

## SENATE AGENDA

Friday, October 10, 2014

2:30 p.m. –F210

1. ADOPTION OF THE MINUTES OF THE SENATE MEETING OF: September 12, 2014
2. BUSINESS ARISING FROM THE MINUTES

**The following motion (motion #8) was passed at the September 2014 Senate meeting.**

Moved by R. Vanderlee, seconded by K. McCullough that for the purposes of publishing the University's Academic calendar, that Senate approve that the Undergraduate Studies Committee (USC) will not accept program changes for the current academic year after the last scheduled USC meeting in December. Any submissions to USC after that meeting date will not take effect until the following Academic Year.

**The implication is that this deadline refers only to this current academic year. For clarity, the motion should read:**

MOTION 1: That for the purposes of publishing the University's Academic calendar, Senate approve that the Undergraduate Studies Committee (USC) will not accept program changes for the *upcoming* academic year after the last scheduled USC meeting in December. Any submissions to USC after that meeting date will not take effect until the following Academic Year.

**At the September 2014 Senate meeting, the Undergraduate Studies Report was received. The following motions were not clearly outlined in the report, but should have been brought to Senate for approval.**

### School of Business

MOTION 1: That Senate approve that the School of Business consider applicants for admission based on the successful completion of ten (10) courses from the Chartered Insurance Professionals' (CIP) program taken through the Insurance Institute of Canada (IIC), with an overall average of 75% or greater.

### Criminal Justice

MOTION 2: That Senate approve that the following be added as an exception to the Residency Requirements as listed in the Nipissing Academic Calendar: *A student who applies for a BA in Criminal Justice must successfully complete 30 Nipissing Criminal Justice credits.*

### School of Nursing

MOTION 3: That Senate approve that SOCI 2036 be removed from and SOCI1016 be added to the list of prerequisites for NURS 3006, 3007, 3016, 3026, 3027, and 3036.

### Computer Science and Mathematics

MOTION 4: That Senate approve that the prerequisites for MATH1070 Fundamentals of Arithmetic for Teachers be changed to the following: Any 3U or 3M Mathematics or MATH1911 or MATH1912.

MOTION 5: That Senate approve that the Undergraduate Studies Committee recommend to Senate that the prerequisites for MATH4086 Functional Analysis be changed to the following: MATH3137 Real Analysis II.

**ADMISSION POLICIES**

MOTION 6: That Senate approve that the Concurrent Education admission requirements for Concurrent Education be modified to include the 3U or 3M or equivalent Math and to delete the 4U Math or equivalent.

MOTION 7: That Senate approve that the BScN Bridging Program admission requirements be changed to eliminate the statement “Diploma must have been awarded within the last ten years.”

**Non-Substantive:**

That the title of the course for SOCI2126 “Research Methods” be changed to SOCI2126 “Introduction to Sociological Research Methods”.

**Non-Substantive:**

That the title and description for the course SOCI2127 “Social Statistics and Data Analysis” be changed to SOCI2127 “Quantitative Research Methods”.

**Non-Substantive:**

That the title of the course for SOCI 4127 “Applied Multivariate Statistics” be changed to SOCI 4127 “Advanced Social Data Analysis”.

3. READING and DISPOSING of COMMUNICATIONS4. QUESTION PERIOD5. REPORTS of STANDING COMMITTEES and FACULTY or UNIVERSITY COUNCILS**Senate Executive Committee (pages 4-10)**

MOTION 1: That the Report of the Senate Executive Committee dated October 2, 2014 be received,

**Planning and Priorities Committee (pages 11-41)**

MOTION 1: That the Report of the Planning and Priorities Committee dated September 26, 2014, be received.

MOTION 2: That Senate grant approval of a Stage 2 proposal for a Joint MA in Sociology with Laurentian, as outlined in the attached document.

MOTION 3: That Senate grant approval to progress to Stage 2 the addition of a 2-year Thesis option to the MSc Mathematics program, and approval of MATH6100 Thesis in Mathematics, as outlined in the attached documents.

6. OTHER BUSINESS

7. AMENDMENT of BY-LAWS**Notice of Motion (regarding the elimination of two ex-officio positions from Article 2.1(a))**

That Article 2.1(a) of the Senate bylaws be amended with the deletion of:

(iii) the Assistant Vice-President, Research and Graduate Studies

(vii) the Director of the Centre for Flexible Teaching and Learning

**Notice of Motion (regarding the addition of one ex-officio position to Article 2.1a))**

That Article 2.1(a) of the Senate bylaws be amended with the addition of the position of Associate Vice-President – Academic

8. ELECTIONS9. REPORTS FROM OTHER BODIES

- A. (1) Board of Governors
- (2) Alumni Advisory Board
- (3) Council of Ontario Universities (Academic Colleague)
  
- B. Reports from Senate members participating on other university-related committees

10. NEW BUSINESS11. ANNOUNCEMENTS

- (a) President
- (b) Provost and Vice-President Academic and Research
- (c) Dean of Applied and Professional Studies
- (d) Dean of Arts and Science
- (e) Dean of Education
- (f) Student Representative
- (g) Others

NIPISSING UNIVERSITY  
SENATE EXECUTIVE COMMITTEE

October 2, 2014

There was a meeting of the Senate Executive Committee on Thursday, October 2, 2014

Present: M. DeGagné (chair), J. Barker, N. Colborne, H. d'Entremont, M-A Parr, S. Renshaw, C. Richardson,  
M. Tuncali, R. Vanderlee

Regrets: Y. Benoit, T. Vassilev

The purpose was to set the agenda for the October 2014 Senate meeting.

The Bylaws and Elections Subcommittee report was received.

One item from the report was brought forward for the President's attention. Bylaws is requesting that the President ask all chairs of Senate committees, subcommittees and councils to review their membership and terms of reference and report back to Bylaws on or before November 1, 2014. The Chair indicated he would make this request.

There was a brief discussion on the final exam policy. Specifically, a couple of requests from some faculty members for exam exemption on second year courses have been requested. Senate Executive indicated that this is a discussion that should occur with USC or Teaching and Learning.

Respectfully submitted,

*Original signed by:*

M. DeGagné  
Chair  
Senate Executive Committee

MOTION 1: That Senate receive the Report of the Senate Executive dated October 2, 2014.

## Nipissing University

## Report of the By-laws and Elections Subcommittee

September 30, 2014

There was a meeting of the Bylaws and Elections Subcommittee on Monday, September 29, 2014 at 3:30 p.m. in F214.

Present: G. Black, N. Colborne, D. Davis, S. Renshaw (chair), D. Tabachnick, H. d'Entremont (n-v),  
C. Jenkins (n-v)

Regrets: I. Hall

Guest: Y. Benoit

An extensive discussion resumed, stemming from the August meeting regarding the changes in the senior academic administrative positions and their subsequent impact on Senate. The Provost Vice-President Academic and Research (PVPAR) was able to confirm that there is no intention to replace the Director for the Centre of Flexible Teaching and Learning, the Assistant Vice-President Research and Graduate Studies and the Vice-President Finance and External, the latter not having any significant Senate impact.

The Committee reviewed the report authored by David Tabachnick on changes to and appointment of senior academic administrators as related to Senate memberships, the function of Senate, its committees, subcommittees, and councils. The suggestion was made that Senate needs to be made aware of these changes and how it impacts the work of Senate. The question was also asked: "how do we move forward?"

Regarding the elimination of the positions of Director for the Centre of Flexible Teaching and Learning and the Assistant Vice-President Research and Graduate Studies, which are currently *ex-officio* voting Senate positions, the following motion was passed and will be presented as a Notice of Motion at the October 2014 Senate meeting.

MOTION 1: Moved by N. Colborne, seconded by D. Tabachnick that Article 2.1(a) of the Senate bylaws be amended with the deletion of:  
(iii) the Assistant Vice-President, Research and Graduate Studies  
(vii) the Director of the Centre for Flexible Teaching and Learning  
CARRIED

With respect to adding the position of Associate Vice-President-Academic (AVP) as an *ex-officio* voting Senate position, the committee decided to approve the following motion (with one dissension) and bring it forward to the October 2014 as a Notice of Motion. Senate can discuss this at the November Senate meeting.

MOTION 2: Moved by N. Colborne, seconded by S. Renshaw that Article 2.1(a) of the Senate bylaws be amended with the addition of the position of Associate Vice-President – Academic.  
CARRIED

David Tabachnick suggested that the Graduate Studies Council make a recommendation to the Bylaws and Elections Subcommittee to have the AVP be designated as their Chair.

The report that was submitted by David Tabachnick is to be appended to this report and submitted to Senate Executive.

MOTION 3: Moved by G. Black, seconded by D. Davis that the Report on changes to and Appointment of Senior Academic Administrators as Related to Senate Membership, the function of Senate, its Committees, Subcommittees, and Councils authored by Dr. David Tabachnick, be forwarded to Senate Executive.  
CARRIED

The committee unanimously agreed to have the Chair of Senate request that all Senate committee and council chairs verify their current membership to ascertain if they are conforming to the Senate bylaws and report back to the Bylaws and Elections Subcommittee no later than November 1, 2014. If any changes are required or requested, this must be forwarded to the Bylaws and Elections subcommittee, accompanied by a rationale.

The request to change the ex-officio membership of the Technology and Infrastructure Subcommittee (Article 9.5.2) and the status of the Admissions and Enrollment Subcommittee is deferred to the next meeting.

Respectfully submitted,

*Original signed by:*

S. Renshaw  
Chair  
Bylaws and Elections Subcommittee

MOTION 1: That Senate Executive receive the Report of the Bylaws and Elections Subcommittee dated September 30, 2014.

**By-Laws and Elections Subcommittee Report on Changes to and Appointment of Senior Academic Administrators  
as Related to Senate Membership, the Function of Senate, its  
Committees, Subcommittees, and Councils**

This report has been prepared under Article 9.1.1 (c) (i) of the Senate Bylaws which states that the By-Laws and Elections Subcommittee (hereafter Bylaws) is charged to “periodically review the Senate By-Laws and the governance practices of Senate and its committees/subcommittees, and make recommendations to the Senate Executive Committee as necessary and appropriate, for conveyance to Senate.”

### **Background**

In part, what follows is an effort to address concerns raised in committee regarding item 1.4 of the Agenda of the Bylaws and Elections Subcommittee meeting of August 25, 2014. The item reads: “A Number of position titles and Changes that impact Senate.” The two relevant sub-items are “Elimination of Assistant VP –Research and Graduate Studies position” and “New Position of Associate VP – Academic.”

### **Section 1**

#### **The Elimination of Assistant Vice-President, Research and Graduate Studies (AVPRG)**

The elimination of Senior Academic Administrative positions relates to Article 2 of the Senate Bylaws which enumerates “Senate Membership and Terms of Office” and specifically articles 2(b), the distribution of Senators, and 2.1, listing “*Ex Officio* Senators.”

##### **1.1 The Elimination of the AVPRG in relation to Senate Membership**

Article 2(b) reads “As stipulated in the Nipissing University Act, the number of faculty Senators in any given year shall be at least more than twice the total number of all other Senators.”

At present, there are 41 faculty Senator positions and 19 non-faculty Senator positions. The elimination of the AVPRG position as part of the contingent of ex-officio members brings the total of non-faculty Senator positions down to 18. In turn, the elimination of the AVPRG as an *ex-officio* member of Senate will mean that the distribution of Senators will still conform to the Nipissing University Act.

