SENATE AGENDA

Friday, May 25, 2018
10:30 a.m. – F210

1.   APPROVAL OF THE AGENDA

2.   BUSINESS ARISING FROM THE MINUTES

MOTION 1:   That Senate approve article 9.1 Senate Executive Committee be amended as outlined below:

9.1 Senate Executive Committee (EXEC)

(a) *Ex Officio Members:*
   (i)   the President, **(**Chair**)**;
   (ii)   the PVPAR, or designate, (Vice-Chair);
   (iii)   the Deans, or their designates;
   (iv)   the Speaker; and
   (v)   the Deputy Speaker.
(b) *Members Elected by Faculty Council:*
   (i)   one (1) tenured or tenure-track faculty Senator*, from each faculty; and
   (ii)   one (1) student Senator from the NUSU Executive.
            *tenured faculty preferred
(c) *Terms of Reference:*
   (i)   to call Senate meetings and prepare the agendas of Senate;
   (ii)   to approve Senate minutes for circulation prior to adoption;
   (iii)   to manage the workflow of Senate and its committee/subcommittees in order that business is carried out in an expeditious and timely fashion;
   (iv)   to ensure that Senate By-Laws are followed and that Senate decisions are properly recorded, transmitted and implemented;
   (v)   to consider, for approval and conveyance to Senate, reports and recommendations of the By-Laws & Elections Subcommittee and Honorary Degree Subcommittee;
   (vi)   when required, to exercise Senate's authority and act on Senate's behalf during the Senate summer recess period, with the understanding that all such actions shall be reported at the September meeting of Senate;
   (vii)   the Senate Executive may act on behalf of Senate when quorum of Senate cannot be established, or when the regularly scheduled Senate meeting is delayed, to deal with any urgent matter that is within the responsibility of Senate, with the understanding that all such actions will be reported at the next meeting of Senate;
   (viii)   to approve degree audits for all undergraduate students who have applied to graduate, and to recommend all candidates to Senate for the conferring of undergraduate degrees, diplomas and certificates;
   (ix)   meetings at which candidates for honorary degrees are discussed shall be conducted *in camera* and considered strictly confidential; and
   (x)   to deal with such other matters as may be assigned from time to time by Senate.

3.   ADOPTION OF THE MINUTES OF THE SENATE MEETING OF: May 11, 2018

4.   READING and DISPOSING of COMMUNICATIONS

5.   REPORTS FROM OTHER BODIES

      A.   (1)   President

              (2)   Provost and Vice-President Academic and Research

              (3)   Vice-President Finance and Administration
                      -   Presentation of the 2018-19 Operating Budget

              (4)   Board of Governors
                      -   Gord Durnan, Chair

              (5)   Alumni Advisory Board

              (6)   Council of Ontario Universities (Academic Colleague)

              (7)   Joint Board/Senate Committee on Governance

              (8)   NUSU

              (9)   Indigenization Steering Committee

             (10)   Others

      B.   Reports from Senate members

6.   QUESTION PERIOD

7.   REPORTS of STANDING COMMITTEES and FACULTY or UNIVERSITY COUNCILS

SENATE EXECUTIVE COMMITTEE

MOTION 1:   That the Report of the Senate Executive Committee dated May 3, 2018, be
                     received.

MOTION 2:   That the Annual Report of the Senate Executive Committee dated May 17, 2018,
                     be received

BY-LAWS AND ELECTIONS SUBCOMMITTEE MEETING

MOTION 1:   That the Senate approve the reordering of the Senate agenda to place "Reports
                     from Other Bodies" ahead of "Question Period"

The Annual Report of the By-Laws and Elections Subcommittee will be deferred until the
September 2018 Senate Meeting.

HONORARY DEGREES SUBCOMMITTEE

MOTION 1:   That the Annual Report of the Honorary Degree Subcommittee, dated May 11,
                     2018, be received.

UNDERGRADUATE STUDIES COMMITTEE

MOTION 1:   That the Report of the Undergraduate Studies Committee dated, May 10, 2018, be received.

MOTION 2:   That Senate approve that the name of the Teacher of Anishnaabemwin as a Second Language (TASL) be changed to Teacher of Indigenous Language as a Second Language.

MOTION 3:   That Senate approve that the course title and description for:

EDUC 1436 Anishnaabemwin Curriculum I
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on Anishnaabemwin in the primary, junior, intermediate and senior divisions.

Be changed to:

EDUC 1436 Indigenous Languages Curriculum I
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on the primary, junior, intermediate and senior divisions.

MOTION 4:   That Senate approve that the course title and description for:

EDUC 1446 Ojibwe Team Teaching I
Faculty-supervised teaching of Ojibwe, in a team setting, to a small group of students in a local day care or summer camp.

Be changed to:

EDUC 1446 Indigenous Languages Team Teaching I
Faculty-supervised teaching of Indigenous Languages, in a team setting, to a small group of students in a local day care or summer camp.

MOTION 5:   That Senate approve that the course title and description for:

EDUC 1546 Anishnaabemwin Language Methodologies I
Teacher candidates develop the skills, knowledge and dispositions required to teach Anishnaabemwin as a second language. As an introductory course, students develop an understanding of language acquisition theory and its role in language development. They develop an understanding of second language learning methodology and develop an awareness of teaching and learning strategies for effective classroom instruction in grades Junior Kindergarten to grade 12.

Be changed to:

EDUC 1546 Indigenous Languages Methodologies I
Teacher candidates develop the skills, knowledge and dispositions required to teach Indigenous Languages as second languages. As an introductory course, students develop an understanding of language acquisition theory and its role in language development.

They develop an understanding of second language learning methodology and develop an awareness of teaching and learning strategies for effective classroom instruction in grades Junior Kindergarten to grade 12.

MOTION 6:   That Senate approve that the course title and description for:

EDUC 2546 Anishnaabemwin Language Methodologies II
Teacher candidates examine second language learning pedagogy as it relates to learning in an Anishnaabemwin context and explore ways to incorporate and meet curriculum expectations and guidelines established by the Ministry of Education. Specifically, teacher candidates examine: planning of second language education programs, curriculum development, student assessment and program evaluation, multilingualism and cultural diversity, media and materials and innovative instructional SLE techniques and practices relevant to second language learning environment.

Be changed to:

EDUC 2546 Indigenous Languages Methodologies II
Teacher candidates examine second language learning pedagogy as it relates to learning in an Indigenous Language context and explore ways to incorporate and meet curriculum expectations and guidelines established by the Ministry of Education. Specifically, teacher candidates examine: planning of second language education programs, curriculum development, student assessment and program evaluation, multilingualism and cultural diversity, media and materials and innovative instructional Second Language Education techniques and practices relevant to second language learning environment.

MOTION 7:   That Senate approve that the course title and description for:

EDUC 2436 Anishnaabemwin Curriculum II
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on Anishnaabemwin in the primary, junior, intermediate and senior divisions.

Be changed to:

EDUC 2436 Indigenous Languages Curriculum II
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on the primary, junior, intermediate and senior divisions.

MOTION 8:   That Senate approve that the course title and description for:

EDUC 2446 Ojibwe Team Teaching II
Faculty-supervised teaching of Ojibwe, in a team teaching setting, to a small group of students in a local day care or summer camp.

Be changed to:

EDUC 2446 Indigenous Languages Team Teaching II
Faculty-supervised teaching of Indigenous Languages, in a team teaching setting, to a small group of students in a local day care or summer camp.

