

**MOUNT ALLISON UNIVERSITY
MEETING OF THE UNIVERSITY SENATE
20 January 2010 3:30 p.m., Tweedie Hall**

Present: R. Campbell, P. Berry, B. Gnassi, S. McClatchie, J. Ollerhead, C. Parker, R. Summerby-Murray, J. vanderLeest, K. Ghandi, R. Hudson, A. Irwin, D. Thomas, W. Wilson C. Brett, G. Briand, R. Bruening, S. Claxton-Oldfield, R. Edwards, Z. Finkel, B. Fleming, W. Hunt, R. Ireland, M. Lee, M. Majithia A. Nurse, D. Torrance, E. Koenig, E. Wells, A. Wilson, D. Bowes, S. Humphrey, M. Kroeker, A. Steeves, B. Turkel, N. Walker, S. Carrigan-Kent, T. Davis, T. Hynes, G. Jollymore, D. Stewart.

Regrets: K. Bamford, C. Chapman, D. Greenwood, E. Herteis, T. Holownia, M. Imbeault, I. Cohen, A. Irwin J Mullen.

The Chair call the meeting to order at 3:33

01.01.10 Approval of the Agenda

**Motion (Brett/Hynes): that Senate adopt the agenda as circulated.
Motion CARRIED.**

02.01.10 Approval of Senate Minutes of 8 December 2009

H. vanderLeest informed Senate that some strikeouts were omitted from the circulated minutes, and he offered to assist the Secretary in correcting the minutes.

**Motion (Brett/Nurse): that Senate adopt the minutes with the suggested changes.
Motion CARRIED.**

03.01.10 Business Arising from the Minutes

The Chair updated Senators on the newly appointed Chancellor's visit with the additional information that it will take place on Friday, March 5th.

Senate was also updated on the Report from the Honorary Degrees with the additional information that six future recipients have been recruited and have accepted to attend Convocation this spring.

A. Nurse commented on the increasing frequency in the past year to assert that a motion should be supported because a committee of Senate had already discussed it. He added that Senate should not be obstructionist, or an opposition, but also should not pass over decisions too quickly.

The Chair agreed that any motion brought forward from Senate committees were not a cashed cheque, but rather one that has yet to be processed.

04.01.10 Report from the Chair

R Campbell commented on the recent ACOA press conference, noting that the ACOA grant of \$750,000 is being matched 2:1 by the University, resulting in a 2.5 million project. Future announcements will be made as further funding is confirmed.

The University's budget preparations are in process, and submissions to the Vice Presidents have been completed. The expectation is for a draft budget to be distributed by early March to the University community for feedback, and a final budget to be presented in April. The President encouraged community and collegial feedback and comment, but added that the budget is ultimately the Board's responsibility. The long-term sustainability model is being developed concurrently and facets of this framework may be incorporated into this year's budget. However it may be a year before the full process is up and running.

The Chair congratulated the student organisers for a successful ATLIS conference this past weekend.

The President informed Senate that he is on a CIS (Canadian Interuniversity Sport) committee discussing the relationship between the CIS and universities. He is also chairing a SSHRC general grants committee.

The President also informed Senate of an upcoming trip to China and Japan for the purpose of student recruitment and fundraising.

The Provost reported that he was aware that there has been a problem with waitlists. He added that the Registrar and the Deans have done a good job within the existing structure, but that there are problems with operational and policy issues. The Deans and the Provost will meet with Jon Parsons to determine what went wrong and how such future problems could be avoided. He speculated that the limitations of the current Datatel system may be a contributing factor.

S. McClatchie announced that data collection for the 2010/11 timetable will begin next week, and that the goal is to have it completed by March 1.

A. Nurse inquired if there were any students still unregistered because of waitlists.

S. McClatchie replied that there were students who had less than the load they wished to carry. He noted that the deans have been asked to attempt to remedy this problem. There may still be some adjustments, but about 99% of the students on waitlist are not eligible for the course for which they are waitlisted

J. Ollerhead clarified that there was a difference between eligible and qualified. Some students may have the academic qualifications, but the system may not recognize them for other reasons such as maximum course load.

05.01.10 Report from the Committee on University Planning

The Provost summarised the recent activity of the committee. Work on the academic side of the budget is in process, and the members have been working in four subcommittees to gather data and to make recommendations on the financial sustainability issue.

S. McClatchie informed Senate that the last written document from the academic review of the History department is completed and all the documents are available on a password protected area of the University's website. With respect to the department's response, he noted that he was pleased with the willingness of the department to act on the items identified in the review process.

D. Torrance thanked the Provost for allowing his department to move forward and enabling it to resolve the one contentious point.

The President commented that the departmental review process was healthy and he thanked all those involved in the process.

S. McClatchie added that three academic unit reviews were in process this year for the Libraries and Archives, Music, and Chemistry and Biochemistry.

06.01.10 Report from the Academic Matters Committee

This section contains recommendations for the following departments and items:

- ▶ Biology
- ▶ Economics
- ▶ Math and Computer Science
- ▶ Music
- ▶ Psychology
- ▶ Online Calendar (ARP Action 41)

Motion (vanderLeest/Parker): That Senate approve the following changes to the Biology program.

