND; FINAL DAY FOR PAYMENT OF FEES OR FORMAL ARRANGEMENT WITH THE ACCOUNTING OFFICE TO PAY LATE**.
31 Friday	Last day for discontinuing courses - 60% refund

FEBRUARY 2014

17 Monday	Islander Day. No classes
17-21 (Mon-Fri)	Mid-semester break. No classes
18 Tuesday	**REGISTRATION begins for SUMMER SESSIONS 2014**
24 Monday	Classes resume
28 Friday	Last day for discontinuing courses - 40% refund. **No discontinuations after this date**

APRIL 2014

3 Thursday	Final day of classes
8-17 (Tues -Thurs)	**EXAMINATIONS. Note**: No examinations will be held during the period March 24 - April 4 inclusive without the permission of the Chair and the appropriate Dean.
18 Friday	Good Friday. No classes/exams
21 Monday	Easter Monday. No classes/exams
23 Wednesday	End of second semester. Course grades for fourth year students to be submitted to the Registrar's Office by noon on this date.
30 Wednesday	Course grades for third year, second year, first year and part-time students to be submitted to Registrar's Office by noon on this date.

MAY 2014

10 Saturday	**Convocation**
12 Monday	Beginning of first summer session

60 teaching days

JULY 2014

15 Tuesday	**REGISTRATION begins for September 2014& January 2015.** Students with fourth year standing on July 15, third year on July 16, second year on July 17, all others on July 18
25 Friday	Last day to discontinue from Second Summer Session courses*

AUGUST 2014

14 Thursday	Last day of Second Summer Session classes
18-19 (Mon-Tues)	Exams for Second Summer Session courses
25 Monday	Second Summer Session grades must be submitted to the Registrar's Office by noon.

*For courses that begin on the dates prior to the regularly scheduled Summer Session dates, and for regularly scheduled summer session courses, please contact the Registrar's Office for refund schedule and late fee schedule. 29 Teaching Days

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Second Curriculum Report

Moved (C. Lacroix/M. Turnbull): to approve all motions contained in the Second Curriculum Report

Carried.

Faculty of Science

Department of Engineering - 3 Motions

Motion: to approve the following minor curriculum changes in Engineering

121 Name to Design 1: Engineering Communications

142 Delete 1st year Statics Course

152 Number and prerequisite change
~~152~~ 151 Engineering and the Biosphere
PREREQUISITE: Concurrent with ENGN 121 and CHEM 111

212 Change course description, prerequisite and credit hours

212 GEOLOGY FOR ENGINEERS
This course is ~~a continuation of Engineering 211~~ an introduction to geology with emphasis on practical aspects of geology as they apply to various areas of engineering and related disciplines. Topics covered include earth materials, geological mapping incorporating basic elements of stratigraphy and structural geology, an introduction to ore forming processes and mineral resources, an overview of petroleum and coal resources, geothermal energy, environmental geology, and groundwater resources development.
PREREQUISITE: ENGN 122 or permission of the instructor.
Three lecture hours ~~one hour laboratory per week~~ and two lab hours per week.

272 Prerequisite change
252 FUNDAMENTALS OF PROCESS ENGINEERING

PREREQUISITE: Engineering ~~142~~ 261, Chemistry 112 and Math 152, or permission of the instructor

291 Number change to 221, title change, description and prerequisite changes
~~291 DESIGN III – Reliability and Safety~~
221 Design 3: Engineering Practice 1
This course gives students a first experience in real-world design . A progression of projects from short-term team-based to the beginning of a long-term comprehensive project are included. All projects are carried out in a team environment with other students. Professional relations and problem solving with colleagues as well as development of individual professional skills are emphasized.
PREREQUISITE: Engineering ~~142~~ 122 or permission of the instructor.

311 Number change to 231, description change and prerequisite change to Engn 122 and Physics 112.
~~311~~ 231 STRENGTH OF MATERIALS
This course is an introduction to the study of stress, strain and deformation of a solid body subjected to static forces. Topics include elastic and plastic stress, strain, Mohr's circle, torsion, behaviour of beams and columns. Computer applications and hands-on laboratory experiments are used. PREREQUISITE: Engineering ~~142~~ 122 and Physics 112 ~~312~~, or permission of the instructor.