MOTION 9: That Senate approve the addition of EDUC 1556 Cree Language 1 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 10: That Senate approve the addition of EDUC 2556 Cree Language 2 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 11: That Senate approve the addition of EDUC 1576 Lunaape Language 1 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 12: That Senate approve the addition of EDUC 2576 Lunaape Language 2 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 13: That Senate approve the addition of EDUC 1586 Mohawk Language 1 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 14: That Senate approve the addition of EDUC 2586 Mohawk Language 2 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 15: That Senate approve the addition of EDUC 1596 Cayuga Language 1 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 16: That Senate approve the addition of EDUC 2596 Cayuga Language 2 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 17: That Senate approve that the program requirements for the Teacher of Indigenous Language as a Second Language be changed to include:

Six credits from:
EDUC 1456 Anishnaabemwin Language I and EDUC 2456 Anishnaabemwin Language II, or
EDUC 1556 Cree Language I and EDUC 2556 Cree Language II, or
EDUC 1576 Lunaape Language I and EDUC 2576 Cree Language II, or
EDUC 1586 Mohawk Language I and EDUC 2586 Mohawk Language II, or
EDUC 1596 Cayuga Language I and EDUC 2596 Cayuga Language II

MOTION 18: That Senate approve that the course title and description for:

EDUC 4738 French as a Second Language (Intermediate)
Teacher candidates develop the knowledge and skills necessary to teach French as a second language (core, extended and immersion) at the intermediate division. Candidates use the French language for all aspects of this course (example: submitting assignments).

Be changed to:

EDUC 4738 French as a Second Language (Elementary)
Teacher candidates develop the knowledge and skills necessary to teach French as a second language (core, extended and immersion) at the elementary level (K-8). The course focuses on the development of listening, speaking, reading, and writing skills of French as a second language learners. Candidates use the French language for all aspects of this course.

MOTION 19:   That Senate approve that the course title and description for:

EDUC 4739 French as a Second Language (Senior)
Teacher candidates develop the knowledge and skills necessary to teach French as a
second language (core, extended, and immersion) at the senior level. Candidates use the
French language for all aspects of this course (example: submitting assignments).

Be changed to:

EDUC 4739 French as a Second Language (Secondary)
Teacher candidates develop the knowledge and skills necessary to teach French as a
second language (core, extended, and immersion) at the secondary level (7-12). The
course focuses on the development of listening, speaking, reading, and writing skills of
French as a second language learners. Candidates use the French language for all aspects
of this course.

MOTION 20:   That the Annual Report of the Undergraduate Studies Committee, dated May
10, 2018, be received.

UNDERGRADUATE SERVICES AWARDS SUBCOMMITTEE

MOTION 1:   That the Report of the Undergraduate Services and Awards
Subcommittee, dated January 17, 2018, be received.

MOTION 2:   That the Annual Report of the Undergraduate Services and Awards
Subcommittee dated April 10, 2018, be received.

UNDERGRADUATE STANDING & PETITIONS SUBCOMMITTEE

MOTION 1:   That the Annual Report of the Undergraduate Standing & Petitions
Subcommittee dated May 1, 2018, be received.

STUDENT APPEALS COMMITTEE

MOTION 1:   That the Annual Report of the Student Appeals Committee dated May 1, 2018,
be received.

LIBRARY ADVISORY SENATE SUBCOMMITTEE

MOTION 1:   That the Annual Report of the Library Advisory Subcommittee, dated April 20,
2018, be received by the Teaching and Learning Committee,

TECHNOLOGY AND INFRASTRUCTURE COMMITTEE

MOTION 1:   That the Annual Report of the Technology and Infrastructure Committee, dated
April 23, 2018, be received.

GRADUATES STUDIES COMMITTEE

MOTION 1:   That the Major Research Paper supervisory committee structure for the MA in Sociology be changed from:

"The MRP committee will consist of the MRP supervisor approved by Nipissing University Graduate Studies Council and one consulting committee member drawn from the Regional Advisory Committee (RAC) membership."

to

"The MRP committee will consist of the MRP supervisor and one committee member who is either a member of the graduate faculty or is a member of the Regional Advisory Committee (RAC)."

MOTION 2:   That the Thesis Research Project supervisory committee structure for the MA in Sociology be changed from:

"The TRP committee will consist of a TRP supervisor and two committee members approved by Nipissing University Graduate Studies Council, and one consulting member drawn from the Regional Advisory Committee (RAC) membership."

to

"The TRP committee will consist of the TRP supervisor and two committee members who are members of the graduate faculty, or the TRP supervisor, one committee member who is a member of the graduate faculty, and one committee member drawn from the Regional Advisory Committee (RAC) membership.

MOTION 3:   That the MEd admission requirements include a four-year undergraduate degree with a 70% average on the last 10 full courses.

MOTION 4:   That MEd program no longer issue offers of admission with probation.

MOTION 5:   That the MES/MESc program expectations be approved (appendix A).

MOTION 6:   That the MES/MESc course expectations and outcomes be approved as listed (Appendix B).

MOTION 7:   That the Annual Report of the Graduate Studies Committee, dated May 14, 2018, be received.

ACADEMIC QUALITY ASSURANCE AND PLANNING COMMITTEE

The Annual Report of the Academic Quality Assurance and Planning Committee will be deferred until the September 2018 Senate Meeting.

TEACHING AND LEARNING COMMITTEE

No Annual Report received.

8.   OTHER BUSINESS

9.   NEW BUSINESS

MOTION 1:   That Senate approve and adopt the Nipissing Celebration Anthem dated May 3, 2018.

10.   ADJOURNMENT

Nipissing University

Minutes of the Academic Senate Meeting

May 11, 2018

10:30 a.m. – Room F210

<u>MEMBERS PRESENT:</u>	M. DeGagné (Chair), Arja Vainio-Mattila, J. McAuliffe, M. Tuncali, R. Vanderlee, D. Iafrate, N. Black
	A. Armenakyan, L. Manankil-Rankin, P. Millar, M. Sullivan
	R. Breton, A. Burk, N. Colborne, R. Gendron, A. Hatef, B. Kelly, L. Kruk, G. McCann, P. Nosko, T. Parks, S. Renshaw, K. Srigley, D. Tabachnick, A. Weeks
	J. Allison, C. Hachkowski, B. Hatt, T. Horton, M. Parr, C. Peltier, C. Ricci, G. Rickwood, G. Sharpe, T. Sibbald
	C. Cho
	S. McArthur
	N. Allaire
	O. Pokorny
	A. Higgins, H. Mackie, T. Somerville, A. Wood
<u>ABSENT WITH REGRETS:</u>	C. Sutton
	C. Richardson
	L. Chen
	S. Connor A. Karassev, E. Mattson, H. Teixeira, T. Vassilev
	W. Richardson
	L. Rossi
	T. Curry, J. Zimbalatti

D. Goulard, K. Kearney

The Speaker welcomed all and acknowledged the traditional territory lands upon which Nipissing is located.

The Speaker advised that due to unforeseen circumstances, the Senate Secretary (Sandy Landriault) will be away and Martee Storms will be standing in for the next two Senate meetings.

The Speaker called upon the Chair to say a few words. The Chair acknowledged the importance of the land acknowledgement at the beginning of meetings.

The Chair advised that the communication that was previously circulated regarding the death of a Nipissing student omitted the student's name out of respect for the family. As the family has now consented to releasing the name, the Chair called for a moment of silence to acknowledge Patrice Wren.

1.   APPROVAL OF THE AGENDA OF THE SENATE MEETING OF: May 11, 2018

MOTION 1:   Moved by Tyrel Somerville, seconded by M. Tuncali that the agenda of the Senate
               meeting of May 11, 2018, be approved.
               CARRIED

2.   ADOPTION OF THE MINUTES OF THE SENATE MEETING OF: April 13, 2018

MOTION 2:   Moved by R. Gendron, seconded by A. Weeks that the minutes of the Senate meeting of
               April 13, 2018, be adopted.
               CARRIED

3.   BUSINESS ARISING FROM THE MINUTES

MOTION 1:   Moved that Senate approves the proposal to recommend to the Board of Governors a
               temporary (12-month) restructuring of the Applied and Professional Studies Faculty that
               will allow the School of Business to report to the Dean of Education, the School of
               Nursing to report to the Provost, and the remaining programs in the Faculty to report to
               the Dean of Arts and Science.

The above motion was withdrawn and a new motion was presented. All Senators were sent the new motion by e-mail this morning from D. Tabachnick. The new motion was presented as follows:

MOTION 2:   Moved by D. Tabachnick, seconded by N. Colborne that Senate approve the proposal to
               recommend to the Board of Governors a temporary (up to 12-month) change in the
               reporting mechanism that will see the School of Business and Criminal Justice report to
               the Interim Associate Dean of Applied and Professional Studies, the School of Nursing
               report to the Dean of Education, and the remaining programs report to the Dean of Arts
               and Science.