(Note: additions/changes are indicated in bold text, deletions are indicated with ~~strikeout~~.)

(Changes to Courses)

BIOL 1001 (3CR)

INTRODUCTORY BIOLOGY EVOLUTION, ECOLOGY, AND THE DIVERSITY OF ORGANISMS

Format: Lecture 3 Hours, Laboratory 3 Hours

Exclusion: Any version of BIOL 1001 previously offered with a different title

Note: This course is designed for science majors. Students who intend to continue to study in Biology should note the need to complete CHEM 1001 as a prerequisite for BIOL 1501.

~~A lecture and laboratory course designed to present a general introduction to the biology of living organisms. A systems approach will be used to explore how living organisms respond to the complex problems encountered while obtaining nutrition, carrying out internal fluid transport and gas exchange, getting rid of wastes, and growing and interacting with the environment and other life.~~

This course introduces the diversity of organisms and their relationships and interactions with their environments in the context of evolutionary theory. Topics include Darwin's theory of natural selection, the genetic constitution of and changes in populations, population growth, the interactions of populations of different species, and a survey of the major plant and animal taxa.

BIOL 2101 (3CR)

INTRODUCTION TO ECOLOGY

Format: Lecture 3 Hours, Laboratory 3 Hours

Prereq: BIOL 1001 **and 1501**; or permission of the Department

Exclusion: Any version of BIOL 2101 previously offered with a different title

~~A course designed to~~ **This course** introduces current concepts of population and community ecology through lectures, field trips and laboratory exercises, using local **ecosystems and organisms, principally aquatic insects**, whenever possible. ~~Familiarity with these organisms, principally aquatic insects, will be obtained through field trip and laboratory exercises.~~

BIOL 2401 (3CR)

ANIMAL BIOLOGY

Format: Lecture 3 Hours, Laboratory 3 Hours

Prereq: BIOL 1001 **and 1501**; or permission of the Department

~~A lecture and laboratory~~ **This course introducing introduces** students to the structure and function of major groups of invertebrate and vertebrate animals on a comparative basis **by observation of both preserved and living material**. ~~Topics to be covered in lectures will include comparative anatomy and phylogeny and the evolution and function of locomotory, digestive, excretory, respiratory, nervous, and reproductive systems. Laboratory exercises will be based on observation of both preserved and living material.~~

BIOL 2701 (3CR)

BIOMETRICS INTRODUCTORY DESIGN & STATISTICAL ANALYSIS

Format: Lecture 3 Hours

Prereq: BIOL 1501 **and Math 1111**; ~~the completion of the Mathematics/Computer Science requirement on the Bachelor of Science, and at least two second year Biology courses; or~~

permission of the Department

Exclusion: BIOL 3701; **any version of BIOL 2701 previously offered with a different title**

Note: Students may count for credit towards a degree a maximum of 6 credits from BIOL 2701, GENS 2431, MATH 2311, and PSYC 2001

This course introduces data analysis, the principles of experimental design, and the formulating and testing of hypotheses. It describes graphical and statistical (t-test, chi-square test, ~~anova~~ **ANOVA**) analyses of laboratory and field-collected data and discusses their appropriate use in Biology.

BIOL 3211 (3CR)

HUMAN CELL PHYSIOLOGY

Format: Lecture 3 Hours, Laboratory 3 Hours

Prereq: ~~BIOL 2001~~ BIOL 1501 and third-year standing; or permission of the Department

Exclusion: any version of BIOL 3211 previously offered with a different title

This course ~~will investigate~~ physiological processes at the level of the animal cell. ~~In lectures and laboratory exercises, we will~~ **It examines** major principles in neurophysiology, muscle function, sensory systems, and endocrinology.

BIOL 3911 (3CR)

PLANTS AND HUMAN SOCIETY

Format: ~~Lecture/Seminar~~ 3 hours

Prereq: ~~First year level~~ **Three credits from Biology, and third year standing;** or

permission of the Department

This course ~~will deal with~~ **investigates** the interactions between plants and human societies from ~~the time of~~ the introduction of agriculture until the present. It ~~will~~ includes the consideration of the evolution of vascular plants, especially those important to agriculture and forestry. It ~~will~~ emphasizes **the** origins of agriculture on various continents; **and it will discuss** economic botany and the present day commercial uses of plants. ~~Consideration will be given to~~ **It also considers** interrelations between plants and societies in ~~their~~ dietary, cultural, and religious connotations. Finally, the course ~~will~~ considers world food shortages, either present or potential, and possible ways to alleviate these.

BIOL ~~4301~~ 3301 (3CR)

PHYSIOLOGICAL PLANT ECOLOGY

Format: ~~Lecture/Seminar/~~ **and** Laboratory ~~Project~~ 3 Hours

Prereq: BIOL 2101 and 2301; or permission of the Department

Exclusion: **BIOL 4301**

~~The emphasis in this course will be on~~ **This course examines** the ways **by which** plants respond to their environments. Topics include a discussion of transpiration and heat transfer, photosynthesis in nature, vernalization, photoperiodism, and response to stresses such as drought, temperature, salinity, and pollutants.