321 Prerequisite change
PREREQUISITE: Engineering ~~142~~ 221 ~~and Math 152~~, or permission of the instructor

321 Course number and prerequisite change:
~~321~~ 234 ENGINEERING DYNAMICS
PREREQUISITE: Physics 111, Engineering ~~142~~ 122 and Math 152 or permission of the instructor

322 Prerequisite change
PREREQUISITE: Engineering ~~142~~ 281 and Math 251, or permission of the instructor.

323 Course number and prerequisite change:
~~323~~ 235 KINEMATICS AND DYNAMICS OF MACHINES
PREREQUISITE: Engineering ~~311~~, ~~321~~ 234 or permission of the instructor.

324 Course number and prerequisite change
~~324~~ 224 Introduction to Structural Engineering
PREREQUISITE: Engineering ~~311~~ 231 or permission of instructor

325 Course number and prerequisite change
~~325~~ 242 FUNDAMENTALS OF ENVIRONMENTAL ENGINEERING
PREREQUISITE: Engineering 122 and ~~151~~ 152 ~~and concurrent with Engineering 352~~ or permission of the instructor

332 Number change to 261 and prerequisite and lab changes
~~332~~ 261 THERMO FLUIDS I.
PREREQUISITE: Engineering ~~142~~ 122 and Math ~~251~~ 152 or permission of the instructor.
Three hours lecture and three hours ~~problem/design~~ lab per week.

341 Number change to 281, prerequisite change
~~341~~ 281 ELECTRIC CIRCUITS I
PREREQUISITE: Mathematics 152, Physics 112, Engn 122 or permission of the instructor
Number change to 282, description change

342 ~~342~~ 282 ELECTRIC CIRCUITS II
This course is a continuation of Engineering ~~341~~ 281, expanding upon concepts introduced in the first course. This will include two port networks, Fourier series and Fourier transforms, Laplace transforms, Bode and Polar plots, and Filters.

352 Number change to 262, prerequisite change
~~352~~ 262 THERMO FLUIDS II
PREREQUISITE: Engineering 261 and Math ~~251~~ 253, or permission of the instructor.

361 Title change and prerequisite change
361 ENGINEERING ~~FINANCE~~ ECONOMICS
PREREQUISITE: ~~Engineering~~ ~~121 and 142~~, or permission of the instructor to Concurrent with Engn 271 or permission of instructor

382 Prerequisite change
PREREQUISITE: Engineering ~~311, 321, 341~~ 231, 261, 281 and concurrent with Math 301, or permission of the instructor

392 Prerequisite change
PREREQUISITE: Engineering ~~272~~ 221, or permission of the instructor

Motion: to approve the following 2 new Engineering courses

441 SAFETYAND HEALTH IN COMPLEX ENVIRONMENTS

This course provides an overview of safety as it relates to all aspects of engineering infrastructure and systems. Topics include basic safety, reliability, legislation, statistics, enforcement, ergonomics, hazard recognition and control, risk assessment, accident

investigation, workers' compensation, and occupational health and safety management systems.
PREREQUISITE: Engineering 272 or permission of the instructor
Three lecture hours and three hours of tutorial per week

442 ETHICS AND LAW IN PROFESSIONAL PRACTICE

This course introduces students to the roles and responsibilities existing among professional practice and ethics and society. Topics include professional engineering, professional practice, engineering education, communication skills, ethics, social impacts, institutional structures, tort law and contracts.
PREREQUISITE: Engineering 272 or permission of the instructor
Three lecture hours and two hours of tutorial per week

Motion: to approve the new calendar entry for the Department of Engineering

Completely revised calendar entry as follows:

Diploma Program

The engineering program at UPEI has a proven history in preparing students for challenging careers in Professional Engineering. Accredited by CEAB as an affiliate with Dalhousie University's Faculty of Engineering, students in the diploma program complete a unique design-based curriculum. Most courses are common throughout the Dalhousie Faculty of Engineering Associated University system (Dalhousie, Saint Mary's, Acadia, St.F.X., NSAC, UCCB & UPEI). As part of this affiliated system, the UPEI engineering diploma satisfies the first two years of a four year Bachelor of Engineering (B.Eng.) at Dalhousie University.