Following a lengthy discussion in which the Provost provided the background and context for the motion and questions regarding the Motion were asked by Senators and appropriately responded to, the Question was asked and the Motion was CARRIED.

MOTION 3: Motion to Rescind: Moved by A. Armenakyan that the School of Business does not support
               the proposed structure of APS and request status quo be maintained until a detailed study
               analysis is performed.
               DEFEATED.

Announcement – re: Senate Budget Advisory Committee

A. Burke reported that the Senate Budget Advisory Committee has met twice. The committee spent time looking at the budget, but the budget process for this year was already underway before the Committee

was able to provide meaningful input. The committee will have more input in the future. The terms of reference for the committee are being developed. Indications from the administrative side are that it is important for academic and budget planning to look further into the future.

4.   READING and DISPOSING of COMMUNICATIONS

No further communications were brought forward.

5.   REPORTS FROM OTHER BODIES

1. The President provided some brief highlights on the following:
- The Canadian Symposium on Indigenous Teachers Education;
- The North Bay Heritage Fair hosted by Nipissing;
- Interest of a local engineering group to have Nipissing consider engineering as an option; and
- The conflict management training event with Dr. Evan Hoffman event taking place this weekend..

The Chair announced the Tenure and Promotion results:
- Promotion to Associate Professor: P.Zou, J. Corkett;
- Promotion to Full Professor: B. Hatt, D. Walters, D. Zarifa, D. Hay, D. Geden, J. Nadeau, J. Vitali, N. Maynes, S. Hansen, T. Vassilev;
- Tenure: R. Hoffman, A. Adler

2. The Provost and Vice-President Academic and Research provided an electronic report that will be included as an attachment.

- The Provost congratulated all those who were successful in the tenure and promotion process.
- She extended a heartfelt invitation to attend convocation, which is a significant event for students, and she encouraged all to attend.

3. NUSU Executive – Tyrel Somerville – See attachment.

4. Council of Ontario Universities (Academic Colleague) – G. McCann:
- Senator McCann advised that everything is on hold due to the upcoming Provincial election, with the ministries maintaining status quo.
- A main issue on the horizon for universities is the possibility of colleges becoming polytechnics. That would be a threat to us as there would be eight more universities.

No reports were provided by:

- The Vice-President, Finance and Administration
- Board of Governors
- Alumni Advisory Board
- Indigenization Steering Committee

6.   QUESTION PERIOD

Would the PVPAR provide the background and rationale for the creation of two (2) new teaching chairs?

The PVPAR advised that her office has received applications and will consider them shortly. The program was discussed with Senate over the spring. None of the research chairs or the Schulich chairs have had to go through Senate before.

MOTION 1:   Moved by D. Tabachnick, seconded by G. McCann that Senate support the creation of two (2) new teaching chairs.
CARRIED

7.   REPORTS of STANDING COMMITTEES and FACULTY or UNIVERSITY COUNCILS

SENATE EXECUTIVE COMMITTEE

MOTION 1:   Moved by M. DeGagné, seconded by M. Tuncali that Senate receive the Report of the Senate Executive Committee dated May 3, 2018.
CARRIED

BY-LAWS AND ELECTIONS SUBCOMMITTEE MEETING

MOTION 1:   ~~That the Report of the By-Laws and Elections Subcommittee meeting, dated May 14, 2018 be received.~~

Strike out Motion 1 as no report was received.

MOTION 2:   Moved by N. Colborne, seconded by M. Tuncali that Senate approve Article 9.1 Senate Executive Committee be amended as outlined below:

Vote was called; results were 13 for and 12 against. Therefore, the motion is CARRIED.

9.1 Senate Executive Committee (EXEC)

(a) *Ex Officio Members:*
    (i)   the President~~, who shall be~~ (Chair);
    (ii)   the PVPAR, or designate~~, who shall be~~ (Vice-Chair);
    (iii)   the ~~Academic~~ Deans, or their designates;
    (iv)   the Speaker; and
    (v)   the Deputy Speaker.
(b) *Members Elected by Faculty Council:*
    (i)   one (1) tenured or tenure-track faculty Senator*, from each faculty; and
    (ii)   one (1) student Senator from the NUSU Executive.
             *tenured faculty preferred
(c) *Terms of Reference:*
    (i)   to call Senate meetings and prepare the agendas of Senate;
    (ii)   to approve Senate minutes for circulation prior to adoption;
    (iii)   to manage the workflow of Senate and its committee/subcommittees in order that business is carried out in an expeditious and timely fashion;
    (iv)   to ensure that Senate By-Laws are followed and that Senate decisions are properly recorded, transmitted and implemented;
    (v)   to consider, for approval and conveyance to Senate, reports and recommendations of the By-Laws & Elections Subcommittee and Honorary Degree Subcommittee;

(vi)   when required, to exercise Senate's authority and act on Senate's behalf during the Senate summer recess period, with the understanding that all such actions shall be reported at the September meeting of Senate;

(vii)   the Senate Executive may act on behalf of Senate when quorum of Senate cannot be established, or when the regularly scheduled Senate meeting is delayed, to deal with any urgent matter that is within the responsibility of Senate, with the understanding that all such actions will be reported at the next meeting of Senate;

(viii) to approve degree audits for all undergraduate students who have applied to graduate, and to recommend all candidates to Senate for the conferring of undergraduate degrees, diplomas and certificates;

(ix)   meetings at which candidates for honorary degrees are discussed shall be conducted *in camera* and considered strictly confidential; and

(x)   to deal with such other matters as may be assigned from time to time by Senate.

A lengthy discussion ensued with regards to the power of Senate Executive (viii) approving graduates in urgent situations. Other options were brought forward to consider in times when Senate is not scheduled to meet or when quorum at Senate is not achieved or lost. It was recommended that Senate meetings not be scheduled during reading week and, if required, an emergency meeting could be called. It was noted that Senate Executive does meet and decisions that are made are then reported back to Senate.
MOTION: CARRIED

MOTION 3:   Moved by N. Colborn, seconded by M. Tuncali, that Senate approve the revisions to the membership of the Joint Standing Committee of the Board and Senate on Governance, as outlined below:

(a) *Ex Officio Members:*
(i)   the President of the Nipissing University Student Union (NUSU) or Designate

(b) Members Elected by Senate:
(i)   three (3) **faculty** Senators ~~or non-Senators Elected by Senate, with at least one being a Senator~~

(c) Members Elected by Board:
(i)   three (3) **non-constituent** members of the Board of Governors~~, Elected by the Board~~

(d) Terms of Reference:
(i)   to periodically review on at least an annual basis the governance structures and practices of the University to foster bicameral communication and collegiality and to recommend amendments to by-laws, practices or policies as may be advisable;

(ii)   to establish and oversee a procedure for providing a joint orientation to new members of the Senate and Board as a means of promoting the effective governance of the university;

(iii)   to establish and oversee a statement on the importance of collegial governance at Nipissing;

(iv)   to address issues that may arise concerning a lack of civility and decorum in the conduct of the interaction of the Senate or Board and which cannot be satisfactorily addressed under the existing policies and bylaws of each, and to recommend amendments to by-laws, practices or policies as may be advisable; and

(v)   to oversee the implementation of the recommendations of the Special Governance
       Commission Report of October 27, 2016.
MOTION: CARRIED

Notion of Motion: That the Senate approve the reordering of the Senate agenda to place "Reports from
Other Bodies" ahead of "Question Period"

ACADEMIC QUALITY ASSURANCE AND PLANNING COMMITTEE

MOTION 1:   Moved by A. Vainio-Mattila, seconded M. Tuncali that the Report of the Academic
            Quality Assurance and Planning Committee dated April 27, 2018, be received.
            CARRIED

MOTION 2:   Moved by A. Vainio-Mattila, seconded M. Tuncali that Senate grant approval for Stage 2
            BSc Honours Specialization and Specialization in Data Science, and BA Honours
            Specialization and Specialization in Data Science. CARRIED

The Dean of Arts and Sciences extended congratulations to those who worked on this proposal, noting
that the first discussions on this were held in 2005.

