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Dear Member of Senate:

I advise you that a meeting of the Senate of Acadia University will occur at **4:00 p.m.** on Monday 12th December, 2016 in **BAC 132**.

The agenda follows:

- 1) Approval of Agenda
- 2) Minutes of the Meeting of 14thth November, 2016
- 3) Announcements (normally 10 minutes per speaker)
- 4) New Business
 - a) Graduate Studies Proposed Curriculum Changes (D. MacKinnon)

Sincerely,

ORIGINAL SIGNED
Rosie Hare
Recording Secretary to Senate

Page 2

Graduate Curriculum Changes

Approved by the Senate Committee on Graduate Studies

NEW COURSES - MSc in MATH and STATS

MATH 5113 Probability

Elementary set theory, outcome spaces, probability spaces, laws of probability (discrete and continuous), independence, conditionality, random variables, random vectors, distributions of functions of random variables, moments and moment generating functions, special distributions, law of large numbers, central limit theorem.

MATH 5133 Regression

An introduction to the methodology and theory involved in multi-linear regression. Topics include: variable selection, indicator variables, correlation analysis and general linear hypothesis testing.

MATH 5153 Nonparametric Statistical Inference

Nonparametric statistical inference and statistical methods based on ranks. Topics include rank and sign tests, linear rank statistics, nonparametric analysis of variance, measures of concordance, relative power and efficiency.

MATH 5163 Sampling Theory

Statistical surveys, simple random sampling, sampling proportions and percentages, estimation of sample size, ratio and regression estimators, stratified random sampling, cluster sampling, probability sampling.

MATH 5173 Design and Analysis of Experiments

Single and multi-factor analysis of variance, fixed and random effects models, analysis of covariance, experimental design, including randomized block designs, balanced incomplete block designs, and factorial designs. Other topics may include repeated measures, split plot designs, response surface models, and fractional factorial designs.

MATH 5183 Time Series

Seasonal effects, trends, descriptive methods. Stochastic processes, moving average and autoregressive processes. Autocorrelation. Model fitting and Box Jenkins models. Forecasting. Regression based procedures.

MATH 5193 Statistical Learning

Modern statistical methods for supervised and unsupervised learning with large and complex data. Topics include: linear regression, classification, resampling methods, model selection and regularization, smooth regression, tree-based models, support vector machines, principal components and dimension reduction, clustering and statistical graphics.

MATH 5213 Mathematical Statistics

Sampling distributions, elementary decision theory, estimation, testing hypotheses.

Reasons for requesting the courses: For nearly every undergraduate offering of these courses since 2004, the department has offered corresponding graduate courses, using "topics" course numbers such as MATH 5823 or MATH 5883. Listing these as graduate courses reflects our current practice and indicates to prospective and current students what graduate offerings might be expected. Proposed numbering maps 3000 level courses to 5100s and 4000 level courses to 5200s.

COURSE DELETIONS – MSc in MATH and STATS

MATH 5243 Applied Stochastic Processes MATH 5623 Discrete and Combinatorial Optimization

Reason for requesting deletions: Our graduate courses parallel our upper level undergraduate courses. The undergraduate versions, MATH 4243 & MATH 4623 were deleted from the calendar several years ago, and thus the graduate version is no longer officially offered.

PROPOSED MODIFICATION TO EXISTING COURSES – MSc in MATH and STATS

Current Course Title and Calendar Description

MATH 5223 Applied Statistical Methods

The course offers a survey of advanced statistical methods including advanced modelling techniques, survival analysis, analysis of contingency tables and nonparametric methods. Computer based empirical evaluation methods are introduced. The use of SAS and other statistical software will be emphasized.

Proposed New Course Title and Calendar Description

MATH 5223 Generalized Linear Models

Review of least squares linear regression and maximum likelihood estimation. Generalized linear models, including binomial (logistic) regression, Poisson regression, contingency tables, and log-linear models. Other topics in regression modeling such as survival analysis.