While most of the core courses are common for all engineering disciplines, students select their discipline choice through a competitive grade point placeholder system. Each separate discipline requires 3 discipline specific electives to be taken in the second year in preparation to move along into the student's chosen discipline. Thus, the program allows students to study for two years in a small, supportive environment at UPEI, while providing the opportunity to complete their engineering degree in the specialized disciplines at Dalhousie's Faculty of Engineering.

Students with a UPEI Engineering Diploma may also choose to transfer to the University of New Brunswick in Fredericton. UPEI has had a long-standing agreement with UNB where courses taken as part of the engineering diploma are transferred on a course-by-course basis. Most students can complete their engineering degree in their chosen discipline within two years of study at UNB. Those who wish to consider the option of completing a degree at the University of New Brunswick should seek advice from UPEI faculty early in their program to ensure the right elective choices are taken.

Design Based Curriculum

The UPEI engineering faculty recognizes the role and responsibility of engineers in society and the need for a broad foundational education. Our program offers engineering education that is a mixture of knowledge-based engineering science with extensive project based learning. This design-based curriculum quickly lets students experience the real-world practice of engineering, resulting in graduates with a high degree of professionalism and maturity.

Students learn knowledge and skills in engineering science, natural science, math, and

complimentary studies applied within an integrated design stream simulating the engineering profession. Students entering the 1st year of the program are actively engaged in the engineering profession from the first day, building competence progressively throughout their time at UPEI.

The following core ***design courses must be taken in succession*** to support the students' developing skills.

1. ENGN 121, Design 1: Engineering Communication
2. ENGN 122, Design 2: Engineering Analysis
3. ENGN 221, Design 3: Engineering Practice I
4. ENGN 222, Design 4: Engineering Practice II

Course Sequence

The engineering program is one of only two at the university with a course load of 6 courses per semester. As such, this is a very demanding program to complete in 2 years of study. Students are strongly encouraged to meet with a faculty advisor early in the program to review course selection. The following is the recommended course sequence for the diploma program.

First Year – Term 1

- Engineering 121 (Design 1 - Engineering Communications)
- Engineering 151 (Engineering in the Biosphere)
- Physics 111 General Physics I
- Chemistry 111 General Chemistry I
- Mathematics151 Introductory Calculus I
- Global Issues 151 (Critical Thinking)

First Year – Term 2

- Engineering 122 (Design 2 – Engineering Analysis)
- Engineering 132 - Computer Programming w/ Engineering Applications
- Physics 112 General Physics II
- Chemistry 112 General Chemistry II
- Mathematics152 Introductory Calculus II
- Humanity Elective (courses typically offered by the Faculty of Arts, except basic languages or economics)

Second Year – Term 3

- Engineering 221 (Design 3 – Engineering Projects I)
- Engineering 231 (Strength of Materials)
- Engineering 261 (Thermofluids I)
- Engineering 281 (Electric Circuits I)
- Mathematics 253 (Vector Calculus for Engineers)
- One Discipline Specific Engineering Elective

Second Year – Term 4

- Engineering 222 (Design 4 – Engineering Projects II)
- Mathematics 221 (Statistics)
- Mathematics 261 (Linear Algebra)

- Mathematics 301 (Differential Equations)
- Two Discipline Specific Engineering Electives

For selection of discipline specific electives for Dalhousie as well as admission criteria to the upper class, please refer to: http://ug.cal.dal.ca/ENGI.htm.

For selection of discipline specific electives for UNB please consult with the Chair of the UPEI Engineering Department.

Admission Criteria for UPEI Diploma

Students apply to the faculty of science and must indicate a preference for engineering. Minimum academic requirements for admission to the faculty of science at UPEI are required. In addition, students must have an overall average of 70% in high school english, mathematics, chemistry, physics and one other academic subject with no mark lower than 65%. Students are encouraged to apply as early as the program has a limited enrollment. For additional details on the application process and admission criteria go to http://www.upei.ca/registrar/calendar_toc#application

ENGINEERING COURSES

111 GEOMATICS
This course provides an introduction to geomatics; the theory, use and care of surveying instruments; field methods; data analysis for determining distance, direction, elevation, and position; manual and computer applications in profile, contour, traverse and topographical mapping; horizontal and vertical curves; earthwork and construction applications; Geographic Information Systems (GIS); Global Positioning Systems (GPS); aerial photos and photogrammetry.
PREREQUISITE: Completed or concurrent with Engineering 121 or have permission of the instructor.
Three hours lecture and three hours lab per week.