GRADUATE STUDIES COMMITTE (GSC)

MOTION 1:   That the Report of the Graduate Studies Committee Meeting, dated April 23, 2018 be
                received.

Strike the Motion as no report was received.

ELECTIONS

Note of appreciation to the Faculties and Deans for the election of new Senators for the 2018-2021 term.

- Speaker of Senate – 2018 – 2020 (2 year term)
    o Nominate B. Hatt; Moved by N. Colborne, seconded by K. Srigley.
    o Moved by M. DeGagné, seconded by J. Allison that nominations cease.
    o ACCLAIMED
- Deputy Speaker of Senate – 2018 – 2020 (2 year term)
    o Nominate N. Colborne; Moved by R. Gendron, seconded by G. McCann.
    o Moved by K. Srigley, seconded by A. Burk that nominations cease.
    o ACCLAIMED
- Alternate Academic Colleague (1 year term to cover sabbatical)
    o Nominate R. Gendron; Moved by J. Allison, seconded by C. Hachkowski.
    o Moved by M. DeGagné, seconded by M. Tuncali that nominations cease.
    o ACCLAIMED

8.   OTHER BUSINESS

9.   NEW BUSINESS

MOTION 1:   That Senate approve and adopt the Nipissing Celebration Anthem dated May 3, 2018.

This motion was deferred to the next meeting of Senate.

MOTION 2:   Moved by R. Gendron, seconded by D. Tabachnick that Senate consider receipt of Graduate Applications. CARRIED

MOTION 3:   Moved by R. Gendron, seconded by K. Srigley to receive the Graduate Applications. CARRIED

MOTION 4:   Moved by K. Srigley, seconded by A. Burk that Senate approved the Graduate Applications. CARRIED

<u>IN-CAMERA</u>

MOTION 1:   Moved by M. DeGagne, seconded G. McCann that Senate move in-camera. CARRIED

MOTION 2:   Moved by M. Tuncali, seconded by M. DeGagné that Senate move out of in-camera. CARRIED

10.   <u>ANNOUNCEMENTS</u>

11.   <u>ADJOURNMENT</u>

Senate was adjourned at 12:38 p.m.

Original signed by:

………………………………….   ………………………………………….
M. DeGagné (Chair)   B. Hatt (Senate Speaker)

Senate Report 11th May 2018
Arja Vainio-Mattila

1) NU Conversations 3 on Indigenous Education were held April 12th. The notes are attached.

   Altogether some 150-170 people stopped by over the three sets of conversations (including many who came to two or all three!). The notes provide one set of perspectives/suggestions on the issues discussed. I would appreciate hearing from the community as to the likelihood they would attend this type of events in the future, as well as on what type of topics would, in your opinion, lend themselves well to such free flowing, face to face conversation.

2) I participated in the CBIE (Canadian Bureau of International Education) visit organized for Canadian Universities to Norway, where we met with representatives of all Norwegian Universities.

   The higher education landscape is very different in Norway. Norway is a wealthy country where all education is free, including for international students. Internationalization is mandated, and funded, including incoming and outgoing students, faculty exchanges, and research collaborations. The Norwegian institutions generally have an orientation to issues related to the arctic (both in social and biological sciences), all institutions offer terms taught in English in a variety of disciplines, and they also have a strong interest in anything related to the out of doors (leisure, recreation, sports, tourism etc). In the North there is significant focus on comparative indigenous cultures.

   Generally all are interested in student and faculty mobility, and research collaborations. If any of the following institutions are of interest, I would be happy to make virtual introductions.

Norwegian University (students)	Interested in collaborating on
Norwegian University of Life Sciences (5200) www.nmbu.no/en	- Focus on problem solving: oceans, climate, enabling technologies, energy - Water research: they offer International Summer School on Water Management in Cold Climates, "Water harmony" network for research - Possibly pathway to their Masters in Big Data - Land and Resource Management
Norwegian School of Sport Sciences (1600) http://www.nih.no/en/	- Physical Activity and Health - Sport Management - Physical Education (teacher education)
Norwegian University of Science and Technology (23 000 undergrads + 17 000 grad) www.ntnu.edu	- Information security - Renewable energy - Sustainability
Oslo Metropolitan University (17 000+3 300)	- Nursing exchanges - International Public health – semester1 - Social Work - Art - Business

University College of Southeast Norway (15 000+3 000) www.usn.no/english	- Sports and Educational Science - School of Business - Teacher training
University of Agder (7000+3000) www.uia.no	- Regional development
The Arctic University of Norway (16500)	- Comparative Indigenous Studies - Arctic Council, Arctic Economic Council, Council o Indigenous Peoples have secretariats in Tromso - Annual conference "Arctic Frontiers" - Sami Culture and language - Masters in Governance and Entrepreneurship in Northern and Indigenous Areas - Strong nursing programme preparing nurses for the North
Nord University (800 students from 65 countries)	- Global challenges - Teacher training and nursing since 1920
Sami Allaskula (Sami University of Applied Sciences) (250 students)	- Sami Pedagogy (indigenous ways of knowing) - Journalism - Social sciences - Reindeer husbandry - Sami taught, also the language of administration - Simultaneous translation in every classroom, teaching in multiple languages
University of Bergen (9090+7465) http://www.uib.no/en	- Fine Art - Art education music)
Norwegian School of Economics (1700+1700) www.nhh.no	- A leading business school in Europe - Member of PIM (Partnership in International Management) - Natural resources
University of Stavanger (8500+2900) www.uis.no	- Nipissing has an agreement for Nursing
Western Norway University of Applied Sciences (14000+2000) https://www.hvl.no/en	- Sports education and science - Teacher education

3) "Indigenizing the Academy" in Membertou, NS, organized by ANSUT: main take home message is that the collective agreements will have a key role in how universities will live the indigenization principles they have committed to.
4) Convocations are in early June (5th in Brantford, 7th & 8th in North Bay). I would encourage all faculty to participate. It is very special for students to be able to introduce their profs to their family and friends. Please, note these dates in your calendar!

Notes from: NU Conversations 3 (April 12th)

The statements in questions 2-14 are the Principles on Indigenous Education adopted by Universities Canada

1. What is Indigenization?
- Please upgrade language > ~~aboriginal~~, use indigenous
    o Why?
- It means listening and asking questions, not being afraid to seek knowledge from fear of offending; it's better to ask and feel embarrassed than to stay in our corner, "safe" yet still ignorant
- The 1st step is starting with "self", as you need to locate yourself as a non-Indigenous/settler before engaging in this process
- Valuing Indigenous knowledges, voices, experiences. This challenges Euro-centric, colonial systems, including university as a site.
- "BisKaabyang" A returning to ourselves
- What kind of preparation do we need to position everyone to be ready to learn – perhaps esp. settlers
- Understand privilege
- Setting aside pre-conceptions, misperceptions, and deeply held assumptions, willingness to be vulnerable

2. What does/could this mean for Nipissing: Ensure institutional commitment at every level to develop opportunities for Indigenous students.
- In/out of the classroom – more than a "schooling" approach
- Allow everyone assignments beyond traditional essays
- Creativity w/ assignment submission: (i.e. Catherine Muran-Stoehl's history course on storytelling – all oral, no notes)
- Allow students to demonstrate understanding of material by orally sharing w/ another students
    o I'd say creative assignments are applicable to all students. Oral story-telling is fine, but there should be some records of the assignment (video?)
- [whol]istic – treating the whole person at all levels of the institution/taking this out of the institution – "on the land"
- Engaging in transdisciplinary dialogue
- Indigenization is not only about being responsive to Indigenous learners. It also means preparing non-indigenous peoples to work with Indigenous people & communities.
- We've all been structurally denied the opportunity to learn about FNMI histories, peoples, cultures. *This is all of our history.
- Recognize milestones, individual + collective advancements/achievements
- Create a planning framework that identifies who is responsible for what throughout NU from top to bottom: like staff orientation, all NU community should have time dedicated to intercultural learning + indigenization

3. What does/could this mean for Nipissing: Be student centred: focus on the learners, learning outcomes and learning abilities, and create opportunities that promote student success.