BIOL 4371 (3CR)

ADVANCED MARINE SCIENCE

Format: ~~Lecture/Seminar~~ 3 hours

Prereq: One of BIOL 3351, 3361 or ~~3781~~ **3371**; or permission of the Department

This course provides students who are seriously interested in marine science with an opportunity for in-depth researches study of selected topics from the **most current and progressive** areas of marine science. Depending on student interest, **it addresses some or all or some of the following areas will be addressed: These may include** advances in biological, geological, chemical, and physical oceanography and methodologies **such as** (e.g. **genomic approach to assessment of oceanic biodiversity and** application of remote technology in marine exploration **of the deep sea**, ultra-clean methods of measuring trace nutrients). Emphasis will be placed on **The course emphasizes** specific topics whose progress carries of global significance and may include ocean/atmosphere interactions **between ocean and atmosphere**, sustainable fisheries, integrative aquaculture, **and invasive biology**, etc.

BIOL 4511 3511 (3CR)

TOPICS IN INVERTEBRATE ZOOLOGY

Format: Lecture 3 Hours, Laboratory 3 Hours

Prereq: BIOL 2401; or permission of the Department

Exclusion: **BIOL 4511**

A course allowing detailed study into several aspects of invertebrate zoology. Each student will be expected to research a specific group of invertebrates thoroughly, and to communicate this information to the other members of the class. In addition, the student will undertake a laboratory study of a topic of interest in invertebrate zoology.

This course investigates in an evolutionary framework the variation in body plan, physiology, reproduction, and ecology for the more than thirty invertebrate phyla.

BIOL 4701 3781 (3CR)

TROPICAL MARINE BIOLOGY

Format: Lecture 3 Hours, Field Trip

Prereq: BIOL 2101, 2401, and one of BIOL 3361, 3371; and permission of the Department

Exclusion: BIOL 4701

Note: The field component of this course usually takes place at a location in the Caribbean. Enrollment is limited and students should be aware of the additional costs of travel and participation fees.

This lecture and field course will introduces students to the fauna, flora, and complex **ecological and behavioural** interactions **of organisms** in tropical habitats and allows independent research in such habitats. **Students explore** Habitats explored will be coral reefs, reef lagoons, mangrove swamps, and rocky shores. Ecological and behavioural interactions of organisms in those areas will be stressed. The field component of this course will take place at a field station in the Caribbean. for twelve days that include the week of Independent Study. The course will include six, 3 hour lectures and two weeks at the Field Station. Students will pay all costs of transportation, room, board and lab fees for this expedition.

Rationale: The current content of BIOL 2101 and 2401 is sufficient to prepare the students for this course: appropriate for third year students. Some specifics have been removed from the description, since they vary from year to year.

BIOL 4711 (3CR)**ADVANCED BIOMETRICS DESIGN AND STATISTICAL ANALYSIS**

Format: Lecture 3 Hours, Tutorial 1 Hour

Prereq: MATH 2311, or PSYC 2011, or BIOL 2701, or GENS 2431; or permission of the Department

~~This is an applied course dealing with the collection and analysis of biological data. This course teaches students how to design studies with clear hypotheses, select appropriate statistical methods, and carry out the analyses, applying the techniques to real data sets. It reviews basic techniques will be reviewed, and students will be exposed~~ **exposes students** to a variety of statistical techniques including advanced ANOVA and regression, techniques for categorical data, resampling methods, MANOVA, and other multivariate techniques. ~~The range of topics covered depends to some extent on the interest and experience of the participants. It considers~~ experimental design issues such as power analysis and pseudoreplication ~~will be considered throughout. The focus of this course is on teaching students how to design studies with clear hypotheses, select appropriate statistical methods, and carry out the analyses. Students will apply the techniques they have learned in lectures to real data sets. The course is intended for upper-level undergraduates with an interest in analysis of biological data. It would be especially beneficial for those who are either pursuing honours or wish to do so, and for those who intend to continue on to graduate studies.~~

Rationale: The new name is more appropriate for the course content, and parallels the proposed title change to 2701 (above).

(And to the Minor)

MINOR in Biology is 24 credits earned as follows:

- 6 from BIOL 1001, 1501
- 3 from CHEM 1001
- 9 from BIOC 2001, BIOL 2101, 2301, 2401, 2601, 2701, 3011, 3101
- 6 from Biology at the 3/4000 level, ~~chosen in consultation with the Program Advisor~~

It was noted in the report that BIOL 1001 is a course intended for science majors and that non-science students should normally take BIOL 1201. The addition of BIOL 1501 to prerequisite streams was to introduce a laboratory component. Rationales for other prerequisite changes other modifications were also given.

Motion CARRIED.

Motion (vanderLeest/Parker): That Senate approve the following changes to the Economics program.