121 DESIGN 1: ENGINEERING COMMUNICATIONS
This course is a basic introduction to the profession, to the design process, and to the way that engineers communicate through drawing, writing and speaking. The course stresses the importance of creativity and social responsibility in engineering. Topics include basic engineering concepts, simple engineering design projects, presentation of graphical material for engineering designs, and technical reporting, which includes verbal, written, and graphical means. There is an emphasis on group work in engineering.
PREREQUISITE: Must have completed or be concurrently registered in, Math 151, Physics 111, and Chemistry 111, or permission of the instructor.
Three hours lecture and three hours laboratory per week

122 DESIGN 2: ENGINEERING ANALYSIS
This course is a continuation of the design process and engineering professionalism introduced in engineering 121. Emphasis is placed on the development of a structured problem solving capability that can be generally applied in most industrial environments. As with all UPEI design courses, the content is delivered primarily through facilitated exercises and a project based learning environment. Students are expected to be self directed and are required to analyze situations in a systematic and scientific manner. In order to perform engineering analysis, a basic understanding of math and engineering science (i.e. statics, strength of materials, material science, material balance, fluid mechanics, thermodynamics , circuits, measurements, etc.). is

required and an overview of these areas is provided. Students are also expected to integrate the knowledge and skills from other engineering science, math and general science courses. Computer aided tools introduced include Microsoft Excel, DataStudio, MatLab and Simulink. Demonstration of design concepts during end of year industry expo is required.
PREREQUSITE: Physics 111 and Engineering 121 or permission of instructor
Three hours lecture and three hours of lab per week.

132 COMPUTER PROGRAMMING WITH ENGINEERING APPLICATIONS
This course is a study of computer programming as it relates to engineering. Topics include problem solving, algorithm design, software standards, operating systems, computer components, data types, control structures, repetition, loops, nested structures, modular programming and arrays. Various programming languages are used.
PREREQUISITE: Engineering 121, or permission of the instructor.
Three lecture hours and two lab hours per week.

151 (formerly 152) ENGINEERING AND THE BIOSPHERE
The course focuses on the relationship between living systems and the man-made environment as it applies to engineering design. The relevance of biology to industrial and engineering applications is emphasized. Laboratory sessions will make extensive use of field-trips to local sites. This course includes a basic introduction to cell structure and function, microbiology and toxicology, nutrient cycles, communities and ecology as it relates to understanding the impacts of man-made systems and structures. ENGN 152 is not considered an equivalent to Bio 131/132 or Bio 101/102.
PREREQUISITES: Concurrent with ENGN 121 and CHEM 111 or permission of instructor
Three lecture hours and three lab hours per week

212 GEOLOGY FOR ENGINEERS
This course is an introduction to geology with emphasis on practical aspects of geology as they apply to various areas of engineering and related disciplines. Topics covered include earth materials, geological mapping incorporating basic elements of stratigraphy and structural geology, an introduction to ore forming processes and mineral resources, an overview of petroleum and coal resources, geothermal energy, environmental geology, and groundwater resources development.
PREREQUISITE: ENGN122 or permission of the instructor.
Three lecture hours and two lab hours per week.

221 (formerly 291) DESIGN 3 – ENGINEERING PRACTICE I
This course gives students a first experience in real-world design . A progression of projects from short-term team-based to the beginning of a long-term comprehensive project are included. All projects are carried out in a team environment with other students. Professional relations and problem solving with colleagues as well as development of individual professional skills are emphasized.
PREREQUISITE: Engineering 122 or permission of the instructor.
Three hours lecture and three hours lab per week

222 (formerly 272) DESIGN 4 – ENGINEERING PRACTICE II
This course gives students a real-world design project experience from initial concept, through analysis of options, meeting with clients, detailed design, prototype development and final reporting. All projects are carried out in a team environment with other students and industry/community client mentors. Students are expected to demonstrate excellence in both engineering science applications and professional/career skills working with colleagues, senior students and professional engineers.