- How can we change our admission + advising practices to better support + recognize student abilities + success

- Quite focused – do we need to do this differently?
- Strengths-based approach
- Flexibility in accommodating cultural difference)e.g. funerals, length of trips home etc)
- Ask the student
- Ensuring appropriate supports in place when discussing certain topics in courses
- Many students from coastal communities are fluent in 2 or more languages, allow them to share in language
- Re-envisioning what we mean by "course"
- Let's not think about Indigenous students with deficits. There are structural inequities between students that impact their 'readiness' to be here.
- Students are experts, work with them
- Let's not homogenize our understanding of Indigenous students – their knowledges & experience
- Need appropriate academic resources to enable this success
- Can we re-define or examine what "success" is

4. What does/could this mean for Nipissing: Recognize the importance of indigenization of curricula through responsive academic programming, support programs, orientations, and pedagogies
- Support orientations for students – and staff
- Can we look at defining what indigenization means on this territory and in particular with our Indigenous partners wo share the territory
- Indigenous-settler content across curricula
- Decolonizing pedagogies & methodologies
- Self-reflexive analysis – locationally – identity politics
- Acknowledge power asymmetries
- University as a colonial institutions > decolonizing the institutional structures
- We would need to think about what this looks like in different disciplines/programs. Will vary.
- You don't need to be the expert > bring the experts to your course
- Engage deeply w/ Indigenous scholars, thinking, knowledge production in your respective fields
- More than just a theme or set of individual outcomes

5. What does/could this mean for Nipissing: Recognize the importance of Indigenous education leadership through representation at the governance level and within faculty, professional and administrative staff.
- Be leaders and continue to share the work we are currently doing with other institutions (25 + years of work)
- Aboriginal leadership program
- Acknowledge/foster mentorship of Indigenous staff/faculty to achieve goals (pursuing further education to acquire positions)
- Indigenous staff & faculty
- Provide professional development > BrockU is a good model
- Students too!
- Not just the responsibility of Indigenous people's – can't forget this!
- Perhaps this means Indigenous faculty + making measurable goals + providing mentorship/support for those faculty to achieve tenure + promotion etc. and/or pre-docs+post-docs to support the number of Indigenous faculty

- But we also must provide support so that Indigenous Faculty are not taking on in addition to their regular responsibilities as faculty – we need to commit to an institutional/administration position that can move this forward institutionally

6. What does/could this mean for Nipissing: Continue to build welcoming and respectful learning environments on campuses through the implementation of academic programs, services, support mechanisms, and spaces dedicated to Indigenous students
- Other departments assist in events (powwow, round dance etc.) demonstrate support of services, not just requesting services > use tobacco to ask questions & understand why
- Professional development or info about culture should be reciprocal
- Workshops/resources/support for faculty who want to be allies but are afraid of getting it wrong/offending
- Introduce language as a vehicle for learning about ways of knowing/being
- Training for staff e.g. facilities – so smudging is easier inside & outside classrooms
- Be authentic, work/teach/learn with heart not just the head
- Integration + consistency in places/spaces beyond office of indigenous initiatives + sudent spaces
- Develop classroom spaces that support Indigenous pedagogies – smudging (hvac), circles etc
- Convocation that is inclusive

7. What does/could this mean for Nipissing: Continue to develop resources, spaces and approaches that promote dialogue between Indigenous and non-Indigenous students
- Outdoor learning spaces
- -inclusion of indigenous voice, histories, knowledge created by Indigenous pp;
- Ermine's "ethical space" as a "place" to discuss
- What creates dialogue? How?
- Visibly welcoming spaces – multi lingual etc
- Address cultural safety/awareness > children's literature
- Encourage respectful conversation, asking questions. Share where certain resources are found, can be accessed
- Create classroom advisory group to respond to faculty experimenting with indigenization

8. What does/could this mean for Nipissing: Continue to develop accessible learning environments off-campus
- Include same kind of visit, or r students, virtual meet up if not possible (students can use a space on campus or in community)
- Understand what an accessible learning environments looks like for multiple learning styles
- Bring Nipissing into the community and communities to Nipissing
- Include working with local communities
- Nipissing mobile
- Authentic and reciprocal partnerships with Indigenous communities

9. What does/could this mean for Nipissing: Recognize the value of promoting partnerships among educational and local Indigenous communities and continue to maintain a collaborative and consultative process on the specific needs of Indigenous students.
- Understand what we mean by partnership and how we enact this across the board
- How do we remove/address trust related to barriers in the short term recognizing this takes a long time?

- Co-development of academic programs w/ Indigenous communities
- Have a summer academy for gr 11/12 students from remote areas to come o campus > two way flow of information about life @ NU and life in rural N. Ont
  - See OII, NUACE/OII – 55+ in-community partnerships
- Invite visiting speakers from Nipissing First Nation to visit classes and speak with students in relevance to the class…of course protocols should be leaned and followed in the process
- Learn about relationship building and what this means for community connection. Wiidaaktaodering, "We are helping one another"
- I wonder if we might be a leader her. Teach other universities how to do it!
- Work in partnerships to offer classes/field courses/retreats in community for students & community members
- Gain better understanding of reciprocity
- Continue to seek best practices elsewhere + remember to adapt to our realities
- Being explicit that this is international even within Canadian orders. A new perspective needed, not "our" indigenous peoples.
- This may mea: partnerships w/ Indigenous Institutes; ensuring the strength of the NUACE; meeting w/ Education Directors from First nations > but recognizing Indigenous students as Diverse – from across ON + QC and are urban as well. Are their experiences voiced as well?

10. What does/could this mean for Nipissing: Recognize the importance of providing greater exposure and knowledge for non-Indigenous students on the realities, histories, cultures and beliefs of Indigenous peoples of Canada.
- More than coursework > a university wide approach
- Do Native Studies courses meet depth/breadth of BA/BSc requirements? Can depth/breadth be more prescriptive?
- Would this knowledge & exposure best come from 'one' course that all take or integrated across all or most?
- Focus on decolonization, not Indigenization
  - We need to specify these
- If there is exposure, providing adequate support to students in class (i.e. RN sent email re let students know in advance about topic of class – residential school)
- This means faculty research Indigenous scholars in their respective fields
- Inclusion of resources from Indigenous perspective
- This means engaging more with Indigenous people, communities, scholars etc in an appropriate way.

11. What does/could this mean for Nipissing: Build on successful experiences and initiatives already in place at universities across the country to share and learn from promising practices, while recognizing the differences in jurisdictional and institutional mission.
- UBC indigenous foundations website is a great resource
  - Some studies and books describe their cutting edge work
- Share all of the great work already happening on campus through Indigenous recruitment and marketing Iie. AP, events on campus, partnerships in community, Debwediza, Aasgaabwitaadwin, Wiidooktaadwin, Treaty mentorship, education program, read-ahead credit, summer institute etc)
- This may mean partnerships with Indigenous Institutes recognizing we bring different strengths.
- Upcoming conference in Ottawa

- Important also to engage exchange on the comparison of the different missions among Indigenous + non-Indigenous organizations + institutions

12. What does/could this mean for Nipissing: Recognize the importance of sharing information within the institution, and beyond, to inform current and prospective Indigenous students of the array of services, programs and supports available to them on campus.
- Social media campaign/ a more fulsome MARKETING campaign to James bay, ON, QC – both remote + urban Indigenous peoples
- Further to my suggestion a few panels back, a summer academy for prospective Gr 11 students
    o See OII Supports, Activities, programmes
- Reach out to communities outside or areas we already reach (ON/QC)
- Assist OII + faculty in sharing what is already taking place on campus. Share what you learn
- Blog? Co-written and shared with students, families, teaches, schools – highlight promising and cutting edge practice, relationships in reader-friendly language
- Further networks like IMNP to develop capacity – invest in this capacity strengthening/Networks/Communication!