ECON 2701 (3CR)**~~STATISTICS FOR BUSINESS AND ECONOMICS~~ INTRODUCTION TO ECONOMETRICS**

Format: Lecture 3 Hours

Prereq: ECON 1001 and 1011, MATH 2311; or permission of the Department

Note: Students may take MATH 3311 and 3321 instead of this course. Honours students are

~~strongly encouraged to do so.~~

Exclusion: ~~MATH 2321~~ **Any version of ECON 2701 previously offered with a different title**

~~The application of statistical methods to economic data. Topics include: descriptive statistics, hypothesis testing, analysis of variance, simple regression, multiple regression, non-parametric statistics chi-square tests, index numbers, sampling designs, and time series~~

This course introduces statistical tools for handling data generated in uncontrolled environments and the techniques involved in their use. Topics include estimation and inference of single- and multi-variable regression models, large sample techniques, dummy variables, heteroskedasticity, and an introduction to times series.

Other Calendar Entries Affected: MATH 2321: Under the proposal a student can receive credit for both MATH 2321 and ECON 2701. The exclusion will also have to be removed in the listing for MATH 2321.

ECON ~~3611~~ 4611 (3CR)

INDUSTRIAL ORGANIZATION: THEORY

Format: Lecture 3 Hours

Prereq: ECON 2001 and ECON 2011 **and MATH 1111**; or permission of the Department

Exclusion: ~~ECON 3611 (Industrial Organization and Policy in Canada)~~

~~An~~ **This course provides an** overview of the central theories of industrial organization, examining market power, the theory of the firm, and strategic behavior, within classic and dynamic oligopoly frameworks. ~~The course~~ **It** makes explicit use of game theoretic techniques where appropriate. Topics may include collusive and competitive behavior, non-linear pricing, commitment and repeated games, and entry deterrence.

ECON ~~3621~~ 4621 (3CR)

INDUSTRIAL ORGANIZATION: POLICY

Format: Lecture 3 Hours

Prereq: ECON 2001 and ECON 2011 **and MATH 1111**; or permission of the Department

Exclusion: ~~ECON 3621~~

~~The~~ **This course examines the** economics of vertical and horizontal constraints. ~~The course~~ **It** provides an introduction to regulatory economics and Canadian and International competition policy. Topics may include policy issues concerning the control of mergers, monopoly, predatory pricing, collusion, resale price maintenance, exclusive dealing, tying, and other contractual arrangements, including restrictions on contracting agents.

ECON 3721 (3CR) LABOUR ECONOMICS

Format: Lecture 3 Hours

Prereq: ECON 2001 ~~and 2011~~; or permission of the Department

~~An introduction to~~ **This course introduces** labour economics. Topics covered include the demand and supply of labour, the Canadian labour market and income distribution, unemployment, poverty, and discrimination in Canada.

ECON 3821 (3CR)

NATURAL RESOURCE ECONOMICS

Format: Lecture 3 Hours

Prereq: ECON 2001 and ~~2011~~, MATH 1111; or permission of the Department

~~The~~ **This course examines the** application of economic analysis to questions of management, use, and/or conservation of natural resources. ~~Students will be exposed~~ **It exposes students** to economic theories used in the study of renewable and non-renewable resource industries. **It pays particular attention** ~~will be given~~ to resource industries important to the Atlantic Canadian economy (fishing, forestry, agriculture, mining, and energy).

R. Hudson inquired if the Commerce Department had been consulted on the changes to ECON 2701, as the course was included in the core requirements for the Commerce Degree. He explained that that the two courses were considered equivalent and that now they are considered different. He further added that the changes to courses like ECON 3611 and 3621 that are reference in the Commerce section of the calendar should have been considered by the Commerce Department given that prerequisites and changes to the levels of the courses have been made. Finally he noted that there are other calendar entries that will be affected and have not been noted.

R. Summerby-Murray informed Senate that the Heads of Social Science council have seen these changes.

R. Hudson countered that it was practise when he was on Academic Matters to document input from the Head of the department affected. This approval might have been given, but it should not be assumed.

Following this and other discussion, the motion was withdrawn so that the Commerce Department could be consulted.

Motion (vanderLeest/Parker): That Senate approve the following changes to the Math and Computer Science program.

The deletion of:

**MATH 3431 (3CR) ORDINARY DIFFERENTIAL EQUATIONS
MATH 4151 (3CR) BOUNDARY AND EIGENVALUE PROBLEMS
MATH 4121 (3CR) TOPICS IN ANALYSIS**

Other calendar entries affected:

Remove MATH 3431 from B. A. Honours in Mathematics & Economics in both departments' entries (line 7). Currently students must take 2 courses from a list of 14 Math courses, one of which is MATH 3431.

Remove MATH 3431 and MATH 4151 from B. Sc. Honours in Mathematics & Physics in both departments' entries (line 8). Currently students must take 2 courses from a list of 12 courses including MATH 3431 and MATH 4151.

Remove MATH 3431 and MATH 4151 from Honours in Physics (line 5). Currently students must take 1 course from a list of 6 courses, including MATH 3431 and MATH 4151.