PREREQUISITE: Engineering 221 or permission of the instructor.
Three hours of lecture and three hours of design lab per week

224 (formerly 324) INTRODUCTION TO STRUCTURAL ENGINEERING
This course is an introduction to the field of structural analysis as an applied discipline. Building on deflection and truss analysis from previous mechanics courses, students are exposed to concepts of influence, flexibility, stiffness, impact and other analytical techniques and dynamic loading in rigid structures. Determination of loadings in structures, the National Building Code and material resistance is also introduced.
PREREQUISITE: Engineering 231 or permission of the instructor.
Three hours of lecture and three hours of lab per week.

231 (formerly 311) STRENGTH OF MATERIALS
This course is an introduction to the study of stress, strain and deformation of a solid body subjected to static forces. Topics include elastic and plastic stress, strain, Mohr's circle, torsion, behaviour of beams and columns. Computer applications and hands-on laboratory experiments are used.
PREREQUISITE: Physics 112 and Engineering ~~142 and 312~~ 122 or permission of the instructor. Three hours lecture and three hours lab per week.

234 (formerly 321) ENGINEERING 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.
PREREQUISITE: Physics 111, Engineering ~~142~~ 122 and Math 152, or permission of the instructor.
Three hours lecture and three hours lab per week.

235 (formerly 323) KINEMATICS AND DYNAMICS OF MACHINES
This course introduces fundamental concepts in the analysis of linkages and other aspects of complex machinery. Using graphical and analytical methods and relying on static and dynamic principles previously learned, students are exposed to a variety of cams, gears and trains in an applied context. Simple gyroscopic effects are also introduced.
PREREQUISITE: Engineering ~~311, 321~~ 234 or permission of the instructor. Three hours lecture and three hours of laboratory per week.

242 (formerly 325) FUNDAMENTALS OF ENVIRONMENTAL ENGINEERING
This course is an introduction to the field of environmental engineering with a focus on understanding the effects of man-made pollutants on natural systems (physical, chemical). Particular emphasis is placed on the identification, analysis and design of solid and wastewater management systems in a sustainable and responsible manner.
PREREQUISITE: Engineering 122 and 15~~1~~2 ~~and concurrent with Engineering 352~~ or permission of the instructor.
Three hours of lecture and two hours of tutorial per week

252 FUNDAMENTALS OF PROCESS ENGINEERING
The main objective of this course is to develop the student's ability to perform mass and energy balances on reactive and non-reactive processes. Introductory topics include systems of units and a study of process variables such as temperature, pressure, and flowrate. Also covered are

fundamental properties of multiphase systems: phase equilibrium, vapour pressure, phase rule, Raoult's and Henry's Laws, and colligative properties. Emphasis is placed on developing problem-solving skills.
PREREQUISITE: Engineering 261, Chemistry 112 and Math 152 or permission of the instructor. Three lecture hours and two tutorial hours per week.

261 (formerly 332) THERMO FLUIDS I
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.
PREREQUISITE: Engineering ~~142~~ 122 and Math ~~251~~ 152 or permission of the instructor.
Three hours lecture and three lab hours ~~problem/design~~ per week.

262 (formerly 352) THERMO FLUIDS II
This course is an introduction to the field of fluid mechanics. Topics covered include properties of fluids, forces on submerged surfaces, stability of floating objects, ideal fluid flow, and momentum and energy methods. Concepts of similitude are introduced and fundamental scaling parameters in real fluids. Turbulence is introduced; pipe flow problems and lift/drag problems are solved.
PREREQUISITE: Engineering 261 and Math 253, or permission of the instructor.
Three hours lecture and three hours lab per week.

281 (formerly 341) ELECTRIC CIRCUITS I
This course is a study of topics such as Ohm's laws, Kirchoff's laws, equilibrium, equations, Thevenin's and Norton's theorems, transient circuit sinusoidal steady state response, complex impedance, complex frequency, and magnetically coupled circuits,
PREREQUISITE: Mathematics 152, Engineering 122, Physics 112 or permission of the instructor.
Three hours lecture and two hours tutorial per week.

282 (formerly 342) ELECTRIC CIRCUITS II
This course is a continuation of Engineering ~~341~~ 281, expanding upon concepts introduced in the first course. This will include two port networks, Fourier series and Fourier transforms, Laplace transforms, Bode and Polar plots, and Filters.
PREREQUISITE: Engineering 341 or permission of the instructor.
Three hours lecture and two hours tutorial per week.