13. What does/could this mean for Nipissing: Recognize the role of institutions in creating an enabling and supportive environment for successful and high quality K-12 experience for Aboriginal youth
- Please see work b OII for past 10-15 years
- We have a framework for this – Aboriginal Framework
- Make these (K-12)-(College/University) shake hands; ongoing conversations with Elementary/Secondary Panels -transitions should be facilitated (all working on similar goals across life course)
- Utilize the resources of our Faculty of Ed
- Recognizing that Indigenous students may not have had the same educational experience/curriculum as non-Indigenous students who are in uni class, and for instructors to consider this in the facilitation/grading of their courses.
- Instructors at Nipissing striving to include Indigenous ways of knowing and sharing into their courses to align with the ways Indigenous students my have learned in elementary/high school
- Provide framework/ability for students
- Please use indigenous, not aboriginal
- Provide K-12 schools presentations led by NU staff
- Promote/participate in treaty education in K-12
- Explore dual-credit options for Indigenous high school students in key areas
- Support by learning of existing initiatives, sharing knowledge of initiatives
- Nipissing to recognize the work that has been done within and continues to grow
- Classroom toolkit online + bucket of classroom resources + contacts for school based experience
    o This notion is not new
- Work with community projects – school boards, community agencies, Learning Partnership to understand and embrace all voices
- OII has been doing some of this work since 2006 with BCSL + WIMI

14. What does/could this mean for Nipissing: Recognize the importance of fostering intercultural engagement among Indigenous and non-Indigenous students, faculty, and staff
- How do we facilitate engagement & socialization with present "gathering places" (centers, cafeterias etc) and spaces that can be isolating in themselves?

- Promoting Indigenous-run events even more to non-Indigenous students than they are already being advertised ex powwows, speakers etc
- Use "events" as the introduction to this process
    o Transition to more than events, but who we are
    o Yu have to start somewhere
- This is really important but we need to make it clear to indigenous students it's not their job to educate non-indigenous students
- Joint projects, assignments
- Intercultural leadership certificate course
- Encourage students in class, during open houses, etc. ie visit our office and participate in existing events. > share that all events everyone is welcome to attend (ie. Snowshoeing, indigenous week, volunteering for Indigenous youth education gatherings etc)

15. Critiques/hesitations?
- Is "education" too colonizing to be indigenized?
    o No, as long as its epistemological structures are identified and can be shifted, unsettled, mobilized in complex relationships
- What is the power of symbolic gestures?
    o The can create space for students supportive of identity & belonging BUT are not as powerful if not understood by the speaker

Academic Senate
NUSU Report for Senate

Daniel Goulard

Daniel Goulard our new President unfortunately had to send in his regrets as he is currently on his way to represent our students at the CFS Provincial Executive Committee. CFS is a student lead organization that represents over 600 000 student across the country and we are honored to have both a seat and a voice within this organization.

Student Passing

We would like to take a moment to express our sincerest condolences on the passing of a fellow student. Our thoughts are with their family and friends. A representative from NUSU attended the funeral and we will continue to provide support to our students who are grieving.

Valedictorian Elections

Valedictorian elections took place this past April.

The four valedictorians that were elected for their convocations are:
- Madison Alyxis Watson
- Laura Koelen (KO-LEN)
- James Donovan (DON-A-VAN)
- Daniel Scarpino (SCAR-PEE-NO)

Lakers Cheerleaders

We would like to congratulate the Nipissing University competitive cheerleading team who competed at the World Cheerleading Championship 3 weeks ago in Orlando, Florida at Walt Disney World's ESPN Wide World of Sports.

The Lakers Cheerleading team placed 14 out of 22 teams.

The event is the most prestigious competition in the world, bringing together 11,000 athletes from 40 countries competing in the elite level 5 and 6 divisions.

Congratulations to Michelle Schenk (SHENK)

We would like to congratulate Michelle Schenk, a Nipissing University student, who received the Ontario Medal for Young Volunteers, which is the highest honour young Ontarians can receive for volunteer service. Michelle was a previous Best Buddies Chapter club president through NUSU. We would like to highlight this student's amazing volunteerism and wish her the best as she graduates this June from the Bachelor of Education program.

Chamber of Commerce Young Professionals Committee

We have been approached by the Chamber of Commerce Young Professionals Committee to have a student member from our board sit on this committee and represent our student population. This is a great opportunity for our students to find out what amazing things the

community are doing and will encourage entrepreneurship and promote local businesses. This will be a way for our students to build relationships.

NUSU Student Centre
We are excited that we have gone out to RFPs and are waiting for proposals to come in shortly. Once a construction firm has been decided on we will then be able to figure out a construction timeline. This is an exciting chapter for our students.

Community clean up, toilet paper, auction
One of our focuses this term is to focus on social responsibility and mentorship for our students. We have started the year developing a relationship with the community of North Bay and have been attending several community focused events to continue to build ties with North Bay and will be encourage students to do the the same. Some of these events we attended are the community clean up, TP North Bay campaign and the spaghetti dinner and silent auction for a student with CF.

Conclusion
Our Executive Committee began their term as of May 1st. In our transition time before May 1st we have met with many groups and individuals including the Equity Centre, Lakers Crew, Alpha Gamma Phi and Office of Indigenous Initiatives. We look forward to working together with these groups as well as our clubs,departments, faculty and administration.

We are excited to have been given this opportunity to work hard for our students, build relationships, and promote academic excellence and social growth.

REPORT OF THE SENATE EXECUTIVE COMMITTEE

May 3, 2018

There was a meeting of the Senate Executive on May 3, 2018.

The following members participated:

M. DeGagné, C. Richardson, M. Tuncali, R. Vanderlee, B. Hatt, N. Colborne, P. Millar, A. Weeks, J. Allison, T. Somerville ,

Regrets:

A. Vainio-Mattila, J. McAuliffe

Guests:

C. Dowdall, M. Storms

Recording Secretary: M. Daniel (Administrative Assistant, Office of the President)

The purpose of the meeting was to set the agenda for the May 11, 2018, Senate meeting.

There was a discussion on the motion that was put forward at the April 11, 2018, Senate meeting for Senate to approve the recommendation for the proposed restructuring of the Applied and Professional Studies faculty. It was decided that the motion would be included under Business Arising from the Minutes.

The Academic Quality Assurance and Planning Committee report, dated April 27, 2018, was received.

The Report of the Graduate Studies Committee report, dated April 23, 2018, was received.

The By-Laws and Elections Subcommittee report, dated April 24, 2018, was received. It includes amendments to the *Ex Officio* membership of the Senate Committee, Subcommittees and Council. The By-Laws and Elections Subcommittee moved to send Article 9.1.(c)(vii) back to Senate in its original form to be voted on by Senate:

> (vii)   the Senate Executive may act on behalf of Senate when quorum of Senate cannot be established, or when the regularly scheduled Senate meeting is delayed, to deal with any urgent matter that is within the responsibility of Senate, with the understanding that all such actions will be reported at the next meeting of Senate;

A Certificate of Academic Achievement – In Memoriam will be brought forward during the in-camera session of the Senate meeting on May 11, 2018.

It was suggested to have the Speaker of Senate acknowledge that the University is situated on traditional territory at the beginning of every Senate meeting.

Respectfully submitted,
Original signed by:

M. DeGagné
Chair
Senate Executive Committee

MOTION 1:   That Senate receive the Report of the Senate Executive dated May 3, 2018.

NIPISSING UNIVERSITY

ANNUAL REPORT OF THE SENATE EXECUTIVE COMMITTEE

May 17, 2018

Senate Executive met a total of 11 times since July 1, 2017. One of those meetings was an electronic meeting.

Members	Attendance/Participation
– Mike DeGagné, Chair	10
– Arja Vainio-Mattila, Vice-Chair[1]	8
– Jim McAuliffe	7
– Carole Richardson	11
– Murat Tuncali	10
– Rick Vanderlee	9
– Blaine Hatt, Speaker	10
– Nathan Colborne, Deputy Speaker	11
– Andrew Weeks (A&S)	8
– Paul Millar (APS)	8
– John Allison (ED)	9
– Tyrel Somerville (NUSU)[2]	1

[1]Arja Vainio-Mattila replace Harley d'Entremont effective October 11, 2017.
[2]Tyrel Somerville replaced Sydney Lamorea effective May 1, 2018.