Relatedly, Article 18(2) of the *Nipissing University Act* reads as follows:

“The members appointed by virtue of their office shall be the following:

1. The President.
2. The Deans of all faculties.
3. The Registrar.
4. The Executive Director of Library Services.
5. Such other officers as the senate may by by-law designate.”

In turn, the elimination of the AVPRG as an ex-officio member of Senate will still conform to 18(2) of the Nipissing University Act.

##### **1.2 The Elimination of the AVPRG in relation to the function of Senate Committees, Subcommittees and Councils**

The AVPRG is listed as an *ex-officio* member of the Planning and Priorities Committee (PPC) under 9.2(a)(ii); a non-voting member of the Research Council (RC) under 10.2 (a)(v); a non-voting member and Chair of the Graduate Studies Council (GSC) under 10.3 (a)(ii).

Under article 8.1(a) “the procedures of Senate standing or ad hoc committees/subcommittees shall parallel those of Senate.” This can be interpreted to mean that committee/subcommittee membership should conform to article 2(b) which stipulates that the distribution of faculty and non-faculty members shall be at least 2 to 1. However, this ratio has not been followed in the composition of committee membership.

i) As such, PPC is composed of 6 administrators (voting), 3 administrators (non-voting) and 4 students (voting) for a total of 13 non-Faculty members, 10 voting and 3 non-voting. There are 9 Faculty members (voting). In total, this represents a 13 to 9 or 10 to 9 (voting members) distribution. By this measure, the elimination of the AVPRG position from PPC would bring the committee membership ratio closer in line to the standard indicated by 8.1(a).

It may also be that the PPC requires further expertise from a member of the Senior Administration.

\*Bylaws requests that the PPC review its membership needs and, if deemed necessary, recommend an amendment to Article 9.2(a-b).

ii) The Research Council is composed of 3 administrators (voting), 3 administrators (non-voting), and 1 graduate student (voting) for a total of 7 non-Faculty members, 4 voting and 3 non-voting. There are 6 Faculty members (voting). In total, this represents a 7 to 6 or 4 to 6 (voting members) distribution. The elimination of the AVPRG position from the Research Council would again result in membership ratio closer in line to the standard indicated by 8.1(a).

**Note:** The RC “Terms of Reference” document listing Council membership does not conform to Article 10.2 (a). The Terms of Reference includes “One (1) Research Chair” that is not included in the membership enumerated in the article.

\*Bylaws requests that the RC address this discrepancy and, if deemed necessary, recommend an amendment to article 10.2(a).

In an email dated July 31, 2014, the Provost/VPAR announced that he “will chair the Research Council” assuming responsibility of this aspect of the “Research portfolio” as of August 1<sup>st</sup>, 2014. Under 8.2(a) Chairs and Vice-Chairs must either be “designated when stipulating the membership or elected.” According to the “Terms of Reference” document (January, 2014), “The Research Council is chaired by the Assistant Vice-President, Research and Graduate Studies. The Vice-President, Academic and Research will be designated as Vice-Chair. The Vice-Chair shall be responsible for fulfilling the responsibilities of the Chair whenever the Chair is unable or unavailable to do so, for any reason.” In turn, as Vice-Chair, the Provost/VPAR may assume the responsibility of the Chair for a period of time that is reasonable for the Research Council to amend the membership section of the “Terms of Reference” document to reflect the elimination of the AVPRG position.

\*Bylaws requests that the RC review its membership needs, the designation of the Chair and Vice-Chair, and, if deemed necessary, recommend a change to Bylaw 10.2(a).

iii) According to Senate Bylaw 10.3(a)(i-viii), the Graduate Studies Council is composed of 2 administrators (voting), 4 administrators (non-voting) and 1 graduate student (voting) for a total of 7 non-Faculty members, 3 voting and 4 non-voting. Also by 10.3(a)(i-viii), there are 8 Faculty members voting. In total, this represents a 7 to 8 or 3 to 8 (voting members) distribution.

**Note:** The Graduate Studies Council “Terms of Reference” for membership does not conform to the Senate Bylaws. Instead of 8 Faculty members as stipulated in the Bylaws, the GSC Terms of Reference lists instead only 5 Faculty members, omitting the inclusion of 10.3(a)(vii): “1 Full Graduate Faculty member from each type of Master’s degree (M.A., M.Sc., M.Ed.) elected by the Graduate Faculty for 2 years.” The “Terms of Reference” also replaces 10.3(a)(viii), which lists “1 graduate student”, with “One graduate student from each level of Graduate Studies”, which may indicate 1 Masters Graduate Student and 1 PhD Student. By these terms, the distribution is significantly different at 8 to 5 or 4 to 5 (voting members).

Yet, the 2014-2015 membership on the council seems to represent a third configuration, **conforming neither to the Bylaws or their Terms of Reference**. GSC membership is currently listed as:

TBD - Assistant Vice-President Research Services & Graduate Studies (**Chair**) (non-voting)  
Harley d'Entremont - Vice-President Academic & Research (non-voting)  
Murat Tuncali - Dean of Arts & Science (interim)  
Carole Richardson - Dean of Education



Hilary Earl - Graduate Advisor/Graduate Chair (MA)  
Mark Wachowiak - Graduate Advisor/Graduate Chair (MSc Math)  
Michelann Parr - Graduate Advisor/Graduate Chair (MEd)  
Dan Walters- Graduate Advisor/Graduate Chair (MES/MESc)  
Stephen Connor - Graduate Faculty Member from Humanities  
Jeff Dech - Graduate Faculty Member from Social Science  
Alex Karassev - Graduate Faculty Member from Science  
Jennifer Barnett - Graduate Faculty Member from Education  
Christopher Donaldson - Graduate Student  
Andrea Robinson - Registrar (non-voting)  
Nancy Black - Library Director or designate (non-voting)

\*Bylaws request that the GSC address this inconsistency as well as the related lack of reference to the “PhD in Education” and, if deemed necessary, request an amendment of article 10.3(a).

In the same email referenced above, the Provost/VPAR further announced that the Associate Vice-President, Academic (AVPA) “will assume the Graduate Studies portfolio.” If this is taken to mean that the AVPA will replace the AVPRG as the Chair of the Graduate Studies Council, both Senate Bylaw 10.3(a) and the GSC Terms of Reference will have to be amended. As a sub-body of Senate listed in 10(a), the GSC must conform to Senate Bylaws.

## Section 2

### The New Position of Associate VP – Academic (AVPA)

As with Section 1 above, the creation of Senior Academic Administrative positions relates to Article 2 of the Senate Bylaws, which enumerates “Senate Membership and Terms of Office” and specifically articles 2(b), the distribution of Senators, and 2.1, listing “*Ex Officio* Senators.”

The creation of Senior Academic Administrative positions also relates to the Board of Governors Policy on the “Search/Appointment/Reappointment of Senior Academic Administrative Officers.” The hiring of Senior Academic Administrators is one of the areas where there is jurisdictional overlay between the Academic Senate and the Board of Governors. Other areas of overlay include the inclusion of 2 members of the Board as members of the Senate, the inclusion of 2 members of the Senate as members of the Board as well as the position of the President serving as Vice-Chancellor, member of the Board and as Chair of Senate.

At present, Board Policy 3.1.2012.B (May 2014) under the section “Associate or Assistant Vice-President, Academic & Research” (e) stipulates that the membership of a Search Committee shall include “Four (4) tenured faculty members with one from each faculty (elected by Senate).” Accordingly, this relates to Article 7.6 (“Elections”) of the Senate Bylaws.

At the October 11, 2013 Senate, a motion was passed to “recommend to the Board of Governors a revision to Policy 3.1.2012.B, the Senior Academic Appointment Policy, to include all senior academic administrative appointments, regardless of title, from the level of Associate Dean.” This motion was prompted by the creation and appointment/filling of the AVPA position without conforming to the original/unamended Policy 3.1.2012.B. As adopted, the October 11, 2013 Senate minutes read as follows: “Senator d’Entremont responded by indicating that the appointment is for a five-year term and is not covered under the Board of Governors senior academic appointment policy.”

In response to the October 11, 2013 Senate motion, the Board passed Resolution 2014-06-08 that amends Policy 3.1.2012B to clarify that all Senior Academic Administrators are covered under the policy. The unamended policy in operation at the time of the appointment of the AVPA states that “the appointment of Senior Academic Administrative Officers shall be made on the recommendation of the President to the Board of Governors together with a written report of the Search Committee” (Section C. Basic Principles). Currently, the AVPA [was] listed as part of the “Senior Administration” (See: <http://www.nipissingu.ca/departments/presidents-office/Pages/Senior-Administration.aspx>); although this webpage is now not operational.

Because this is an area of jurisdictional overlay in the bicameral governance structure of Nipissing University, this discrepancy was and remains a relevant and rightful concern of Senate.

\*Bylaws recommends that Senate review the participation of Senate and elected faculty members in the process of recommending Senior Academic Administrators.

**2.1** The creation of the AVPA in relation to the Graduate Studies Council.

\*Bylaws requests that the GSC and Senate Executive clarify the recommended composition of the Council and, if deemed necessary, request an amendment to article 10.3(a).

**Review**

The Bylaws and Elections Subcommittee requests and recommends:

1. That the PPC review its membership needs and, if deemed necessary, recommend an amendment to Article 9.2(a-b).
2. That the RC address the discrepancy between article 10.2(a) and its Terms of Reference and, if deemed necessary, recommend an amendment to article 10.2(a).
3. The RC review its membership needs, the designation of the Chair and Vice-Chair in its Terms of Reference, and, if deemed necessary, recommend a change to Bylaw 10.2(a).
4. The GSC address the discrepancy between the article 10.3(a-b), its Terms of Reference document and its actual membership as well as the related lack of reference to the “PhD in Education” and, if deemed necessary, request an amendment of article 10.3(a-b).
5. That Senate reviews the participation of Senate and elected faculty members in the process of recommending Senior Academic Administrators.
6. The GSC and Senate Executive clarify the recommended composition of the Council and, if deemed necessary, request an amendment to article 10.3(a).

**Nipissing University**  
**Report of the**  
**PLANNING AND PRIORITIES COMMITTEE**  
**Friday, September 26, 2014**

The first meeting of the **Planning and Priorities Committee** was held on **Friday, September 26, 2014**. The following members were in attendance:

Harley d'Entremont, Chair

Liz Ashworth

Nancy Black

Greg Brown

Jamie Graham

Uldis Kundrats

Barb Olmstead

Aroha Page

Andrea Robinson

Matti Saari

Murat Tuncali

Rick Vanderlee

Roxana Vernescu

Regrets: G. Brophy, M. Couchie, G. Laronde, P. Nosko, C. Nosko, C. Richardson

Guests: Heather Brown, Sharon Rich, Sal Renshaw

Recording Secretary: Anne Bolger

PPC approved the documents to be sent out to external reviewers as part of Stage 2 for a BA in Human Rights and State Violence and a Bachelor of Engineering, pending minor revisions.

PPC approved the Stage 2 Proposal for a Joint Nipissing-Laurentian MA in Sociology. The proposed program has undergone external review.

PPC also approved a Stage 1 Major Modification: the addition of a two-year Thesis route option to the MSc Mathematics Program, and the addition of MATH 6100 Thesis in Mathematics.

PPC will recommend to Bylaws Committee that the Admissions & Enrolment Subcommittee be abolished

Respectfully submitted,

*Original signed by:*

Harley d'Entremont, PhD

Provost and Vice-President, Academic and Research

Chair, Planning and Priorities Committee

Motion 1: That the Report of the Planning and Priorities Committee dated September 26, 2014, be received.