Reason for requesting this modification: Our graduate courses parallel our upper level undergraduate courses. The undergraduate version, MATH 4223, was modified several years ago. At that time, the corresponding change was not made to the calendar description of MATH 5223, so we are now rectifying this omission.

PROPOSED MODIFICATION TO A PROGRAM – MSc in MATH and STATS

The preamble to the listing of graduate courses currently reads (on page 352 in the Calendar): Credit cannot be obtained both for a graduate course and for the undergraduate course with the corresponding number (4xxx instead of 5xxx) and title.

The new preamble to the listing of graduate courses should read: Credit cannot be obtained both for a graduate course and for the undergraduate course with the corresponding number (4xxx instead of 5xxx, or 32yy instead of 51yy) and title.

NEW COURSE – MSc in GEOL

GEOL 5743 Topics in Soil Science

An examination of soils from a mineralogical and geochemical perspective, including dissolution, hydrolytic and oxidative soil forming processes, soil evolution and maturity, the effect of substrate composition on soil type, organic matter composition and decomposition, adsorption, desorption, controls on permeability, and essential nutrient and micronutrient cycling. Prereq: Permission of instructor

Reason for requesting new course: Needed by graduate students for background in this subject.

COURSE DELETION – MSc in PSYC

PSYC 6063 Internship in Community Psychology

Reason for requesting deletion: PSYC6063 has not been offered for many years and is not a required course for our MSc Program. It was an elective available for graduate students at one time but there is currently no one available to teach this course, and there are no plans to offer the course in the future.

PROPOSED MODIFICATION TO EXISTING COURSES – MEd Program

Current Calendar Description

EDUC 5143 – Educational Explorations

This course provides an opportunity for the exploration of a variety of educational issues through participation in formats such as institutes, workshops, and mini-courses. Evidence of 3h equivalency (120 hours of approved voluntary professional development activities), program relevance, and appropriate academic standards are to be submitted for prior approval to the Director. Evaluation is on a pass/fail basis.

Proposed New Calendar Description

This course provides an opportunity for the exploration of a variety of educational issues through participation in formats such as institutes, workshops, and mini-courses. Evidence of 3h equivalency (120 hours of approved voluntary professional development activities), program relevance, and appropriate academic standards are to be submitted for prior approval to the Graduate Coordinator. Evaluation is on a pass/fail basis. Available only to students enrolled in an Acadia University M.Ed. program or Director-approved extension programs (example: the NSAC technology program)

Reason for requesting this modification: The Explorations course credit is intended to provide flexibility for program students to supplement their MEd with specialized electives. It was never intended to be a standalone course but furthermore directly related to the ongoing development of an Acadia MEd program student.

Current Course Title and Calendar Description

EDUC 50D3 Professional Issues in Counselling

This course engages students in critical analysis of professional, ethical, legal, and diversity issues related to practice, teaching, supervision, and research in counselling. Students explore personal beliefs and values, review ethics and legal documents, consider procedures for processing ethical inquiries and complaints, and engage in application of ethical decision-making processes to ethical dilemmas. Prerequisite: 12 hours of coursework in the program

Proposed New Course Title

EDUC 50D3 Ethics in Counselling Practice

This course engages students in critical analysis of professional, ethical, legal, and diversity issues related to practice, teaching, supervision, and research in counselling. Students explore personal beliefs and values, review ethics and legal documents, consider procedures for processing ethical inquiries and complaints, and engage in application of ethical decision-making processes to ethical dilemmas. Prerequisite: 12 hours of coursework in the program

Reason for requesting this modification: Ethics is a major competency in our accredited program. The current title does not reflect this. The change in title better reflects the current content of this course.