At the April 5, 2018, meeting, Senate Executive established the Senate meeting dates for 2018-2019. The schedule is as follows:

- Friday, September 14, 2018
- Friday, October 19, 2018
- Friday, November 9, 2018
- Friday, December 14, 2018
- Friday, January 11, 2019
- Friday, February 8, 2019
- Friday, March 8, 2019
- Friday, April 12, 2019
- Friday, May 10, 2019 (10:30 a.m. start)
- Friday, May 24, 2019 (10:30 a.m. start)

Annual Reports were received from the following Senate committees:

- Honorary Degrees Subcommittee;
- Undergraduate Studies Committee;
- Undergraduate Standing & Petitions Subcommittee;
- Student Appeals Committee;
- Library Advisory Subcommittee;
- Technology and Infrastructure Committee;
- Graduate Studies Council.

Respectfully submitted,
Original signed by:

M. DeGagné, Chair
Senate Executive Committee

MOTION 1:   That the Annual Report of the Senate Executive Committee dated May 17, 2018, be received.

NIPISSING UNIVERSITY

ANNUAL REPORT OF THE HONORARY DEGREES SUBCOMMITTEE

May 11, 2018

Members	Attendance/Participation
M. DeGagné (Chair)	3
J. Nadeau	3
K. Ferguson	3
R. Nagy	1
G. Durnan	3
M. Tuncali	2
S. McArthur	2
C. Allen	1

As per past practice, an e-mail was sent out to the university community in August to solicit names of potential candidates to add to the master list.

At the meetings on October 12, 2017 and October 30, 2017, additional names were received from the solicitation and the committee agreed to forward these suggestions to Senate for approval. The list of names was approved at the November 10, 2017 Senate meeting.

The Committee Chair reached out to the individuals as decided by the Honorary Degree Subcommittee. Three of the five honorary degrees were accepted.

A second meeting was held on March 28, 2018, and six additional nominations for honorary degrees were added to the list of approved names. The list of names was approved at the April 13, 2018 Senate meeting. The Committee Chair contacted the next two individuals on the list. Confirmation was received for all five honorary degrees for the 2018 Convocation ceremonies.

The list of approved names from which the committee has to work currently stands at 36. This includes the names designated for June 2018

There were no nominations received for professor emeritus.

Respectfully submitted,

Mike DeGagné, Chair
Honorary Degrees Subcommittee

MOTION #1:   That Senate Executive receive the Annual Report of the Honorary Degrees Subcommittee dated May 11, 2018.

Sharon Johnston began her working career in Kingston, Ontario, as a psychiatric occupational therapist with young adults at Kingston General Hospital, and then as a therapist at Beechgrove, a treatment centre for young children with learning and behavioural problems. When the Johnston family moved to Toronto, she worked at the Crippled Children's Centre in Occupational Therapy. In June 2016, Mrs. Johnston was appointment Honorary Captain (Navy) for Military Personnel Command of the Canadian Armed Forces.

David Johnston began his professional career in 1966 as assistant professor in the Queen's University law faculty. He moved on to the University of Toronto's law faculty in 1968, and became dean of Western University's law faculty in 1974. He was named principal and vice-chancellor of McGill University in 1979, serving for fifteen years before returning to teaching as a full-time professor in the McGill Faculty of Law. In June 1999, he became the fifth president and vice-chancellor of the University of Waterloo, serving until 2010. David Johnston was the 28th governor general of Canada, from October 1, 2010, to October 2, 2017.

Major Brendan Tinsley is the first woman to command the 51 Aerospace Control and Warning (Operational Training) Squadron at the Canadian Air Defence Sector, 22 Wing/CFB North Bay. The North Bay base is the only location in the world where United States Forces are integrated into operations under overall Canadian Command.

George Couchie of Nipissing First Nations is a retired OPP Sergeant. George has over 33 years of policing experience, including 12 years designing and delivering award winning Native Awareness Training Programs and Initiatives to youth and members of the OPP, as well as to other government employees and teachers.

Paul Kennedy is a broadcast journalist who works at the Canadian Broadcasting Corporation. He is a veteran broadcaster and award-winning documentarist, and is best known for being the host of the program Ideas on CBC Radio One since 1999.

Yvonne Boyer is the first Indigenous person appointed to the Senate from Ontario. Yvonne is a Canadian lawyer and speaks on her criticism of inequities in Canada's health care in its treatment and availability to Indigenous peoples. She was a professor in the law faculty of the University of Ottawa and associate director at the school's Centre for Health Law, Policy and Ethics.

NIPISSING UNIVERSITY

**Report of the
Undergraduate Services and Awards Subcommittee**

January 17, 2018

There was a meeting of the UNDERGRADUATE SERVICES AND AWARDS Subcommittee on Wednesday, January 17, 2018.

PRESENT: Carole Richardson (Chair), Casey Philips, Ken McLellan, Debra Iafrate, Terry Campbell, Kaitlyn Walker, Tanya Lukin-Linklater, Louela Manankil-Rankin

ABSENT WITH REGRETS: Cory Tremblay, Andrea Parolin, Dan Walters

ABSENT WITHOUT REGRETS: Tysina Mein

GUESTS: Jennifer Mercer

1. Scholarships Awarded

Award	Number of Nominations	Awards Available
Tembec Citizenship Award	Eight	Three
Ivan and Joy Clysdale Memorial Achievement Award	Two	Two
Board of Governors Award	n/a	One

Respectfully Submitted,

Carole Richardson, Chair
Undergraduate Services and Awards Subcommittee

MOTION 1:   That the Report of the Undergraduate Services and Awards Subcommittee dated January 17, 2018 be received.

NIPISSING UNIVERSITY

Report of the
Undergraduate Standing & Petitions Subcommittee

February 14, 2017

There were seven (7) meetings of the UNDERGRADUATE STANDING AND PETITIONS Subcommittee held between December 21, 2017 and April 26, 2018.

December 21, 2017
PRESENT: Debra Iafrate, Carole Richardson, Pavlina Radia, Rick Vanderlee, Anahit Armenakyen, Logan Hoehn, John Vitale

ABSENT WITH REGRETS: Kaitlyn Walker, Tysina Mein, Cory Tremblay

 GUESTS: Ken McLellan, Heather Brown, Crystal Pigeau

January 15, 2018
PRESENT: Debra Iafrate, Carole Richardson, Rick Vanderlee, Pavlina Radia, Logan Hoehn, John Vitale, Anahit Armenakyan, Cory Tremblay

ABSENT WITH REGRETS: Tysina Mein, Kaitlyn Walker

 GUESTS: Crystal Pigeau, Ken McLellan, Casey Phillips, Jane Hughes

February 5, 2018
PRESENT: Debra Iafrate, Carole Richardson, Rick Vanderlee, Logan Hoehn, John Vitale, Anahit Armenakyan, Cory Tremblay

ABSENT WITH REGRETS: Pavlina Radia, Kaitlyn Walker, Tysina Mein

 GUESTS: Heather Brown, Crystal Pigeau, Dana Mackfall

February 26, 2018
PRESENT: Debra Iafrate, Carole Richardson, Pavlina Radia, Mary Pat Sullivan (Dean's Designate), Logan Hoehn, Anahit Armenakyan, Sydney Lamorea

ABSENT WITH REGRETS: John Vitale, Tysina Mein, Cory Tremblay, Kaitlyn Walker

 GUESTS: Ken McLellan, Jane Hughes (recording secretary)

March 19, 2018
PRESENT: Debra Iafrate, Carole Richardson, Pavlina Radia, Rick Vanderlee, Anahit Armenakyan, Logan Hoehn, John Vitale

ABSENT WITH REGRETS: Tysina Mein, Cory Tremblay, Kaitlyn Walker

 GUESTS: Heather Brown, Ken McLellan, Casey Phillips, Crystal Pigeau

April 9, 2018
PRESENT: Debra Iafrate, Carole Richardson, Pavlina Radia (Dean's designate),
             Anahit Armenakyan, Logan Hoehn, John Vitale

ABSENT WITH REGRETS: Rick Vanderlee, Tysina Mein, Cory Tremblay, Kaitlyn Walker

GUESTS: Heather Brown, Ken McLellan, Casey Phillips, Crystal Pigeau

April 26, 2018
PRESENT:

ABSENT WITH REGRETS:

GUESTS:
1. Petitions Heard:

	APPROVED	**DENIED**
Admission/Readmission		
Late Registration		
Late Withdrawal		
Degree Requirements Waived/Altered		
Transfer Credit		

Deferred:

Respectfully Submitted,

Debra Iafrate, Chair
Undergraduate Standing and Petitions Subcommittee

MOTION 1: That the Report of the Undergraduate Standing and Petitions Subcommittee dated
April 26, 2018 be received.