Motion 2: That Senate grant approval of a Stage 2 proposal for a Joint MA in Sociology with Laurentian, as outlined in the attached document.

Motion 3: That Senate grant approval to progress to Stage 2 the addition of a 2-year Thesis option to the MSc Mathematics program, and approval of Math 6100 Thesis in Mathematics, as outlined in the attached documents.

**Stage II**  
**Laurentian/Nipissing M.A. in Sociology (Applied Social Research)**

**1. Program Rationale and Objectives**

Submitted to the Minister of Training, Colleges and Universities on December 20, 2013, the Nipissing University *Proposed Strategic Mandate Agreement* (p.1) outlines the following mandate statement for the future of the university:

*“Nipissing University is dedicated to engaging students by delivering education with an overall focus on excellent teaching and student-centred learning. The Nipissing classroom experience is complemented by experiential and inquiry-based learning, research and scholarly opportunities. In addition to its education mandate, as one of the largest employers in the region, Nipissing University also serves a primarily northern, regional and economic development purpose highlighted by its curriculum focus on the environment, health, administration, STEM, and the arts and culture of the north.”*

The proposed Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree will bring together a broad range of faculty expertise, teaching and research across the two campuses in a jointly offered graduate degree program that incorporates the fields of sociology, health studies and gerontology, anthropology and criminology, along with the new Nipissing CRC Chair in Life Course Transitions in Northern & Rural Communities, the resources of the Institute for Applied Social Research (IASR) and CRaNHR (Centre for Northern and Rural health Research), and a new and developing program with the local Nipissing First Nation in Indigenous archeology.

Offered both in English and in French (at the Laurentian campus), the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree will focus on the recruitment and training of graduate students from northern Ontario, and elsewhere in Canada and abroad, in the application of social theories and research methodologies to understanding and addressing the social problems and challenges of northern/rural communities, including First Nations and other Indigenous communities. With a planned flexible program delivery incorporating on-site classes, compressed format courses, distance delivery using lecture capture and other methodologies and electronic means of communication and interaction, the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree will bring together the very best in traditional graduate education with new electronic methodologies that will allow students on both campuses to benefit from the teaching and research expertise of fifteen (15) core graduate faculty members, and more than fifteen (18) associated graduate faculty.

It is expected that the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree will attract students with completed undergraduate degrees in sociology, anthropology, criminology, other social science disciplines such as gender studies, political science, social welfare, as well as other disciplines such as health studies, education, nursing, gerontology and Aboriginal studies.

Fostering the acquisition of academic knowledge and applied social research skills among graduate students, and representing a new focal point in northern Ontario for expertise in applied social research, the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree will be a key contributor in engaging and building the capacity of northern Ontario communities to identify, research and develop action plans to address social problems and challenges of growth and change.

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree is identified in the Nipissing University *Proposed Strategic Mandate Agreement* (p. 4) as “one of a select number of graduate programs in areas of research strength and relevance to its mission” that are targeted for development and implementation within the next five years. Building on the academic and research strengths of the fifteen core graduate faculty members across the two campuses, and a diverse portfolio of research funding including SSHRC, Population Studies and Research Center for Asia and Pacific (PSRC), ICES, Ontario Ministry of Community Safety and Correctional Services and Ontario Ministry of Health and Long-Term Care, Northeast LHIN, Canadian Water Network, CMHA, International Center for Research on Women (ICRW) and

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<sup>1</sup> Nipissing University Proposed Strategic Mandate Agreement (SMA), December 20, 2013.

a host of other governmental and social service agencies, the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree will be a dynamic new participant in graduate education at Nipissing, in northern Ontario, and beyond.

As a “*future area for strategic growth*” (SMA, Appendix A, p. 3), the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree is a shining example of the innovation in teaching and research, community engagement and regional development, educational leadership and partnership that remains the root strength of the university, and that which will lead it into the future.

## 2. Degree Structure

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree program of study will include two degree-completion options for students:

- (1) Two-year thesis program, designed for students who plan to undertake original empirical research in an area related to a specific social issue/policy, and who plan to continue on to doctoral studies, and
- (2) One-year major research paper, designed for students who want to conduct library-based research, reviews of literature and secondary analyses of data (e.g. census data) that focus on social issues and policy analysis, and who plan to seek employment opportunities possibly as policy research analysts/evaluators.

All students will have the option of completing a Practicum placement course to gain practical, applied research experience in a government, not-for profit groups, community agencies or private organizations.

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree program will have the following course completion structure, determined by (1) thesis or (2) major research paper.

<b>TWO YEAR- Thesis (6 terms 15 credits)</b>	<b>ONE YEAR- Major Research Paper (3 terms, 18 credits)</b>
<b>Required ‘Core’ courses</b>	<b>Required ‘Core’ Courses</b>
SOCI 5000 Thesis	SOCI 5005 Major Research Paper
SOCI 5106 (Theory and Research) (3cr)	SOCI 5106
SOCI 5216 (Research Design) (3cr)	SOCI 5216
SOCI 5217 (Quantitative Analysis) (3cr) <u>or</u> SOCI 5417 (Qualitative Analysis) (3cr)	SOCI 5217 or SOCI 5417
<b>Elective Courses</b>	<b>Elective Courses</b>
SOCI 4227/5227 Science, Technology & Env (3cr)	SOCI 4227/5227 Science, Technology & Env (3cr)
SOCI 4206/5206 Determinants of Pop. Change (3cr)	SOCI 4206/5206 Determinants of Pop. Change (3cr)
SOCI 4547/5547 Education and Inequality (3cr)	SOCI 4547/5547 Education and Inequality (3cr)
SOCI 5509 Special Topics One (3cr)	SOCI 5509 Special Topics One (3cr)
SOCI 5519 Special Topics Two (3cr)	SOCI 5519 Special Topics Two (3cr)
SOCI 5609 Directed Studies One (3cr)	SOCI 5609 Directed Studies One (3cr)
SOCI 5709 Directed Studies Two (3cr)	SOCI 5709 Directed Studies Two (3cr)
SOCI 5508 Thesis Practicum (optional) (6cr)	SOCI 5508 Thesis Practicum (optional) (6cr)

The credits SOCI 5000 (Thesis) and SOCI 5005 (Major Research Paper) designate the credit option in which the student is enrolled, and the level and type of supervision required of faculty over the course of the student’s MA program.

Four core (required) program courses SOCI 5106 Seminar on Theory and Research (3 cr.), SOCI 5216 Research Design (3 cr.), SOCI 5417 Qualitative Analysis (3 cr.) and SOCI 5217 Quantitative Analysis (3 cr.) will be taught on an annual basis at both the Laurentian and Nipissing university campuses. As needed, and depending on available resources at each campus, each of the core courses may be offered in a distance delivery/mixed delivery/compressed format between the two campuses.

Elective courses will be offered (some in an annual rotation), and will be drawn from three cross-coded graduate/undergraduate courses currently offered at each of the Nipissing/Laurentian campuses (at Nipissing, for example SOCI 4227/5227 Science, Technology and Environment, SOCI 4206/5206 Determinants of Population Change, SOCI 4547/5547 Education and Inequality), two special topics courses SOCI 5509 Special Topics One and SOCI 5519 Special

Topics Two, and two directed studies courses SOCI5609 Directed Studies One and SOCI5709 Directed Studies Two. Distance delivery/mixed delivery/compressed format methods will be used to promote a broad offering of elective options across the two campuses.

SOCI5508 Research Practicum will be offered as an elective, subject to faculty availability and interest. The practicum offers students an opportunity to gain practical, applied research experience relevant to their thesis or major research paper through a 192-hour placement with a government, not-for-profit or private agency. Practicum placements are arranged in consultation with the graduate program committee and the research supervisor.

### **3. Course Descriptions**

#### **SOCI 5000 E - MASTER'S THESIS (0 cr)**

This course allows students to undertake original empirical research in an area related to a specific social and policy issue. The thesis topic will be selected by the student in consultation with the graduate coordinator.

#### **SOCI 5005 E - MASTER'S MAJOR RESEARCH PAPER (0 cr)**

This course allows students to conduct library-based research, literature reviews and secondary analyses of data (e.g. census data), with a focus on social and policy issues. The topic of the major research paper will be selected by the student in consultation with the graduate coordinator.

#### **SOCI 5216 E – SEMINAR ON RESEARCH DESIGN (3 cr)**

This course guides students through the different steps of their research project: articulating a research problematic for investigation, developing a research plan, crafting a literature review and proposal, writing an ethics application and beginning preliminary fieldwork, with the goal of combining these into a final research report. Students learn how to define research problems in light of epistemological, theoretical and methodological questions.

#### **SOCI 5217 E - QUANTITATIVE ANALYSIS (3 cr)**

This course in multivariate statistics provides students with an up-to-date approach to the most common statistical methods that can be used when more than two variables are considered simultaneously. The emphasis is on linear statistical models. Students are expected to apply these statistical methods in their own research and use their knowledge to critically review that of others. Students without a statistics course beyond the introductory level will require the permission of the Department to register in this course.

#### **SOCI 5417 E - QUALITATIVE ANALYSIS (3 cr)**

This course provides an overview and critique of qualitative methods of inquiry. Questions of epistemology and ontology are taken up. Students engage with multiple ways of collecting and analyzing data including interviews, focus groups, visual methods and content analysis. Students are supported in using qualitative methods in their own research.

#### **SOCI 5106 E – SEMINAR ON THEORY AND RESEARCH (3 cr)**

This course provides an introduction to theoretical approaches as they relate to social research. Theories are evaluated in relation to the research topics of the students. There is a focus on questions of epistemology and ontology and on the inter-relationships between researcher, theory, and the social relations of sites being explored.

#### **SOCI 5508 E – RESEARCH PRACTICUM (6 cr)**

The practicum offers students an opportunity to gain practical, applied research experience relevant to their thesis or major research paper through a 192-hour placement with a government, not-for-profit or private agency. Practicum placements are arranged in consultation with the graduate program committee and the research supervisor.

#### **SOCI 5509 E - SPECIAL TOPICS IN SOCIAL AND POLICY ISSUES (3 cr)**

Applying a variety of methods, students conduct research on social and policy issues related to areas such as poverty, education or health in accordance with the areas of expertise of the professor.

#### **SOCI 5609 DIRECTED STUDIES (3 cr)**

In this individualized course, the student works on a theoretical or methodological issue related to his or her thesis or major research paper under the supervision of a professor (usually the supervisor, co-supervisor or a member of the evaluation committee). Students are expected to present their work at a departmental seminar.

#### 4. Learning Objectives

The learning objectives of the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree are to refine critical, scholarly and research skills by:

1. Fostering an academic atmosphere conducive to critical thinking and writing, independent thought, cooperative learning and empirical research;
2. Preparing students for doctoral and other professional degrees and occupations through the application of social theories, methodologies, and analytic skills;
3. Fostering critical, original and applied research by students and faculty, and to encourage the dissemination of knowledge.

The thesis option is intended to develop the skills necessary to pursue PhD level studies. Students are taught and supervised by faculty who possess specialist knowledge and skills and who are experts in their respective fields. Learning objectives are achieved through a combination of research, course work and independent study. Students learn to apply qualitative and quantitative methods of inquiry to investigating social and policy issues. They will be expected to develop a proposal for ethics review at the institutional level. They will participate in seminars and have the opportunity to present their work.