Current Course Title and Calendar Description with Prerequisite

EDUC 5563 Career Counselling

This course is for students who wish to expand their career counselling competencies. It includes a major practical component and will cover such topics as career education and exploration, planning and decision making, and incorporation of computer-based programs. Students are introduced to selected interest and other preference assessment tools. Equity and diversity are taken up as central concerns in career counselling. Prerequisite: EDUC 5543

Proposed New Calendar Description

EDUC 5563 Career Counselling

This course is for students who wish to expand their career counselling competencies. It includes a major practical component and will cover such topics as career education and exploration, planning and decision making, and incorporation of computer-based programs. Students are introduced to selected interest and other preference assessment tools. Equity and diversity are taken up as central concerns in career counselling.

Reason for requesting this modification: Dropping the prerequisite allows for greater selection of courses by independent students; allows for students in other MED programs other than Counselling to pick up an elective; and, allows students in Counselling Programs at other universities to take the course. This change was discussed extensively with the instructor who has taught this course for over 20 years and with other program faculty. All agree to the change.

PROPOSED MODIFICATION TO PROGRAM - MEd in COUN

The proposed changes to the MEd Counselling program admissions criteria clarify the two-year work experience. The changes also reflect questions asked by incoming applicants and make the process more transparent. Finally, the changes clarify overall admission requirements for all applicants to all MEd programs.

Admission Requirements

- A Bachelor of Education degree or its equivalent (e.g., NS Teachers College plus an undergraduate degree) for the School Stream in Counselling or a relevant undergraduate degree for those pursing the Agency Stream in Counselling, with at least a B (73 - 76%) average in the BEd program or in the final two years of full-time equivalent study is required.
- 2. Two years of paid, full-time equivalent, post-degree teaching or related experience is required. Related experience for the MEd Counselling program includes work in a social service capacity.
- 3. Two arm's length references from persons conversant with the applicant's academic and professional abilities are required. One is to be an academic reference from a recent instructor/teacher/professor. The other is to be a professional reference from an individual familiar with the applicant's professional performance. If the applicant has not taken a course (undergraduate or graduate) in the last five years, two professional references may be submitted. This is the only circumstance in which two professional references are acceptable.

MEd (Counselling) Additional Admission Requirements:

a) Applicants who do not hold a Bachelor of Education degree or its equivalent and seek admission to the MEd (Counselling) program for purposes other than school counselling must hold a minimum of a four-year undergraduate degree with at least a B (73-76%) average in the final two years of full-time equivalent study and fulfill all other requirements.

Proposed New Calendar Info:

Admission Requirements

All applicants must meet the minimum graduate admission criteria as outlined below:

- Applicants to all MEd programs must have at least a B average (73-76%) in the final two years
 of full-time equivalent (60 credit hours) university study, including coursework in
 undergraduate degree(s) and any graduate work completed.
- Applicants to all MEd programs must possess a Bachelor of Education degree or its equivalent (e.g., NS Teachers College plus an undergraduate degree). Applicants to the MEd Counselling, Agency Stream must possess a relevant four-year undergraduate degree or its equivalent.
- Two years of paid, full-time equivalent, post-degree teaching or related experience is required. Applicants to the M.Ed. Counselling program should carefully note the information under Additional Admission Requirement below.
- Two current arm's length references from persons conversant with the applicant's academic and professional abilities are required. One is to be an academic reference from a recent instructor/teacher/professor. The other is to be a professional reference from an individual familiar with the applicant's professional performance. If the applicant has not taken a course (undergraduate or graduate) in the last five years, two professional references may be submitted. This is the only circumstance in which two professional references are acceptable.

Med (Counselling) Additional Admission Requirement

Applicants to the MEd Counselling must have a minimum of two years (full-time equivalent)
of work experience in jobs that involve working in a helping capacity with children,
adolescents and/or adults. The two years of relevant work history can include paid and

volunteer positions held prior to, during, and subsequent to post-secondary study. All work experience must be documented. Preference will be given to those applications that document a minimum of two full years of paid work experience subsequent to post-secondary study.

- Applicants must provide a letter of intent outlining their motivations and aspirations in reference to the counselling program.
- Applicants must participate in an interview as part of the application review process.

Reason for requesting this modification: The current descriptions are inadequate.