(And changes to the following courses)

MATH 2121 (3CR)

ELEMENTARY DIFFERENTIAL EQUATIONS I

Format: Lecture 3 Hours

Prereq: MATH 1121; ~~MATH 2111~~; or permission of the Department

Exclusion: Any version of MATH 2121 previously offered with a different title

~~This course introduces is an introduction to the techniques and applications of first and second order differential equations. **Topics include techniques for solving simple differential equations and the qualitative analysis of linear and non-linear equations.** Included will be: **Applications** of first order equations to areas **include** such as growth and decay, **heating and cooling and diffusion, mixture problems , and mixing and** chemical reactions. ~~the logistic equation, orthogonal trajectories, higher order differential equations and applications, and power series solutions of differential equations.~~~~

MATH 3131 (3CR)

MATHEMATICAL METHODS FOR DIFFERENTIAL EQUATIONS

DIFFERENTIAL EQUATIONS II

Format: Lecture 3 Hours

Prereq: MATH 2121, **2111** and 2221; or permission of the Department

Exclusion: Any version of MATH 3131 previously offered with a different title

~~This course is designed primarily for students in mathematics, physics, or engineering. It covers systems of 1st and 2nd order ordinary differential equations, Laplace and Fourier transforms, power series solutions for equations with singular points, and Fourier series.~~ **This course focuses on ordinary and partial differential equations. Topics for ordinary differential equations include existence and uniqueness of solutions, systems of differential equations, power series solutions, Laplace and Fourier transforms, and Fourier series. Topics for partial differential equations include separation of variables, generalized Fourier series, Sturm-Liouville theory, Legendre polynomials, Bessel functions, Green's functions, and the calculus of variations.**

MATH 3151 (3CR)

AN INTRODUCTION TO MATHEMATICAL MODELLING

Format: Lecture 3 Hours

Prereq: **MATH 1111 and third year standing;** ~~2121 and 2221~~; or permission of the Department

~~This course provides is an introduction to~~ **introduces** the nature of theoretical mathematical modelling illustrated by examples drawn from the physical ~~and engineering~~ sciences, ~~pursuit and conflict problems,~~ population dynamics (mathematical ecology), traffic flow, sociological problems (**for example** voting, kinship, **and** cultural stability), and other areas, depending on the interests of the class.

MATH 3311 (3CR)

PROBABILITY AND STATISTICS I

Format: Lecture 3 Hours

Prereq: MATH 2111; or permission of the Department

~~Exclusion: MATH 3310~~

~~This course is an introduction to~~ **focuses on** the mathematical theory of probability. **It includes topics such as:** ~~covered include:~~ sample space; events; axioms; conditional probability; **Bayes' Theorem**; random variables; combinatorial probability; moment generating functions; transformations of random variables; univariate and **joint** distributions with reference to the binomial, hypergeometric, normal, Gamma, Poisson, and others; convergence of sequences of variables; **and the Central Limit Theorem.**

MATH 3321 (3CR)

PROBABILITY AND STATISTICS II

Format: Lecture 3 Hours

Prereq: MATH 3311; or permission of the Department

~~Exclusion: MATH 3310~~

~~This course is an introduction to~~ **focuses on** mathematical statistics. **It includes topics such as** ~~covered include:~~ **estimation**, unbiasedness, efficiency, Cramer-Rao lower bound, consistency, sufficiency, maximum likelihood estimators, hypothesis testing, power of tests, likelihood **ratio**, regression analysis, and analysis of variance.

MATH/COMP 3411 (3CR)

NUMERICAL ANALYSIS

Format: Lecture 3 Hours

Prereq: MATH 1121, 2221, COMP 1631 or 1731 or 1751 **3 credits in Computer Science**; or permission of the Department

Note: This course is cross-listed as ~~COMP 3411~~ **COMP/MATH 3411** and may therefore count as three credits in either discipline.

~~This course is an introduction to~~ **introduces** numerical methods for solving a variety of problems in mathematics, the natural sciences, and engineering **and the implementation of numerical methods on a computer.** Topics ~~to be studied~~ include numerical **stability**, **polynomial approximation and interpolation**, **integration and solution of differential equations**, solution of linear and nonlinear systems of equations, ~~Gauss elimination~~, pivoting strategies, numerical stability, **and matrix PLU factorization**, ~~tridiagonal matrices~~, ~~polynomial and cubic spline approximation and interpolation.~~

Other calendar entries affected :

Changes made to MATH/COMP 3411 will also have to be made to COMP/MATH 3411

MATH 4111 (3CR)

TOPOLOGY

Format: Lecture 3 Hours

Prereq: MATH 3111; or permission of the Department

~~Exclusion: MATH 4110~~

~~This course is an introduction to the study of~~ **introduces** metric and topological spaces, convergence, and continuous functions.

MATH 4141 (3CR)

MEASURE AND INTEGRATION

Format: Lecture 3 Hours

Prereq: MATH ~~3110~~ or 3121; or permission of the Department

This course examines topics such as topology of \mathbb{R}^n , Lebesgue Measure Lebesgue measure, Measurable Functions measurable functions, the Lebesgue Lebesgue integral, the convergence theorems, and products measures. As time permits it and may also cover other topics such as abstract measure theory, Lp-spaces, and absolute continuity will be covered.