The major research paper option is intended to develop the skills necessary to conduct library-based research, literature reviews and secondary analyses of data (e.g. census data) focusing on social and policy issues. Students will develop a greater awareness of current social problems. They will also gain experience with the ethical issues that arise when conducting applied social research.

#### 5. Program Outcomes

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree is awarded to students who have demonstrated:

(1) Depth and Breadth of Knowledge

Students will, through the completion of coursework and independent reading and discussion and debate with faculty and fellow students, demonstrate a systemic understanding of the classical and contemporary theories of sociology and qualitative and quantitative methods of inquiry; and will demonstrate an awareness of current problems in the discipline of sociology and new developments and insights, including developments in related fields.

(2) Research and Scholarship

Students will demonstrate a conceptual understanding and methodological competence that

- a) Enables a working comprehension of how both qualitative and quantitative techniques of sociological research and inquiry are used to create and interpret knowledge in the discipline, and may be applied to investigating and evaluating social problems and issues;
- b) Enables a critical evaluation of current sociological research and advanced research and scholarship in the discipline and of the application of sociological theory and method to the investigation and evaluation of social problems and issues; and
- c) Enables a treatment of complex issues and judgements based on established sociological principles and techniques; and; on the basis of these competencies, has shown at least one of the following:
  - a. The development and support of a sustained argument in written form; or
  - b. Originality in the application of knowledge.

(3) Level of Application of Knowledge

Students will demonstrate competence in the research process by applying an existing body of knowledge in the critical analysis of a new question or a specific problem or issue in a new setting

(4) Professional Capacity/Autonomy

Students will demonstrate

- a) The qualities and transferable skills necessary for employment requiring the exercise of initiative and of personal responsibility and accountability; and decision-making in complex situations;
- b) The intellectual independence required for continuing professional development;

- c) The ethical behaviour consistent with academic integrity and the use of appropriate guidelines and procedures for responsible conduct of research; and,
- d) The ability to appreciate the broader implications of applying knowledge to particular contexts.

(5) Level of Communications Skills

Students will demonstrate the ability to communicate ideas, issues and conclusions clearly.

(6) Awareness of Limits of Knowledge

Students will demonstrate cognizance of the complexity of knowledge and of the potential contributions of other interpretations, methods and disciplines.

**6. Admission Requirements**

Students must have successfully completed an Honours BA with an average of “B” (70%) in all courses in the area of specialization. Students must have completed at least 9 credits of statistics and methods courses:

1. SOCI/STAT 2126E Introduction to Statistics or an equivalent introductory statistics course.
2. SOCI 2127E Research Methods and Data Analysis or equivalent.
3. At least 3 additional credits of quantitative or qualitative research methods.

Students with an Honours BA in a discipline other than Sociology who meet the relevant requirements are welcome to apply.

Students lacking the necessary prerequisites may be required to take one or more undergraduate courses in addition to the required graduate courses during their Master’s degree program. It is strongly recommended that students without a degree in Sociology enrol in or audit an undergraduate course in contemporary sociological theories.

Students with a 3-year degree may need to complete a full qualifying year before being considered. To enter a qualifying year, students should have at least an average of “B” (70%) in their major subject. Successful completion of courses during a qualifying year does not ensure automatic admission to a graduate program, nor does meeting the minimum requirements.

Applicants lacking the necessary prerequisites or a 3-year degree should contact the graduate studies program at their registration campus (Nipissing University School of Graduate Studies at [sgs@nipissingu.ca](mailto:sgs@nipissingu.ca) or the Faculty of Graduate Studies <http://laurentian.ca/faculty/graduate-studies> at Laurentian University) for complete details and procedures.

All applicants must provide three (3) letters of reference and a description of their research interests. Admission is subject to the availability of qualified supervisors.

**7. Program Demand and Projected Program Enrolment**

Historically, there has been consistent demand in the range of 7-15 students per year for the Laurentian M.A. in Sociology – Applied Social Research program. In 2011-12, 7 Nipissing students applied to the Laurentian M.A. in Sociology – Applied Social Research program, and as of January 2014, 7 Nipissing University graduating students have already stated plans to apply for September 2014 admission to the proposed program. This suggests that a steady state enrolment of 30 students across the two campuses after five years is not unreasonable.

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research will fill a demand for skilled graduate level researchers and analysts among government, not-for-profit and private sector organizations involved with policy planning and research. There are few Sociology programs in Canada specifically designated as applied research programs.

The goal in the first year would be to accept 7 students into the program at each of the two Universities. Projected growth in subsequent years, based on the two-year flow-through of thesis option students, and annual admissions to the major research paper option, is shown in Table 1 below.



**Table 1**  
**Projected Five Year Enrolment**  
**Nipissing/Laurentian M.A. in Sociology – Applied Social Research**

Option	Year 1		Year 2		Year 3		Year 4		Year 5	
	NU	LU	NU	LU	NU	LU	NU	LU	NU	LU
<b>Thesis – 2 year (ongoing/new admits)</b>	3	3	3/3	3/3	4/3	4/3	4/4	4/4	4/4	4/4
<b>Major Research Paper – 1 year</b>	4	4	4	4	6	6	6	6	7	7
<b>University Totals</b>	7	7	10	10	13	13	14	14	15	15
<b>Program Totals</b>	14		20		26		28		30	

## 8. Resource Requirements

### i. Faculty

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research criteria for “Core” graduate faculty/supervisor status include the following:

- Education – Must have a Ph.D.
- Employment – Must hold a tenured or tenure-track appointment at a minimum level of Assistant Professor; and,

Over a the initial five-year period following implementation of the Nipissing/Laurentian M.A. in Sociology – Applied Social Research the members of the “Core” Graduate faculty will demonstrate:

- Publications – an appropriate track record of peer reviewed research publications.
- Research Funding – an established program of research, including research funding from internal and/or external sources.
- Graduate Student Supervision – demonstrate timely completion whereby students complete the degree requirements for the thesis option in 24 months (to a maximum of 27 months), and for the major research paper option within 12 months. A maximum of two new students per year may be accepted by each supervisor.
- Conference Presentations – an average of one conference presentation per year.

There are currently eight (8) full-time faculty members in the Department of Sociology at Nipissing University who will be engaged in the graduate program, and seven (7) full-time faculty members in the Department of Sociology at Laurentian University who participate in the existing M.A. in Sociology: Applied Social Research program.

**Table 2**  
**Core/Supervising Program Faculty and Cross-Appointed Faculty**  
**Nipissing/Laurentian M.A. in Sociology – Applied Social Research**

<b>NIPISSING Faculty Members</b>	<b>M or F</b>	<b>Supervisory Privileges</b>
<b>Sociology</b>		
<b>Berger, E. Associate Professor</b>	<b>F</b>	<b>Masters</b>
<b>Brown, G. Associate Professor</b>	<b>M</b>	<b>Masters</b>
<b>Dzisah, J. Associate Professor</b>	<b>M</b>	<b>Masters</b>
<b>Dokis, C. Assistant Professor</b>	<b>F</b>	<b>Masters</b>
<b>Erfani, A. Associate Professor</b>	<b>M</b>	<b>Masters</b>
<b>Kelly, B. Assistant Professor</b>	<b>M</b>	<b>Masters</b>
<b>Smith, T. Associate Professor</b>	<b>M</b>	<b>Masters</b>
<b>Zarifa, D. Associate Professor</b>	<b>M</b>	<b>Masters</b>
<b>Criminology &amp; Criminal Justice</b>		

<b>Barker, J.</b>	<b>Associate Professor</b>	<b>F</b>	<b>Masters</b>
<b>Millar, P.</b>	<b>Assistant Professor</b>	<b>M</b>	<b>Masters</b>
<b>LAURENTIAN Faculty Members</b>			
<b>Sociology</b>			
<b>Bagaoui, R.</b>	<b>Associate Professor</b>	<b>M</b>	<b>Masters</b>
<b>Benoit, M.</b>	<b>Associate Professor</b>	<b>F</b>	<b>Masters</b>
<b>Dépelteau, F.</b>	<b>Associate Professor</b>	<b>M</b>	<b>Masters</b>
<b>Kinsman, G.</b>	<b>Full Professor</b>	<b>M</b>	<b>Masters</b>
<b>Laflamme, S.</b>	<b>Full Professor</b>	<b>M</b>	<b>Masters</b>
<b>Vardalos, M.</b>	<b>Associate Professor</b>	<b>F</b>	<b>Masters</b>
<b>Steedman, M.</b>	<b>Professor Emerita</b>	<b>F</b>	<b>Masters</b>
<b>Nangia, P.</b>	<b>Sessional Member</b>	<b>M</b>	<b>(graduate teaching)</b>
<b>New Hire in 2014-2015</b>			
<b>New Hire in 2015-2016</b>			

In addition, there are currently thirteen (13) adjunct/cross-appointed faculty members from a wide range of departments at Laurentian, Huntington and Algoma Universities, the Federal University of Sao Paulo and the University of Sudbury who are permitted to (co)supervise students, sit on graduate thesis committees, or occasionally deliver special topics courses in the program.

**Table 2 (cont'd)**  
**Core/Supervising Program Faculty and Cross-Appointed Faculty**  
**Nipissing/Laurentian M.A. in Sociology – Applied Social Research**

<b>LAURENTIAN Faculty Members</b>			
<b>Northern Development</b>			
<b>Roth, R.</b>	<b>Assistant Professor</b>	<b>M</b>	<b>Masters</b>
<b>Political Science</b>			
<b>Lacassagne, A.</b>	<b>Associate Professor</b>	<b>F</b>	<b>Masters</b>
<b>Nieguth, T.</b>	<b>Associate Professor</b>	<b>M</b>	<b>Masters</b>
<b>Peters, J.</b>	<b>Assistant Professor</b>	<b>M</b>	<b>Masters</b>
<b>Segsworth, R.</b>	<b>Professor</b>	<b>M</b>	<b>Masters</b>
<b>Economics</b>			
<b>Pastoret, C.</b>	<b>Associate Professor</b>	<b>F</b>	<b>Masters</b>
<b>Environmental Studies</b>			
<b>Bouchard, C.</b>	<b>Professor</b>	<b>M</b>	<b>Masters</b>
<b>Watelet, A.</b>	<b>Assistant Professor</b>	<b>F</b>	<b>Masters</b>
<b>Social Work</b>			
<b>Boudreau, F.</b>	<b>Associate Professor</b>	<b>M</b>	<b>Masters</b>
<b>Nursing</b>			
<b>Montgomery, P.</b>	<b>Associate Professor</b>	<b>F</b>	<b>Masters</b>
<b>THORNELOE Faculty Members</b>			
<b>Women's Studies</b>			
<b>Johnson, J.</b>	<b>Assistant Professor</b>	<b>F</b>	<b>Masters</b>
<b>ALGOMA Faculty Members</b>			
<b>Sociology</b>			
<b>Clarke, J.</b>	<b>Assistant Professor</b>	<b>F</b>	<b>Masters (co-sup. only)</b>
<b>Woodman, D.</b>	<b>Assistant Professor</b>	<b>F</b>	<b>Masters (co-sup. only)</b>
<b>Federal University of Sao Paulo</b>			
<b>Sociology</b>			
<b>Landini, T.S.</b>	<b>Associate Professor</b>	<b>F</b>	<b>Masters (co-sup. only)</b>

At Nipissing University, the projected new course teaching load and faculty resource requirements, in excess of current undergraduate requirements, are shown in Table 3 below.