312 MATERIALS SCIENCE
This course is an introduction to the properties and behaviour of engineering materials. Topics include atomic structure and bonding, crystalline structures, deformation, metallic structures, hardening and annealing, phase diagrams, ceramics, polymers, composites, electrical and optical properties. Computer applications are used.
PREREQUISITE: Engineering ~~142~~ 221 ~~and Math 152~~ or permission of the instructor.
Three hours lecture and three hours lab per week.

322 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.
PREREQUISITE: Engineering ~~142~~ 281 or permission of the instructor.
Three hours lecture and three hours lab per week.

361 ENGINEERING ~~FINANCE~~ ECONOMICS
This course provides students with the fundamentals of engineering economics and ~~finance~~ financial aspects in the context of professional engineering practice. Topics include the time value of money, project screening, cost estimation, and discounting analysis techniques. Economic analysis of depreciation, maintenance, replacement and upgrading and the impact of taxes, inflation and time on infrastructure development. Relevant software and projects are used.
PREREQUISITE: ~~Engineering 121 and 142~~, Concurrent with Engineering 222 or permission of the instructor.
Three hours lecture and three hour tutorial per week.

382 SYSTEM DYNAMICS
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.
PREREQUISITE: Engineering ~~311, 321, 341~~, 231, 261, 281 and concurrent with Math 301, or permission of the instructor.
Three hours lecture and three hours lab per week

392 PROJECT MANAGEMENT
This course provides an overview of engineering project management principles and terminology, the project life cycle, and project phases. Project phases include feasibility and needs assessment, planning and design, project implementation, project execution, and closeout. Particular attention is given to the role of communication and leadership in effective project management.
PREREQUISITE: Engineering ~~272~~ 221, or permission of the instructor.
Three hours lecture and two hours of tutorial per week.

441 SAFETY AND HEALTH IN COMPLEX ENVIRONMENTS
This course provides an overview of safety as it relates to all aspects of engineering infrastructure and systems. Topics include basic safety, reliability, legislation, statistics, enforcement, ergonomics, hazard recognition and control, risk assessment, accident investigation, workers' compensation, and Occupational Health and Safety management systems.
PREREQUISITE: Engineering 272 or permission of the instructor.
Three hours lecture and three hours tutorial per week.

442 ETHICS AND LAW IN PROFESSIONAL PRACTICE
This course introduces students to the roles and responsibilities existing between Professional Practice and Ethics and Society. Topics include professional engineering, professional practice, engineering education, communication skills, ethics, social impacts, institutional structures, tort law and contracts.
PREREQUISITE: Engineering 272 or permission of the instructor.
Three lecture hours and two hours of tutorial per week.

481-482 DIRECTED STUDIES IN ENGINEERING
Available to advanced engineering students at the discretion of the department. Entry to the course, course content, and the conditions under which the course may be offered will be subject to the approval of the Chair of the Department and the Dean of the Faculty. (See Academic Regulation 9 for Regulations Governing Directed Studies.)

491-492 SPECIAL TOPICS IN ENGINEERING
This course provides students with an opportunity to pursue special topics in engineering. The course content and its offering in any one semester will be at the discretion of the Department. Interested students should contact the Department to confirm the details of the course and its offering.
PREREQUISITE: Permission of the instructor.

Department of Applied Human Sciences - 3 Motions

Motion: to approve the following changes in Foods & Nutrition courses

FN 373	373 Nutrition and Aging Change prerequisite PREREQUISITES: Foods and Nutrition ~~212~~ 101 or 102 or 211 or permission of the instructor
FN 371	371 Lifespan Nutrition Change prerequisite PREREQUISITES: Foods and Nutrition ~~212~~, 101 or 102 or 211 or permission of the instructor
FN 352	352 Clinical Nutrition I Change prerequisite PREREQUISITE: ~~Foods and Nutrition 212,~~ Foods and Nutrition 351 and Biology 122
FN 321	Change course title, number and prerequisite ~~FN 312 Nutrition and Dietary Behaviour~~ FN 223 Determinants of Dietary Behaviour PREREQUISITES: Foods and Nutrition 101 or ~~212~~, 211 or permission of the instructor
FSc 440	440 Senior Undergraduate Research Project Change prerequisite PREREQUISITE: Fourth year standing in the Family Science or Child and Family Studies programs.