(and the following changes to Computer Science courses)

Prerequisites

COMP 3611 (3CR)

ALGORITHM ANALYSIS (3CR)

Format: Lecture 3 Hours

Prereq: COMP ~~2611~~ or 2631, COMP/MATH 2211; or permission of the Department

COMP 3651 (3CR)

ARTIFICIAL INTELLIGENCE

Format: Lecture 3 Hours

Prereq: COMP ~~2611~~ or 2631, COMP/MATH 2211; or permission of the Department

COMP 3711 (3CR)

PRINCIPLES OF PROGRAMMING LANGUAGES

Format: Lecture 3 Hours

Prereq: COMP ~~2611~~ or 2631, 2931; or permission of the Department

COMP 3811 (3CR)

DATABASE SYSTEMS

Format: Lecture 3 Hours

Prereq: COMP ~~2611~~ or 2631, 2931, COMP/MATH 2211; or permission of the Department

COMP 3831 (3CR)

COMPUTER GRAPHICS

Format: Lecture 3 Hours

Prereq: COMP ~~2611~~ or 2631, 2931, MATH 2221; or permission of the Department

COMP 3971 (3CR)

COMPUTER ORGANIZATION AND ARCHITECTURE

Format: Lecture 3 Hours

Prereq: COMP ~~2611~~ or 2631, 2931; or permission of the Department

COMP 4911 (3CR)

COMPUTER NETWORKS

Format: Lecture 3 Hours

Prereq: COMP ~~2611~~ or 2631, 2931, and 3 credits from Computer Science at the 3/4000 level; or permission of the Department

COMP 3611 (3CR)

ALGORITHM ANALYSIS (3CR)

Format: Lecture 3 Hours

Prereq: COMP ~~2611~~ or 2631, COMP/MATH 2211; or permission of the Department

~~The purpose of This course is to apply~~ **applies** analysis and design techniques to non-numeric algorithms ~~which that~~ act on data structures. **The design of efficient algorithms leads to in-depth investigations of computational complexity such as NP-hard problems.** ~~Designing efficient algorithms for internal and external sorting/merging/searching leads to notions of complexity (e.g. NP-hard problems) and to memory management techniques.~~

COMP 3911 (3CR)

OPERATING SYSTEMS

Format: Lecture 3 Hours

Prereq: COMP 2931; or permission of the Department

This course ~~includes~~ **examines** the major concepts underlying the design of operating systems. ~~Topics include:~~ **such as** process management, scheduling, memory management, device management, ~~system programming,~~ security, and network structures.

COMP 3971 (3CR)

COMPUTER ORGANIZATION AND ARCHITECTURE

Format: Lecture 3 Hours

Prereq: COMP ~~2611~~ or 2631, 2931; or permission of the Department

This course ~~provides an introduction to~~ **introduces** modern computer design and its relation to system architecture and ~~operating system program~~ **functionality.** Topics include: system bus design, memory organization, I/O device access, instruction set design, **instruction pipelining, and building up leading to an investigation of how these tools are used to support multi-processor systems** ~~RISC computers, and parallel organization.~~

COMP 4721 (3CR)

SOFTWARE DESIGN

Format: Lecture 3 Hours, Laboratory 2 Hours

Prereq: COMP 2631, 2711 or 3721, 2931, 6 credits in Computer Science at the 3000/4000 level, and third or fourth-year standing; or permission of the Department

This course ~~includes~~ **focuses on** the study of software design **culminating in a major project.** ~~topics such as software life cycle, requirements specification, and quality assurance.~~ Software design topics such as strategies, intractable problems, concurrent systems, and data modeling are included. **It studies life cycle models and their phases: planning, requirements, specifications, design, implementation, testing, and maintenance.** This course will include a large software project.

Motion CARRIED.

Motion (vanderLeest/Parker): That Senate approve the following changes to the Music program.

MUSC ~~2603~~-1603 (3 CR)

COLLABORATIVE KEYBOARD I

Format: Integrated Lecture and Laboratory 1.5 Hours

Exclusion: MUSC 2603 Collaborative Keyboard I

Note: All piano and organ students registered for MUSC ~~2501~~ **1501** must also take MUSC ~~2603~~ **1603**

This course provides students with the basic knowledge and skills necessary for an artistic accompaniment. Students examine different styles of music including Art Song, Lieder, and Oratorio, as well as accompaniments for instrumental works and orchestral reductions.

Other calendar entries affected: Change the first note for MUSC 1501/2501/3501/4501 to read **Note: All piano and organ students enrolled in MUSC 1501/1511 must take MUSC 1603.**

MUSC 1619-4619*

*Coreq: MUSC ~~1639/2639/3639/4639~~

Other calendar entries affected: In the description of the Academic Program (7.6.3, page 40 of the calendar) add MUSC 1619-4619 to the required core (7.6.3 a) iii)). Also add this to the listing of core ensemble credits in 7.6.4.