**Table 3**  
**New Course Teaching Load and Faculty Resource Requirements**  
**Five Year Projection Following Implementation**  
**Nipissing/Laurentian M.A. in Sociology – Applied Social Research**

Course Load/Faculty Resource Requirement	Year 1	Year 2	Year 3	Year 4	Year 5
<b>Faculty Supervision Credits</b>					
SOCI 5000 (Thesis)	3 X 3cr. release	6 X 3 cr. release	7 X 3cr. release	8 X 3cr. release	8 X 3cr. release
SOCI 5005 (Major Research Paper)	4 X 3cr. release	4 X 3cr. release	6 X 3cr. release	6 X 3cr. release	7 X 3cr. release
SOCI 5508 (Research Practicum)	1 X 3cr. release	2 X 3cr. release	2 X 3cr. release	3 X 3cr. release	3 X 3cr. release
SOCI 5609 (Directed Studies)	1 X 3cr. release	2 X 3cr. release	2 X 3cr. release	3 X 3cr. release	3 X 3cr. release
Total Supervision Credits	27	42	51	60	60
Total Course Load Teaching Credit Equivalent <sup>2</sup>	2 (6 cr)	3 (9 cr.)	3 (9 cr.)	4 (12 cr.)	4 (12 cr.)
<b>Course Load Teaching Credit Hours</b>					
SOCI 5106 (Theory & Research)	1 X 3 cr. load	1 X 3 cr. load	1 X 3 cr. load	1 X 3 cr. load	1 X 3 cr. load
SOCI 5216 (Research Design)	1 X 3cr. load	1 X 3cr. load	1 X 3cr. load	1 X 3cr. load	1 X 3cr. load
SOCI 5217 (Quantitative Analysis) <sup>3</sup>	1 X 3cr. load	-	1 X 3 cr. load	-	1 X 3 cr. load
Total Course Load Teaching Credits	3 (9 cr.)	2 (6 cr.)	3 (9 cr.)	2 (6 cr.)	3 (9 cr.)
<b>Total Credit Hours/</b>	15 cr.	15 cr.	18 cr.	18 cr.	21 cr.
<b>Faculty FTE</b>	1	1	1.2	1.2	1.4

<sup>2</sup> Based on one Nipissing University – Faculty CBA, 2012-2015 formulae.

<sup>3</sup> Offered every other year in rotation with SOCI 5417 (Qualitative Analysis) at Laurentian University campus.

Based on current undergraduate enrolments and faculty complements in both the Department of Sociology (including both sociology and anthropology programs) and the School of Criminology and Criminal Justice, along with the new Nipissing CRC Chair in Life Course Transitions in Northern & Rural Communities position, and given the joint delivery and overall large faculty complement of the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree, no new faculty positions in sociology at Nipissing University will be required in the first five years of the operation of the graduate program. The projected total course credit hours/Faculty FTE equivalent requirements can be accommodated within the current sociology program.

*ii. Instructors (lab, language, other)*

None.

*iii. Support Staff*

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research program will fall under the School of Graduate Studies. As such, the program will have a graduate studies coordinator who will be responsible for overseeing the administrative aspects of the program (e.g., coordinating review of applications, overseeing allocation of research/teaching assistantships, coordinating scholarships and bursaries, monitoring student time to completion and student academic advising, and representing the program on the Graduate Studies Council).

*iv. Library*

Library Evaluation for Program Proposal

<b>Program:</b>	M.A. Sociology – Applied Social Research
<b>Department:</b>	Sociology
<b>Faculty:</b>	Arts and Science
<b>Institution:</b>	Nipissing University
<b>Librarian:</b>	Laura Sinclair
<b>Date:</b>	January 28, 2014

Introduction

The Library is a shared service between Canadore College and Nipissing University and serves a total of seven campuses. Most of the collection and staff are housed in the Harris Learning Library located at the North Bay College Drive Campus. There is a branch at Canadore's Commerce Court Campus and also collections in three partner public libraries: the Brantford Public Library, the Bracebridge Public Library and the Parry Sound Public Library. There is also a strong partnership with the local public libraries via PALS (Public and Academic Libraries Sharing) which allows for reciprocal borrowing.

The Library website is accessible at <http://www.eclibrary.ca/library/index.php>

Section 1: Services & Spaces

The Library provides many services for students, staff and faculty of both Canadore College and Nipissing University. The E-Resources (online journals and other databases) and Catalogue are accessible through the Library website both on and off campus, 24 hours a day, 7 days a week, enabling students, faculty, and staff to perform research outside of the Library building hours of opening. In addition to borrowing from the Library collections, students, staff and faculty can make use of materials on Reserve or request resources through Interlibrary Loan.

The Harris Learning Library on the North Bay campus provides several different types of space including bookable group study rooms, a silent study area, and adaptive technology rooms for learners identified with special needs. During operational hours, the Library provides wireless access, computers for student use (desktops and laptops), as well as printing, photocopying and audio-visual preview facilities.

The Library provides services to distance education students and faculty from the Harris Learning Library in North Bay. Online resources, including the vast majority of the Library's journal subscriptions, as well as e-

books can be accessed through the Library website. Print books, audiovisual materials, and other physical resources are shipped via courier (at no cost to the user) to students and faculty living outside the North Bay area. Reference assistance is available through email or a toll-free telephone number.

## **Section 2: Collections**

The Library collection includes print and electronic books, films and other audiovisual materials, kits, and journals in both print and online formats. Liaison Librarians work with Faculty to select resources to be added to the collection to support coursework and research activities.

The Library is a member of several provincial and national consortia, providing group purchasing opportunities for databases and other resources.

- The Library is active in Ontario's college consortium, Ontario College Library Service (OCLS), which facilitates consortial purchasing of databases and collaboration on further initiatives.
- Nationally, the Library is a member of CRKN (Canadian Research Knowledge Network), which negotiates consortial database purchases on behalf of Canadian universities. CRKN invests in large-scale content acquisition and licensing to support research and development in Canada's universities.
- The Library is also a member of OCUL (the Ontario Council of University Libraries). OCUL is active in negotiating database purchases for all Ontario universities, managing interlibrary loans, providing access to data through Odesi and Scholars Geoportol, and the web-based bibliographic citation manager RefWorks. Additionally, with the Scholars Portal initiative, the content of many databases is being centrally loaded in Ontario, ensuring long-term access.
- The Library is a Selective Depository Library for the Government of Canada and the Government of Ontario as well as being a member of Statistics Canada's Data Liberation Initiative (DLI). For an annual subscription fee, DLI offers unlimited access to a range of Statistics Canada microdata and geographic files.
- The Library participates in the Canadian Universities Reciprocal Borrowing Agreement and Ontario Colleges Reciprocal Borrowing Agreement allowing for in-person borrowing of material.

## **Section 3: Information Literacy Instruction**

The Information Desk is staffed whenever the Harris Learning Library is open, and provides reference service in person as well as via email and phone, which includes a toll-free line for distance students. Research appointments with Information Desk staff are also available.

There is a strong information literacy program in place. Information Desk staff provide instruction and support to enable faculty to incorporate information literacy concepts into the curriculum. Session topics for first year students may include an introduction to various types of information, exposure to databases and search strategies, as well as the evaluation of information. Sessions for upper year and graduate level students may include in-depth coverage of specialized databases, advanced searching techniques, and tools such as citation management software

**Collections Snapshot (Source: CARL statistics)****Library Collections**

	<b>2011-12</b>	<b>2010-11</b>	<b>2009-10</b>	<b>2008-09</b>
Number of Print Volumes	199,979	197,756	201,067	200,761
Print Books	184,981	183,312	187,451	186,471
Electronic Books	344,673	317,829	284,525	275,676
Print Journals	318	236	356	369
Electronic Journals	49,820	44,564	39,048	36,271

**Expenditures**

	<b>2011-12</b>	<b>2010-11</b>	<b>2009-10</b>	<b>2008-09</b>
Print books	\$74,646	\$91,354	\$59,224	\$150,819
Electronic books	\$47,159	\$46,598	\$27,651	\$27,651
One-off serials	\$46,449	\$52,633	\$50,349	\$52,057
Electronic Serials	\$448,799	\$391,950	\$429,063	\$362,406
Total Budget	\$789,621	\$733,404	\$676,725	\$769,109

**Use of Collections**

	<b>2011-12</b>	<b>2010-11</b>	<b>2009-10</b>	<b>2008-09</b>
Circulation	31,727	38,634	46,942	56,942
Reserves Circulation	3,982	3,993	2,802	3,616
COUNTER full-text journal requests (calendar year)	n/a	194,462	168,939	n/a
Library web site visits (calendar year)	221,408	195,829	176,310	n/a

**Use of other Collections**

	<b>2011-12</b>	<b>2010-11</b>	<b>2009-10</b>	<b>2008-09</b>
Books borrowed via Interlibrary Loan	1604	2,024	2,670	3,229
Article photocopies via Interlibrary Loan	311	223	267	419

**Library Instruction, Services and Spaces  
Teaching and Learning Snapshot**

	<b>2011-12</b>	<b>2010-11</b>	<b>2009-10</b>	<b>2008-09</b>
# reference questions	14,212	10,965	10,756	11,029
<b>Instruction</b>				
# instruction sessions	197	222	187	173
# students participating	3,940	5,550	4,675	4,325

**Spaces for learning and research (Harris Learning Library)**

	<b>2011-12</b>	<b>2010-11</b>	<b>2009-10</b>
Seating capacity	533	250	250
# of Group Rooms	12	0	0
# individual study rooms	7	3	3
Turnstile count (sample day)	1638	2,380	2,270

\*Note these are different years than the other tables to show the change in the new building.

**Services**

Fall and Winter Building Hours	8:00am to 10:30pm (Mon-Thurs) 8:00am to 6 p.m. (Fri) 10:00am to 5:30pm (Sat, Sun)
Information Desk Hours	Same as building hours
Wireless	√
24/7 access via proxy	√
URL Resolver	√
Integrated one-card	√
Free Interlibrary Loan	√
Photocopiers	√
Computers	√
B&W and Colour Printing	√
Audiovisual viewing	√

**External Rankings (Source: Maclean's)**

	<b>2012</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Holdings per student	16	16	17	17
Acquisitions	19	19	22	22
Expenses	18	18	20	17
Total schools in category	19	19	22	21



Appendix 1: Library SnapshotLibrary Resources for Master of Arts in Sociology Program

<b>Item Type</b>	<b>Evaluation</b>
<b>Print Books</b>	<p>The Library currently acquires titles published on a range of topics in the area of Sociology; consequently, there is already a moderate collection of monographs, primarily at the undergraduate level, in a mix of print and online formats. Titles specifically related to Applied Social Research have not been a focus of acquisition; therefore a collection of core titles would need to be purchased, in consultation with faculty, to support required courses in the program, as well as provide current supplementary information at the graduate level.</p> <p>There are some related titles in the collection in areas such as psychology, health and education; however, the acquisition of more specialized titles will be necessary, focusing particularly on the areas of methodology and social research in the Canadian context.</p> <p>If courses will be offered online or at multiple campuses, then ebooks would be the preferred format. Academic titles in ebook format tend to be more expensive than their print counterparts, so allowance would need to be made for this in budgetary decisions.</p> <p>To purchase a solid core of these titles would require a start-up cost of \$5000. An increase to the existing collection base budget of \$2500/year would be necessary to acquire new titles in the field and keep the collection current.</p>
<b>Additional Physical Materials</b>	<p>Films or other audiovisual materials may be required, depending on course curricula and instructor methodology. Currently, the Library collection has a small collection of films in this subject area, and it is dated. Faculty teaching in the program would work with the Liaison Librarian to select any additional physical resources required, and these would be considered individually as the budget allowed. The program will be offered at multiple campuses, making streamed video resources the preferred format, and it is important to note that these materials tend to be subscription-based (i.e. ongoing cost) rather than one time purchases.</p>
<b>E-Resources</b>	<p>Currently, the Library E-Resources holdings for Sociology are fairly substantial, and include databases such as Sociological Abstracts, Social Services Abstracts and Social Sciences Citation Index. In addition, this topic could be supported by other subject-specific databases (PsycInfo, Education Resource Information Center (ERIC), MedLine etc.), as well as some multidisciplinary resources. Maintaining access to the current suite of databases is essential.</p>
<b>Additional Online Materials</b>	
<b>Other Relevant Material</b>	<p>The Liaison Librarian will work with individual Faculty members to determine if there are other specialized resources required to support the curriculum.</p>

<b>Start-up Costs:</b>	<b>\$5000</b>
<b>Ongoing Costs:</b>	<b>\$2500</b>

**Additional Comments:**

Please note that all amounts are provided on a scale of magnitude basis, rather than as exact pricing.