Motion : to approve the deletion of the following Foods & Nutrition course

FN 262	262 Issues in Professional Practice Delete Course

Motion: to approve changes to prerequisites to the following Kinesiology courses

KINE 301 301 Exercise Physiology
PREREQUISITE: Kinesiology 101, ~~and~~ Biology 122 and admission to BSc Kinesiology program

KINE 312 312 Introduction to Biomechanics
PREREQUISITE: Kinesiology 101, and Math 112 or Math 151/152 and admission to BSc Kinesiology program

Faculty of Arts

Island Studies - 2 Motions

Motion: to approve the following new course

IST 211 ISLAND TOURISM: THE SEARCH FOR PARADISE
This course will provide a cross-disciplinary analysis of the nature of island tourism, looking at contrasts between warm-water and cold-water islands; supply and demand considerations; cycles and challenges of the industry; the cultural positioning of hosts and guests; the transformation of land and seascapes; pros and cons of mass versus niche tourism; environmental downsides; and future challenges, including prospects for 'sustainable development'.

Motion: to delete the following course

IST 202 202 Case Studies in Island Studies
Delete

Minor in Social Studies of Science (SSS) - 1 Motion

Motion: to approve a new minor in Social Studies of Science (SSS)

Science Studies is an interdisciplinary field whose primary object is the study of science as an institution. Going beyond familiar ideals, the field aims to understand how science was and is practiced, how it shapes and is shaped by its objects of study, how science represents itself and is represented beyond its institutional boundaries, and how various technosciences increasingly blur the boundaries between nature and society. Within that, there is tremendous scope in terms of what to study (disciplines, technologies, skills, objects, traditions, non-human and human animals, scientists and their discourses) and how to study it (the whole range of humanities, natural science, and social science methodologies and theories). As such, a minor in Social Studies of Science (SSS) speaks to students throughout the Schools and Faculties on campus including Nursing, Music, Science, Business, and Arts.

REQUIREMENTS FOR A MINOR IN SOCIAL STUDIES OF SCIENCE (SSS):

The minor's structure would consist of 21 semester hours of credit as follows:
a) taking EITHER SSS/History 222 'Science and Society in Historical Perspective' OR SSS/SocAnth 266 'Science, Culture, and Society' as a mandatory core course in the program;

b) taking at least one additional SSS course at the 200-level, with SSS 222 or SSS 266 as the prerequisite;
c) taking at least two 300-level courses, with SSS 222 or SSS 266 as the prerequisite;
d) taking at least two 400-level courses, with at least one 300-level SSS course as the prerequisite;
e) the remaining course at the 200- 300-, or 400- level.
Below is a preliminary list of courses instructors/departments have agreed to cross list into the minor. (Some additional courses are still in the process of being developed).
WST 412 'Theories of the Body'
SOC 412 'Sociology of Health'
SOC/ANTH 266 'Science, Culture, and Society'
PHIL 203 'Environmental Philosophy'
PHIL 204 'Bio-medical Ethics'
PHIL 301 'Philosophy of Science'
PHIL 363 'Philosophy of Biology'
HIST 222 'Science and Society in Historical Perspective'
HIST 311 'Science, Magic, Witchcraft, and the Occult in Premodern Europe'
HIST 333 'Healthcare and North American Society in Historical Perspective'
HIST 434 'Madness and Society'
ENG 224 'Literature and Science'
ANTH 401 'Medical Anthropology'
ANTH 403 'Cybercultures'
Additional courses not on the above list may be applied to the minor with permission of the Program Co-ordinator and the course instructor.

Miscellaneous

Calendar Dates (2012-2013) - 1 Motion

Motion: to amend the Calendar Dates for 2012-2013

July 2013

~~9~~ 16 Tuesday	Registration for September 2013 and January 2014. Students with 4th year standing on July ~~9~~ 16, 3rd year standing on July ~~10~~ 17, 2nd year standing on July ~~11~~ 18; all others on July ~~12~~ 19

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6. Annual Reports

Student Academic Appeals Committee.

The report was received for information and Senator Sweeney-Nixon was available for questions.

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7. Adjournment

Moved (D. Buck/F. Gray): to adjourn the meeting at 4:35 pm.

Respectfully submitted
Kathleen Kielly, Registrar

Secretary to Senate