MUSC ~~3603~~ 2603 (3CR)

COLLABORATIVE KEYBOARD II

Format: private instruction 0.5 hours

Prereq: MUSC ~~21603~~

Exclusion: MUSC 3603 Collaborative Keyboard II

This course provides students with practical experience in collaborating with ~~student~~ vocalists and instrumentalists, **building on the skills learned in MUSC 1603.**

MUSC ~~4601/4603~~ 3603 (3CR)

COLLABORATIVE KEYBOARD III

Format: private instruction 0.5 hours

Prereq: MUSC 2603

Exclusion: MUSC ~~4601/4603~~ Collaborative Keyboard III

This course provides students with practical experience in collaborating with ~~student~~ vocalists and instrumentalists, **building on the skills learned in MUSC 2603.**

MUSC ~~4611~~ 4601/4603 (3 CR)

COLLABORATIVE KEYBOARD IV

Format: Private Instruction ~~1~~ **0.5** Hour

Prereq: MUSC 3603, or permission of the Department.

Exclusion: MUSC ~~4611-~~ Collaborative Keyboard IV

This course provides students with practical experience in collaborating with ~~student~~ vocalists and instrumentalists, building on the skills learned in MUSC 3603.

MUSC ~~2151~~ 1521 (3CR)

DICTION FOR SINGERS

Format: Lecture 3 Hours

Exclusion: MUSC 2151

This course acquaints students with the symbols and sounds of the International Phonetic Alphabet and with the application of the IPA to the English, French, German, Italian, Latin, and Spanish languages. It explores the differences between spoken and sung language and investigates and practices the physical processes required to produce the various sounds.

MUSC ~~2221~~ 3261 (3CR)

WOMEN AND MUSIC

Format: Lecture 3 Hours

Prereq: MUSC 2001 or MUSC 1201; or permission of the Department

Exclusion: MUSC 3211 "Women in Music"; **MUSC 2221**

This course explores the many roles women have played in music and music-making as performers, composers, conductors, teachers, critics, patrons, or as the inspiration for musical composition. It examines in detail how style, tradition, and ethnicity historically have shaped music and culture. It also examines the role of feminist criticism and gender studies in challenging perceptions and assumptions about music.

Other Calendar Entries Affected: Women's Studies will need to substitute MUSC 2221 in its Minor in Women's Studies section, in the section "or from the following courses in any year when the Program Co-ordinator approves that their content contains a significant Women's Studies component" and replace it with MUSC 3241.

MUSC ~~2231~~ 3271(3CR)

MODERN MUSICAL THEATRE

Format: Lecture 3 Hours

Prereq: MUSC 2001 or MUSC 1201 or DRAM/ENGL 1701; or permission of the Department

Exclusion: MUSC 3211 "Musical Theatre"; **MUSC 2231**

This course surveys selected important works in the American and British Musical theatre traditions from precursors in the 19th century up to the mature musicals of Stephen Sondheim and Andrew Lloyd Webber. It studies musicals in their historical and cultural context and as they relate to popular song and musical styles.

Other Calendar Entries Affected: Drama will need to delete MUSC 2231 in its Minor in Drama Studies section, line 2 and add MUSC 3251

Motion CARRIED.

Motion (vanderLeest/Parker): That Senate approve the proposed new courses in Psychology.

PSYC 3601 (3CR)

INTRODUCTION TO CLINICAL PSYCHOLOGY

Format: Lecture 3 Hours

Prereq: PSYC 2601 and at least six credits from 2000 level Psychology courses plus at least third-year standing, or permission of the Department

Exclusion: PSYC 3501 Introduction to Clinical Psychology

This course introduces the main theoretical perspectives, strategies of diagnosis and assessment, and types of intervention used in clinical psychology. Lectures focus on developing a framework for conceptualizing psychological problems, on the basics of interviewing and using psychological tests, and on different types of clinical treatments. It also explores specialized areas of clinical psychology such as child psychology, clinical neuropsychology, and forensic psychology.

PSYC 3821 (3CR)

CHILD PSYCHOPATHOLOGY

Format: Lecture 3 Hours, Laboratory 1 Hour

Prereq: PSYC 2431 and at least six credits from 2000 level Psychology courses plus at least third-year standing or permission of the Department

Exclusion: PSYC 3501 Child Psychopathology

This course examines prevalence, aetiology, diagnosis, and treatment of the major psychological disorders of childhood including: anxiety; mood and conduct disorders; ADHD; autism; and language and learning disorders. The course focuses on examining the current state of research in childhood psychopathology.

PSYC 4421 (3CR)

ADVANCED TOPICS IN SOCIAL DEVELOPMENT

Format: Seminar 3 Hours

Prereq: PSYC 2431 and at least six credits from 3000 level Psychology courses plus at least third-year standing; or permission of the department.

Exclusion: PSYC 4501 Advanced Topics in Social Development

This course provides a thorough examination of specific topics in social development, for example, attachment, abnormal social development, and emotional development of the child. It focuses on current theoretical and methodological issues in the chosen topic area.

PSYC 4611 (3CR)

ADVANCED TOPICS IN HEALTH PSYCHOLOGY

Format: Seminar 3 Hours

Prereq: PSYC 2611 and at least six credits from 3000 level Psychology courses plus at least third-year standing; or permission of the department.

Exclusion: PSYC 4501 Advanced Topics in Health Psychology

This research seminar in psychoneuroimmunology examines how interactions among behaviour, the nervous system, and the immune system influence health. The broad focus is on relationships among brain, behaviour, and immunity from a life-span perspective and on the implications for disease management within various areas of behavioural medicine.