*v. Space*

Graduate classes will take place in existing seminar classrooms on campus. Graduate students will have access to research software programs online through Nipissing University (e.g., SPSS), the on-campus student computer labs and in the study space allocated for graduate students.

*vi. Equipment*

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research program will make use of the expertise and technology available through the Nipissing University's electronic learning resources and staff, and comparable resources at the Laurentian University campus, to design and deliver compressed format courses, distance delivery using lecture capture and other methodologies, and other electronic means of communication and interaction that will allow students on both campuses to benefit



**12. Expectations in Terms of Additional Capital or Operating Funding**

At present, the external research funding secured by the faculty in the Department of Sociology and the School of Criminology & Criminal Justice totals \$3,419,349, with \$239,536 held and being administered through Nipissing University. A core component of the funding will go towards supporting the training of highly qualified personnel.

**13. Relationship to Other Programs and Institutions (service courses, partners, etc.)**

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research program is a joint graduate degree offered by both Nipissing University and Laurentian University, and incorporates strong connections between fifteen core faculty members and eighteen cross-appointed faculty members in a broad range of social science disciplines, including sociology, anthropology and criminology and criminal justice. With strong connections to the applied research institutes IASR at Nipissing and CRaNHR at Laurentian, the The Nipissing/Laurentian M.A. in Sociology – Applied Social Research program is strongly connected through its research activities to a host of community partners, including the Sudbury and North Bay regional hospitals, the Northeastern Ontario LHIN, the OPP, Sudbury, West Nipissing and North Bay police services, the Ontario Ministry of Health and Long-Term Care and Ministry of Community Safety and Correctional Services, Correctional Service of Canada, etc.).

In addition, the Nipissing/Laurentian M.A. in Sociology – Applied Social Research program is connected to other academic institutions through the professional activities of its faculty, including adjunct appointments and graduate committee memberships at various universities.

**14. Relationship to Existing Programs in the Faculty (synergies)**

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research program will draw on faculty in sociology and anthropology to form the nucleus of the core supervisory graduate faculty at Nipissing University, and will invite colleagues from across the Faculty of Arts and Science to serve as graduate committee members. It is anticipated the the Nipissing/Laurentian M.A. in Sociology – Applied Social Research program will have a broad appeal to students from other Arts and Science disciplines, such as gender studies, religions and cultures, political science, human geography and Native Studies, as well as others.

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research program will continue to reflect the collaborative, cross-disciplinary nature of the research interests of faculty members in sociology and anthropology.

**15. Relationship to other programs in other faculties, opportunities for collaboration, transformation and leveraging resources****16. Similar programs offered at other post secondary institutions, the differences between these programs and the proposed program, and the rationale for the introduction of an additional program if a similar one is offered in the region.**

With the exception of the University of Windsor's M.A. in Social Data Analysis, there are no other programs in Ontario, or for that matter, Canada, that offer the M.A. in Sociology – Applied Social Research. Departments of Sociology at the University of Guelph, Waterloo, Windsor, Western , Toronto and Brock do combine sociology and criminology academic disciplines, and occasionally anthropology as well (Guelph, Windsor).

There are no similar graduate programs in northern Ontario.

<b>Post-Secondary Institution</b>	<b>Faculty</b>	<b>Program Name</b>
Carleton	Faculty of Arts and Social Sciences	Sociology
Brock	Faculty of Social Science	Critical Sociology
Guelph	College of Social and Applied Human Sciences	Sociology
Lakehead	Social Sciences and Humanities	Sociology

Laurier	Faculty of Arts	Sociology
McMaster	Faculty of Social Sciences	Sociology
Ottawa	Faculty of Social Sciences	Sociology
Queens	Faculty of Arts and Science	Sociology
Toronto	Faculty of Arts and Science	Sociology
Waterloo	Faculty of Arts	Sociology
Windsor	Faculty of Arts and Social Sciences	Sociology M.A. in Social Data Analysis
Western	Faculty of Social Sciences	Sociology
York	Faculty of Liberal Arts and Professional Studies	Sociology

**17. Collaboration potential with other institutions/community colleges, etc.**

M.A. Faculty (Nipissing)	Collaborations
Gregory Brown	Adjunct Professor, Department of Health Studies and Gerontology, University of Waterloo; Department of Sociology and Legal Studies, University of Waterloo; Department of Sociology, Laurentian University; RCMP; OPP; Defense Research and Development Canada; interRAI; North Bay Regional Health Centre; North Bay Police Service
Trevor Smith	Adjunct Professor, Department of Health Studies and Gerontology, University of Waterloo; Department of Sociology, Laurentian University; Fellow, interRAI
Amir Erfani	Adjunct Professor, Department of Reproductive Health, Population Studies and Research Institute for Asia and the Pacific (PSRI), Tehran, Iran; Research Associate, Department of Reproductive Health, Population Studies and Research Institute for Asia and the Pacific (PSRI), Tehran, Iran
James Dzisah	Adjunct Professor, Department of Sociology, Laurentian University
David Zarifa	Department of Sociology, Laurentian University, Adjunct Professor; Department of Sociology and Anthropology, University of Guelph, Special Graduate Faculty; Department of Sociology and Anthropology, Carleton University, Adjunct Research Professor; Research Collaborations with Department of Sociology and Anthropology, University of Guelph, Department of Sociology, McMaster University Department of Sociology, Western University
Carly Dokis	Adjunct Professor, Department of Sociology, Laurentian University; research collaborator Canadian Water Network
Ben Kelly	Adjunct Professor, Department of Sociology, Laurentian University; research collaborator Canadian Water Network
Ellie Berger	Adjunct Professor, Department of Sociology, Laurentian University; research collaborations with McMaster University; Population Change and Lifecourse Strategic Knowledge Cluster
Jane Barker	Adjunct Professor, Department of Sociology, Laurentian University
Paul Millar	Adjunct Professor, Department of Sociology, Laurentian University

**18. Evidence of consultation with other departments, faculties**

<b>Faculty, Dept, School</b>	<b>Person &amp; Title</b>	<b>Dates Contacted</b>	<b>Form of contact (written preferred)</b>	<b>Response Received and Attached</b>
Faculty of Social Sciences and Humanities, Laurentian University	Dr. Elizabeth Dawes (Dean)	ongoing	Written document	Laurentian University's Institutional Quality Assurance Processes (IQAP) - TEMPLATE for NEW PROGRAM and MAJOR MODIFICATIONS TO EXISTING PROGRAMS (attached)
Faculty of Applied and Professional Studies, Nipissing University	Dr. Rick Vanderlee (Dean)	January 2014	Letter of Support	Submitted

**19. Evidence of student demand: (Petitions, surveys, provincial data, etc.) [Please provide concrete evidence that there will be a demand from students.]**

Historically, there has been consistent demand in the range of 7-15 students per year for the Laurentian M.A. in Sociology – Applied Social Research program. In 2011-12, 7 Nipissing students applied to the Laurentian M.A. in Sociology – Applied Social Research program, and as of January 2014, 7 Nipissing University graduating students have already stated plans to apply for September 2014 admission to the proposed program. This suggests that a steady state enrolment of 30 students across the two campuses after five years is not unreasonable.

**20. Priority within the University's program structure and development. Relationship to Faculty plans and objectives**

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree is identified in the Nipissing University *Proposed Strategic Mandate Agreement* (p. 4) as “one of a select number of graduate programs in areas of research strength and relevance to its mission” that are targeted for development and implementation within the next five years. Building on the academic and research strengths of the fifteen core graduate faculty members across the two campuses, and a diverse portfolio of research funding including SSHRC, Population Studies and Research Center for Asia and Pacific (PSRC), ICES, Ontario Ministry of Community Safety and Correctional Services and Ontario Ministry of Health and Long-Term Care, Northeast LHIN, Canadian Water Network, CMHA, International Center for Research on Women (ICRW) and a host of other governmental and social service agencies, the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree will be a dynamic new participant in graduate education at Nipissing, in northern Ontario, and beyond.

As a “future area for strategic growth” (SMA, Appendix A, p. 3), the Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree is a shining example of the innovation in teaching and research, community engagement and regional development, educational leadership and partnership that remains the root strength of the university, and that which will lead it into the future.

**21. Source of students (e.g. existing programs within the university, net new additions to student body, change in demographic)**

It is anticipated that, at least in the first few years of the program, students will be recruited primarily from undergraduate programs in sociology at both Nipissing and Laurentian University, from anthropology and criminology & criminal justice programs at Nipissing, and from other social sciences programs at the two partner university, owing to the generally broad appeal of M.A. Sociology programs. At the same time, already one student from the University of Guelph has visited the Nipissing campus to meet with faculty regarding admission to the Nipissing/Laurentian M.A. in Sociology – Applied Social Research program, and four other students who plan on attending graduate school in 2014.15 have included the Laurentian program as a graduate program choice (because the Nipissing choice does not yet exist). The Nipissing/Laurentian M.A. in Sociology – Applied Social Research degree will be the only graduate degree in sociology in northeastern Ontario.

Revised December 12 2013

**22. Consultation with employers and/or professional organizations and research as to the current and anticipated job market and employment potential**

The Nipissing/Laurentian M.A. in Sociology – Applied Social Research program will have strong links to the local community and to professional organizations and potential employers through the conduct of applied research projects and practicums involving faculty members and graduate students. From the North Bay and West Nipissing police services, the RCMP, North Bay and Sudbury Regional Health Centres, Population Studies and Research Center for Asia and Pacific (PSRC), International Center for Research on Women, interRAI, Canadian Water Network, Ontario and Canadian government ministries and other organizations, students in the graduate program will have unique opportunities to gain valuable research-related employment skills, and invaluable employment contacts.