The report explained that the Psychology department is taking advantage of the expertise of a new faculty member to offer these new courses.

R Beattie asked if the courses were going to be offered every year, or in alternating years.

S. Claxton-Oldfield replied that the intention of the department was to offer all but one of those courses every year.

Motion CARRIED.

Motion (vanderLeest/Parker): That the Academic Calendar as posted on the university web site (currently in .html format) will be the official University Calendar.

The following principles will be applied:

- The Academic Calendar will be broken into at least two distinct parts, one of which will include sections 7 and 9 of the current Calendar and will be titled **Academic Programs and Courses of Instruction**.
- Changes to the *Academic Programs and Courses of Instruction* part of the online calendar will be posted on March 1 of each year.
- All parts of the Academic Calendar will be archived on paper and electronically in the University Archives and in the Registrar's Office on September 1 of each year.
- Whereas current Calendar regulation 6.1.3 allows students with continuous enrolment to graduate under any one calendar in force during their registration with respect to the content of sections 7 and 9, the archived Academic Programs created on September 1 of each year shall be the official calendar from which students may choose.
- Changes to other parts of the calendar, after they have been approved by Senate or another appropriate authority, will be added to the online calendar on March 1 and September 1. If there are Senate approved changes, the regulations will go into effect immediately after Senate approval. Other changes will go into effect as soon as they are posted in the online Calendar.
- The following statement will appear on the homepage for the online Academic Calendars and in all archived print versions of the Academic Calendar:
 "The Calendar contains general information, regulations, and program information. It is each student's responsibility to be familiar with University regulations and other information about the University and its programs which affects him or her. The online Calendar, as it appears on the Mount Allison web pages or as archived in the Registrar's office, shall be the official version of the Academic Calendar."
- The following note will appear on the homepage for the online Academic Calendars:

“Print copies of all calendars are kept in the Office of the Registrar and the University Archives. The University reserves the right to make changes after the posting of Calendars. The online version of the Calendar will be updated to reflect any changes on 1 March and 1 September of each year.”

J. vanderLeest added that a number of universities have already adopted their online calendars as the official university calendar.

Motion CARRIED.

07.01.10 Report from the Research and Creative Activities Committee

S. McClatchie reported that there was currently a search underway for a tier 2 Canada Research Chair. The Committee has approved the creation of two committees to consult with the university community on the two remaining NSERC chairs and on the areas to which they should be allocated. A further question the committees will consider is whether they should remain two chairs or be converted to one tier 1 chair.

Motion (McClatchie/Brett): That the attached policy Statement on Integrity in Research, Scholarly, and Creative Activity be approved.

S. McClatchie gave a quick overview highlighting section 2.1 which states the principle that the policy is in concert with the collective agreement. The most significant item of change defines the role of the Vice President, Academic and Research and also that of the Deans overview of the process. One change from faculty council is in section 8.3 where the right of an individual(s) involved to have representation throughout the process is explicitly stated.

A. Nurse requested clarifications on the right of the University to manage the institution and recognizing the collective agreement, and on the rights of individuals to representation. He also suggested that, in section 8.2, that a Dean should not conduct an interview as part of the preliminary consideration because the Dean desiring such an interview, but rather because the Dean considered the interview to be required.

R. Hudson inquired about the difference between an honest mistake and an unintentional mistake. He wondered about the financial questions addressed in section 4, and the researcher's ownership of profit from research as defined in the collective agreement. He also commented on the practical aspects of keeping data for five years and the issue of confidentiality. He also suggested that the reference to scholarly rigour in section 3 may discipline specific.

K. Gandhi asked about the faculty member's responsibility for student misconduct.

R. Bruening requested clarification of the status of post-doctoral fellows and this policy.

S. McClatchie stated that this policy is directed to those eligible for Tricouncil funding, and as such would apply to faculty and post-doctoral fellows. He maintained that there was also ample room in the policy to account for honest mistakes.

S. Carrigan-Kent requested clarification on how the policy would apply to students, suggesting that it may not be fair for a faculty member to be charged for a student's actions.

S. McClatchie replied that it was not possible to anticipate every possibility. Some of the responsibility can fall on the student, but the faculty member also has a responsibility to teach proper research and ethical behaviour.

R. Hudson added that it may be desirable to add a statement that this policy does not apply to course work.

S. McClatchie remarked that the student coursework is covered by other internal policies. This policy would only be relevant when the student is involved in funded research.

S. Carrigan-Kent asked if students accused with misconduct were entitled to representation.

S. McClatchie replied that they were not in the same way as unionized faculty and staff, but that student discipline policies would be followed.

After considerable discussion S. McClatchie undertook to revise the document by deleting the last bulleted point in section 2, making a statement that the policy does not apply to student research, and to make some editorial changes. Following this a vote was taken on the motion.

Motion CARRIED.

08.01.10 Other Business

Other than the report from Faculty Council, there was no other business.

09.01.10 Adjournment

The meeting was adjourned at 5:00 pm

Respectfully submitted,

Paul Berry,

Secretary