**New Graduate Course Template (2013)****A) Descriptive Data: Only fields applicable to your program need be filled out.**

Course Code	<b>6100 (tentative)</b>
Course Title	Thesis in Mathematics
Short Title (maximum 29 characters)	Thesis in Mathematics
Course Pre-requisite	MATH5066; MATH 5086
Anti-requisite	MATH 6001
Total Hours	36 hours      72 hours      Other <b>288 (full-year)</b>
Delivery Method (Lecture, Individualized Study etc.)	Individualized study
Course Credits	3 credits      6 credits      Other <b>12</b>
Course Description (Restricted to 50-75 words, present tense and active voice)	In the thesis option for the M.Sc. in Mathematics, completion of a written thesis is required. The thesis must involve primary research and make a significant contribution to scholarship. The thesis must be approved by the Supervisory Committee, and defended in an oral examination. The supervision and examination of all graduate theses at Nipissing University are administered by the School of Graduate Studies. MATH6100 is a full-year, twelve credit-hour course.
Course Grouping or Stream	Does this course belong to a Group or Stream? No <b>X</b> Yes (Please specify)
Program Implications (ex. Students may only attempt this course once. Failure of this course will require the students to withdraw from the program.)	Does this course have program implications? No      Yes <b>X</b> Students enrolled in the M.Sc. Mathematics program, Thesis option, must successfully complete MATH 6100.
Course Expectations and degree learning outcomes	See attached.
Additional Resources	Does this course require additional physical resources, (i.e. special classroom space, purchase of a new microscope etc.)? No <b>X</b> Yes (Please specify)
	Does this course require additional human resources (i.e. hiring a new lab instructor, placement coordinator etc.)? No <b>X</b> Yes (Please specify)
	Please have a Subject Librarian complete this section: Does this course require additional library acquisitions? No      Yes (Please specify) Date:      Signature:

**B) Comparative Data**

<b>University</b>	<b>Equivalent Course Title</b>	<b>Non-Equivalent but 50% or More Overlap</b>
Algoma		
Brock		
Carleton		
Guelph		
Lakehead		
Laurentian		
McMaster		
OCAD		
Ottawa		
Queen's		
RMC		
Ryerson		
Toronto		
Trent		
UOIT		
Waterloo		
Western		
Wilfred Laurier		
Windsor		
York		



**COURSE EXPECTATIONS (PROPOSED)****COURSE CODE: MATH 6100 COURSE NAME: THESIS IN MATHEMATICS****FACULTY MEMBER: ALL****☒2014-15      ☒2015-16****CALENDAR COURSE DESCRIPTION:**

In the thesis option for the M.Sc. in Mathematics, completion of a written thesis is required. The thesis must involve primary research and make a significant contribution to scholarship. The thesis must be approved by the Supervisory Committee, and defended in an oral examination. The supervision and examination of all graduate theses at Nipissing University are administered by the School of Graduate Studies. MATH 6100 is a full-year, twelve credit-hour course.

**CREDIT HOURS: 12****EXPECTATIONS:****By the end of the course students should be able to:**

1. perform original research and add to the scholarship in a specific pure or applied area in mathematics.
2. navigate and filter the literature in a specific field.
3. independently study and learn about topics ancillary to the chosen research topic to gain a deeper understanding of that topic.
4. discuss current research, both in the literature and one's own, in professional forums.
5. propose and provide insight into directions in which the research could be taken further.
6. produce results and insights into a specific mathematical field, and to prepare these results and insights for publication and dissemination to the wider mathematical community.
7. communicate effectively with researchers, professionals, and practitioners outside one's specific area in mathematics, and with those in other, disparate areas of mathematics.
8. write a multi-chapter thesis paper that presents original work in an important area of mathematics.

**OUTCOMES:****Successful graduates of this course will demonstrate:**

1. an ability to independently research and analyze state-of-the-art and leading-edge contributions in mathematics.
2. an understanding of what is involved in peer-reviewed scientific publishing and the review process.
3. expertise in locating and selecting relevant literature to support the chosen research topic.
4. an ability to convey advanced mathematical ideas, both orally and in writing.
5. an ability to present one's own original research in scientific forums.
6. an understanding of advanced mathematical topics, including some which are not directly related to the chosen thesis topic (i.e. a well-rounded understanding of the mathematical sciences).
7. an ability to integrate disparate mathematical and computational concepts, and to discuss the connections between them.
8. a pedagogical ability to convey complex mathematical ideas to peers that are not specialists in the chosen research area.
9. proficiency in writing high quality scientific papers.
10. an ability to communicate and work in multi- and inter-disciplinary environments and with colleagues outside of the student's specific, chosen area of mathematics.

## Letter of Intent for a Two-Year Thesis Option for the M.Sc. in Mathematics at Nipissing University

Department of Computer Science and Mathematics

April 22, 2014

Revised: June 23, 2014

This Letter of Intent (LOI) is submitted for approval by the Arts and Science Faculty Council and the Graduate Council prior to presentation to the Planning and Priorities Committee (PPC). The LOI provides a high-level overview of, description of, and justification for a major modification in the M.Sc. in Mathematics program at Nipissing University. Specifically, **the Department proposes to introduce a thesis option, thereby offering a two-year alternative to the existing Major Research Paper (MRP) option already in place.** The thesis option will be implemented by the addition of a 12-credit hour thesis course, substituting for the present six-hour MRP course, and the reduction of two (2) regular (classroom-delivered) courses from the program, for a total of 24 hours (12 thesis hours + 4×3 course hours). One existing course that will not be taken with the thesis option is MATH 6101/6201 (Selected Topics in Pure Mathematics and Computational Mathematics, respectively), which is currently taught as preparation for MRP work. No additional graduate courses need to be added to the academic calendar. Refer to the MRP-vs.-Thesis comparison for a summary of the differences in the two options, in terms of coursework. Per the Nipissing University Institutional Quality Assurance Process (May 21, 2013), Part 3A, #9, the introduction of a thesis option is considered to be a major modification to an existing program.

This LOI will briefly address the concerns associated with major modifications to existing programs, as required for Stage I approval.

**1. Fit of the program with the University's and Faculty's planning priorities as specified above under Evaluation Criteria 1-10 (Appendix I) and the Senate approved criteria (Appendix J)**

As this LOI describes a proposal for a major change to an existing program, and is not considered to be a new program (of which Appendix I [Evaluation Criteria for New Program Approvals] addresses), points in Appendix J (Nipissing University Criteria for Program Development) are addressed here.

A. Academic Fit and Relevance

The proposed thesis option directly fits the mix of Nipissing University's programs. The University is developing distinct strengths in graduate studies (e.g. the recent approval of the M.Sc. in Environmental Studies, which already has a thesis option). The addition of a two-year M.Sc. in Mathematics directly complements the University's research mission by facilitating more and higher quality student research in the mathematical sciences. The thesis option would complement the already-strong teaching and profile in mathematics (with its existing MRP M.Sc. program) and computer science.

B. Interdisciplinarity

Mathematics and computational science are unique in their interdisciplinary scope, and consequently the proposed thesis program will involve interdisciplinary approaches. Faculty members work with topics and practitioners in a wide variety of disciplines, and exposure to this work will greatly benefit students. Some faculty members also have existing collaborations with the Faculty of Applied and Professional Studies and the Faculty of Education, and students will have the opportunity to become involved in these inter-Faculty research projects.

C. Critical Inquiry Initiative (CII)

*Internationalisation:* Although the proposed thesis option does not directly provide an international experience, students may be exposed to faculty research collaborators who are based outside of Canada. Furthermore, students may potentially interact with international colleagues at conferences and scientific meetings. The proposed program does have a direct appeal to international students who find immigration issues easier for two-year programs (as opposed to one-year programs).

*Service/Experiential Learning:* Although there is no formal service learning component, students in a two-year thesis (as opposed to a one-year MRP) option are expected to have more opportunities to lecture and teach (e.g. at conferences, seminars, and colloquia) and to interact with a greater variety of collaborators than would be possible with an MRP program. Depending upon

the specific topic chosen, the wider research scope of a thesis option would also naturally present more opportunities for experiential learning.

*Research Opportunities:* The proposal is clearly characterized by a formal research component. Students must complete innovative and original research work as part of their thesis requirement. The longer time frame required to complete the degree also gives students greater opportunities for developing breadth and depth in a topic.

#### D. External Partnerships

Although the proposed thesis option has not been developed in partnership with external groups, faculty members maintain many relationships and collaborations with external institutions, as described below. Students directly benefit from these partnerships through interaction with a wide variety of people from different disciplines, as opposed to a narrower one-supervisor-per-student model. Such interactions also enhance students' career horizons prospects.

#### E. Access for First Generation Students

As this LOI proposes a major change to an existing graduate program, it is presumed that applicants have already been awarded undergraduate degrees. Therefore, first generation criteria are not applicable in this case. However, there are no obstacles or impediments for first generation students achieving the undergraduate degree to apply to, be accepted to, and succeed in M.Sc. programs.

#### F. University-College Collaboration

The proposed thesis option does not involve formal collaboration between Nipissing University and a college. However, the presence of a thesis option may make Nipissing University a more attractive choice for students graduating from college. In addition, student research projects may involve faculty from colleges.

#### G. Graduate Studies

The proposal is for a major change to an existing graduate program (M.Sc. in Mathematics). Mathematics, both pure and applied/computational, is an established area of strength at the University, with faculty members excelling in publishing, external funding, teaching, and professional service.

#### H. Teaching and Learning Excellence

The proposed program will build on the teaching strengths of the Department. Faculty members already are at the leading-edge concerning mathematics pedagogy, and will continue to develop and adopt innovative teaching methods at both the undergraduate and graduate levels. Clear learning outcomes for existing graduate classes already exist, and outcomes are also presented for the proposed thesis course.

#### I. Regional Need and Relevance

Although Laurentian University in Sudbury ON offers an M.Sc. program in Computational Science (which is delivered by faculty from across all departments), there is no specific M.Sc. program in Mathematics at that institution. Therefore, the Nipissing M.Sc. thesis option would fulfil a regional need. Furthermore, in contradistinction to the Laurentian Computational Science program, the applied/computational option in the proposed program still requires a firm grounding in theoretical mathematics, and therefore the thesis would be more heavily associated with a mathematical discipline.

Furthermore, highly trained mathematical scientists are sought in many industry sectors, including energy, geography and the environment, financial services, statistical professions, biomedicine, etc., and, consequently, a research-intensive thesis option in Mathematics is relevant.

#### J. Environment and Sustainability

The proposed thesis option does not directly address environmental or sustainability issues, with the exception of collaborative research with physical geography/geospatial mathematics, of which there exist many existing partnerships and research opportunities.

#### K. Program Sustainability (Business Plan)

The proposed thesis option will meet a need for rigorous graduate education in mathematics. Learning outcomes and career expectations will be carefully and fully disseminated to the students. It is expected that students will find a rigorous M.Sc. with a thesis option more attractive than a one-year MRP alternative, and that therefore enrolment will increase. Additionally, a two-year program is more likely to attract international and out-of-province students.

The program is sustainable over the long term. The infrastructure to support the program is already in place, and additional faculty resources are not required for delivery.

### **2. Student demand and anticipated growth of the program (local, provincial, national)**

A two-year, research-intensive thesis M.Sc. is generally seen to be more attractive to potential students who wish to pursue careers in industry, education, government, or who may wish to subsequently continue their education with doctoral studies. Therefore, it is expected that a thesis program will attract students from the B.Sc. mathematics and computer science programs at Nipissing University, and will also be competitive with other programs provincially and nationally. Furthermore, because of various immigration issues, it is generally more conducive for international students to study in two-year, as opposed to one-year, M.Sc. programs, and, consequently, a thesis program is expected to attract more international students.

### **3. Current and proposed faculty and other teaching and research resources required to support the program**

The proposed two-year thesis program will not require additional faculty resources. The existing tenured, tenure-track, and doctoral-level LTA faculty can deliver the program. The primary distinguishing feature between the existing MRP and proposed thesis options is the requirement for a two-semester research-intensive thesis course (12 hours), instead of the (typically) one-semester MRP course (6 hours) (see coursework comparisons for the MRP-vs.-Thesis options). Such courses are delivered as directed studies classes, and therefore do not require overload payments or additional faculty.

### **4. Other resources required: infrastructure, operating budget, library, capital, space, student service for satellite locations, as well as how they will be provided**

Adequate infrastructure is already in place. University library facilities offer a large collection of journals and scientific databases, including but not limited to MathSciNet (from the American Mathematical Society), Science Direct, Scholars Portal, SpringerLink, IEEE, and ACM. In addition, the library offers an interlibrary loan service that can quickly obtain books, articles, and other materials from external sources.

The University already has many well-outfitted computer laboratories, as well as specialized labs with advanced hardware and mathematical software. The University is also a member of the SHARCNET (Shared Hierarchical Academic Research Computing Network), which provides free high-performance and supercomputing facilities through the high-speed Orion network.

There is also adequate office and study space for M.Sc. students – specifically, the Graduate Student Centre (R229), and ample study facilities in the library. It is expected that students in the proposed program will study and perform their course work and most of their research at the North Bay campus. For cases in which students work or live at remote locations, teleconferencing options are available. Such arrangements have precedent in the M.Sc. in Environmental Studies program.

### **5. Confirmed and potential external financial support**

New students accepted who have an admission average of 80% or greater will receive a minimum of \$15000 from the University. Externally, financial support is provided through a variety of mechanisms, including, but not limited to, funding through research

grants from individual supervisors, NSERC fellowships, and OGS scholarships. Most Computer Science and Mathematics faculty hold NSERC grants, and many are also supported by other funding sources and interdisciplinary collaborations.

#### **6. Possible and confirmed partnerships with other units and institutions**

Particularly in the Department of Computer Science and Mathematics, much of the research performed is multi- and interdisciplinary, and is characterized by both collaborations with other Nipissing University Departments, and with other institutions. Faculty members are actively involved in collaborative research with international institutions, and some are also partially funded by these sources. The Department is a core participant in the University's membership in Compute Canada through SHARCNET, and can therefore provide high-performance computing facilities. The Department also maintains ties with MITACS, and intends to strengthen collaborations with this institution. In addition, the Department hosts many national and international mathematics conferences.

Proposal for a Two-Year Thesis Option for the M.Sc. in Mathematics at Nipissing University

Department of Computer Science and Mathematics

April 22, 2014

Revised: June 23, 2014

This proposal provides a description of and justification for a major modification in the M.Sc. in Mathematics program at Nipissing University. Specifically, the Department proposes to introduce a thesis option, thereby offering a two-year alternative to the existing Major Research Paper (MRP) option already in place. Per the Nipissing University Institutional Quality Assurance Process (May 21, 2013), Part 3A, #9, the introduction of a thesis option is considered to be a major modification to an existing program.

A research-intensive thesis option for M.Sc. programs has a precedent at Nipissing University with the M.Sc. in Environmental Studies offered jointly through the Departments of Geography, Biology, and History. The proposal for such an option in Mathematics closely follows this precedent.

An M.Sc. thesis is distinguished from an MRP in the following ways:

1. A thesis requires a greater degree of originality and innovation vis-à-vis an MRP.
2. A thesis requires students to become more deeply proficient in an area of mathematics than is standard in an MRP. In other words, the level of mastery of a topic is higher in the former than in the latter.
3. A thesis is generally (depending on the topics) longer and more detailed than an MRP.
4. For successful completion of a thesis, the collaboration and interactions between the student and the supervisor(s) must be stronger than is usually the case with an MRP.
5. Because of its more advanced nature, a thesis requires more time to complete than an MRP.
6. The quality of the written product (thesis) is higher than that of an MRP.
7. A thesis is generally (but not always) contains multi- and inter-disciplinary aspects, or, at least, will involve research into different areas of mathematics and computational science.
8. In the thesis option, more emphasis will be placed on dissemination of original results in the form of journal papers and/or conference presentations.
9. The thesis course is twelve credit hours, whereas the MRP is six credit hours.

### **Description of Changes to the Existing Program**

This proposal considered as an addition to the existing one-year MRP option for the M.Sc. in Mathematics, which will remain in place at Nipissing University. The proposed change will only require the following modifications:

1. The addition of a twelve (12)-credit thesis course to substitute for (for students taking the thesis option) the existing MRP course. To achieve 24 hours, the thesis option requires a reduction of two (2) three-credit courses, one of which will be MATH 6101/6201 (Selected Topics in Pure Mathematics or Selected Topics in Computational Mathematics, respectively), which is currently taught as preparation for MRP work. Currently, the Department offers a six-credit MRP course (MATH 6001). The proposed change would add a 12-hour thesis course in pure and applied/computational mathematics. Thesis students would be required to take one of these two courses. Alternatively, there could be one thesis course number, the content of which would be in pure or applied/computational mathematics, depending upon the student's topic. The thesis course takes the form of directed study by a supervisor(s) within the Department. Refer to the MRP-vs.-Thesis comparison for a summary of the differences in the two options, in terms of coursework.
2. Mandatory attendance at Department seminars and colloquia.

The first year coursework requirements already in place for the MRP option would also apply to the proposed thesis option.

### **Motivation**

Most M.Sc. programs in Ontario, Canada, and in the United States are two-year programs that are generally delivered via one of two streams: (1) a coursework option, in which students generally take two (2) or three (3) courses each semester for four semesters; (2) A thesis option, in which students generally take two or three courses each semester for two semesters, and subsequently concentrate on research work during the second year. As is the usual practice, students may also take coursework or perform research in during the spring and summer months. However, because of the more intense nature of the thesis option, students opting for work during spring and summer will generally have to complete an extra one or two semesters the following year.

A thesis-based M.Sc. degree has advantages over the MRP option. It better prepares students for doctoral work in applied mathematics, computational science, computer science, statistics, physics, econometrics, and many other fields. Many potential employers view successful completion of research work as an indicator of maturity and independent thought. Furthermore, students themselves will benefit more from undertaking a large research project. Not only will they attain a deeper mastery of mathematics than with the MRP, they will also gain the sense of accomplishment that comes from successfully completing a large-scale academic endeavor.

The faculty in the Department of Computer Science and Mathematics are active in research, with most faculty members holding some type of external funding, including NSERC grants. Many faculty members are also involved in inter- and multi-disciplinary research, with fruitful research collaborations with other departments both within Nipissing University and at other institutions, which would greatly enhance students' postgraduate educational experiences. Consequently, because of the research-intensive nature of the faculty, there is great aptitude and enthusiasm to administer a thesis program, and to make it successful.

Finally, from an administrative standpoint, a two-year thesis option is expected to attract more students to the program, including international students, who generally see two-year programs as more worth the effort of completing the lengthy process of obtaining credentials to study in Canada.

### **Resource Implications**

The proposed addition of a two-year thesis option would not require additional faculty or material resources. Twenty-four (24) credits are required for both the Thesis and MRP options (see MRP-vs.-Thesis coursework comparisons). However, supervision of such work may contribute to more faculty members requesting course release in subsequent years, per the FASBU Collective Agreement (2012-2015), Article 29.5.

In terms of course additions, the following course would be offered, and would be approved through the normal channels. Note that this course is delivered as directed study, and therefore do not directly contribute to faculty overload for tenured and tenure-track faculty.

MATH 6100 – Thesis in Mathematics

Calendar Course Description (Proposed): In the thesis option for the M.Sc. in Mathematics, completion of a written thesis is required. The thesis must involve primary research and make a significant contribution to scholarship. The thesis must be approved by the Supervisory Committee, and defended in an oral examination. The supervision and examination of all graduate theses at Nipissing University are administered by the School of Graduate Studies. MATH 6100 is a full-year, twelve credit-hour course.

Credit Hours: 12

In terms of funding, new students accepted who have an admission average of 80% or greater will receive a minimum of \$15000 from the University. Externally, financial support is provided through a variety of mechanisms, including, but not limited to, funding through research grants from individual supervisors, NSERC fellowships, and OGS scholarships. Most Computer Science and Mathematics faculty hold NSERC grants, and many are also supported by other funding sources and interdisciplinary collaborations.

### How the Revised Program would Fit with Nipissing University's Vision, Mission, and Strategic Direction

The proposed program will enhance the research profile of the University, as a more intense thesis-based M.Sc. program will result in a greater quantity of high quality research. It will also contribute to making Nipissing University a viable option for students who want to perform research in the mathematical and computational sciences. It is also expected that the proposed program would benefit Nipissing University's strategic direction by attracting a greater number of international students, who, for immigration reasons, would generally prefer a two-year M.Sc. program.

### Evidence of Consultation with All Academic Units

The proposed major change to the M.Sc. program has been approved by the Department of Computer Science and Mathematics. Arts and Science Faculty Council approved the proposal on May 14, 2014.

### Certification from the Dean

The Dean of the Faculty of Arts and Sciences approves of the proposed changes to the M.Sc. program.

Nipissing University – Master of Science in Mathematics

### MRP Option Requirements (for comparison)

Students will complete 24 credits according to the MRP option. In this option, students will complete six (6) 3-credit courses and write an MRP (Master Research Paper) worth 6-credits, normally within one year. Students in the MRP option will complete the following:

Core courses:

MATH 5066	General Topology	3 cr.
MATH 5086	Functional Analysis	3 cr.

Plus (4) four of the following 3-credit courses: *Note that not every course will be offered each year.*

MATH 5036	Measure Theory	3 cr.
MATH 5056	Algebra	3 cr.
MATH 5046	Complex Analysis	3 cr.
MATH 5067	Introduction to Algebraic Topology	3 cr.
MATH 5236	Advanced Numerical Methods	3 cr.
MATH 5237	Computational Topology	3 cr.
MATH 5246	Optimization	3 cr.
MATH 5247	Cryptography & Coding Theory	3 cr.
MATH 5256	Graph Theory	3 cr.
MATH 6101	Selected Topics in Pure Mathematics	3 cr.
MATH 6201	Selected Topics in Computational Mathematics	3 cr.

In addition to the courses above, students will complete the following MRP course:

MATH 6001	Major Research Paper	6 cr.
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### Thesis Option Requirements

Students will complete 24 credits according to the Thesis option. In this option, students will complete four (4) 3-credit courses and write a Thesis worth 12 credits, normally within two years. Students in the Thesis option will complete the following:

Core courses:

MATH 5066	General Topology	3 cr.
MATH 5086	Functional Analysis	3 cr.

Plus (2) two of the following 3-credit courses: *Note that not every course will be offered each year.*

MATH 5036	Measure Theory	3 cr.
MATH 5056	Algebra	3 cr.
MATH 5046	Complex Analysis	3 cr.
MATH 5067	Introduction to Algebraic Topology	3 cr.
MATH 5236	Advanced Numerical Methods	3 cr.



MATH 5237	Computational Topology	3 cr.	
MATH 5246	Optimization	3 cr.	
MATH 5247	Cryptography & Coding Theory	3 cr.	
MATH 5256	Graph Theory	3 cr.	
MATH 6101	Selected Topics in Pure Mathematics	3 cr.	
MATH 6201	Selected Topics in Computational Mathematics		3 cr.

In addition to the courses above, students will complete the following Thesis course:

MATH 6XXX	Thesis	12 cr.
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