To: Undergraduate Studies Committee
From: Schulich School of Education Faculty Council
Date: April 24, 2018
Approved at the April 17, 2018 Faculty Council

Motion 1: That the Undergraduate Studies Committee recommend to Senate that the name of the Teacher of Anishnaabemwin as a Second Language (TASL) be changed to Teacher of Indigenous Language as a Second Language.

Motion 2: That the Undergraduate Studies Committee recommend to Senate that the course title and description for:
EDUC 1436 Anishnaabemwin Curriculum I
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on Anishnaabemwin in the primary, junior, intermediate and senior divisions.

Be changed to:

EDUC 1436 Indigenous Language Curriculum I
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on the primary, junior, intermediate and senior divisions.

Motion 3: That the Undergraduate Studies Committee recommend to Senate that the course title and description for:
EDUC 1446 Ojibwe Team Teaching I
Faculty-supervised teaching of Ojibwe, in a team setting, to a small group of students in a local day care or summer camp.

Be changed to:

EDUC 1446 Indigenous Language Team Teaching I
Faculty-supervised teaching of Indigenous Language, in a team setting, to a small group of students in a local day care or summer camp.

Motion 4: That the Undergraduate Studies Committee recommend to Senate that the course title and description for:
EDUC 1546 Anishnaabemwin Language Methodologies I
Teacher candidates develop the skills, knowledge and dispositions required to teach Anishnaabemwin as a second language. As an introductory course, students develop an understanding of language acquisition theory and its role in language development. They develop an understanding of second language learning methodology and develop an awareness of teaching and learning strategies for effective classroom instruction in grades Junior Kindergarten to grade 12.

Be changed to:

EDUC 1546 Indigenous Language Methodologies I
Teacher candidates develop the skills, knowledge and dispositions required to teach Indigenous Language as second languages. As an introductory course, students develop an understanding of language acquisition theory and its role in language development. They develop an understanding of second

language learning methodology and develop an awareness of teaching and learning strategies for effective classroom instruction in grades Junior Kindergarten to grade 12.

Motion 5: That the Undergraduate Studies Committee recommend to Senate that the course title and description for:
EDUC 2546 Anishnaabemwin Language Methodologies II
Teacher candidates examine second language learning pedagogy as it relates to learning in an Anishnaabemwin context and explore ways to incorporate and meet curriculum expectations and guidelines established by the Ministry of Education. Specifically, teacher candidates examine: planning of second language education programs, curriculum development, student assessment and program evaluation, multilingualism and cultural diversity, media and materials and innovative instructional SLE techniques and practices relevant to second language learning environment.

Be changed to:

EDUC 2546 Indigenous Language Methodologies II
Teacher candidates examine second language learning pedagogy as it relates to learning in an Indigenous Language context and explore ways to incorporate and meet curriculum expectations and guidelines established by the Ministry of Education. Specifically, teacher candidates examine: planning of second language education programs, curriculum development, student assessment and program evaluation, multilingualism and cultural diversity, media and materials and innovative instructional Second Language Education techniques and practices relevant to second language learning environment.

Motion 6: That Undergraduate Studies Committee recommend to Senate that the course title and description for:
EDUC 2436 Anishnaabemwin Curriculum II
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on Anishnaabemwin in the primary, junior, intermediate and senior divisions.

Be changed to:

EDUC 2436 Indigenous Language Curriculum II
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on the primary, junior, intermediate and senior divisions.

Motion 7: That Undergraduate Studies Committee recommend to Senate that the course title and description for:
EDUC 2446 Ojibwe Team Teaching II
Faculty-supervised teaching of Ojibwe, in a team teaching setting, to a small group of students in a local day care or summer camp.

Be changed to:

EDUC 2446 Indigenous Language Team Teaching II
Faculty-supervised teaching of Indigenous languages, in a team teaching setting, to a small group of students in a local day care or summer camp.

Motion 8: That the Undergraduate Studies Committee recommend to Senate the addition of EDUC 1556 Cree Language 1 to the Teacher of Indigenous Language as a Second Language Program.

A) Descriptive Data:

Course Code	**EDUC 1556**
Course Title	Cree Language 1
Course Credits	☑ 3 credits ☐ 6 credits ☐ Other
Course Description	Teacher candidates explore and analyze the linguistic complexities of the Algonquian grammatical structures, as they pertain especially to teachers of the Cree language and the Ontario curriculum documents. The emphasis in all instruction is on the four key skills of language learners in connection to exploring varying levels of fluency.
Course Prerequisite	
Course Corequisite	
Antirequisite	
Restriction	
Instructional Method	☑ lecture ☐ tutorial ☐ laboratory work ☐ studio work ☐ private study ☐ service learning ☐ seminar ☐ clinical practice ☐ practical work ☐ online delivery ☐ independent study
Hours of contact time expected per week	
Hours of contact time expected per term	36
Program Implications (ie. Does this program belong to a Group or Stream?)	Does this course have program implications? ☑ Yes ☐ No If yes, please specify: This course will be considered a mandatory course for students enrolled in the Teacher of Indigenous Languages as a Second Language Program, Cree stream.
Course Grouping or Stream	Does this course belong to a Group or Stream? ☐ Yes ☐ No If yes, please specify:
Cross-Listing	☐ Cross-Listed - this course may be credited towards
Learning Outcomes *(6-8 points, visible, measurable and in active voice)*	Teahcer candidates will: • Select appropriate teaching/assessment/learning methodologies to advance learner growth based on a process of gathering, reviewing, interpreting, and evaluating. • Demonstrate an ability to communicate accurately and reliably in various written oral forms (e.g., multimedia, interviews, reports) • Demonstrate an understanding of research conducted in Cree as a second language settings; • Become familiar with Ontario Ministry of Education policy documents. • Demonstrate understanding of the relationship between

	assessment, evaluation, instructional planning, and their impact on learning

Motion 9: That the Undergraduate Studies Committee recommend to Senate the addition of EDUC 2556 Cree Language 2 to the Teacher of Indigenous Language as a Second Language Program.

B) Descriptive Data:

Course Code	**EDUC 2556**
Course Title	Cree Language 2
Course Credits	☑ 3 credits ☐ 6 credits ☐ Other
Course Description	Teacher candidates continue to analyze the linguistic complexities of the Algonquian grammatical structures, as they pertain especially to teachers of the Cree language and the Ontario curriculum documents. The emphasis in all instruction is on the four key skills of language learners in connection to exploring varying levels of fluency.
Course Prerequisite	
Course Corequisite	
Antirequisite	
Restriction	
Instructional Method	☑ lecture ☐ tutorial ☐ laboratory work ☐ studio work ☐ private study ☐ service learning ☐ seminar ☐ clinical practice ☐ practical work ☐ online delivery ☐ independent study
Hours of contact time expected per week	
Hours of contact time expected per term	36
Program Implications (ie. Does this program belong to a Group or Stream?)	Does this course have program implications? ☑ Yes ☐ No If yes, please specify: This course will be considered a mandatory course for students enrolled in the Teacher of Indigenous Languages as a Second Language Program, Cree stream.
Course Grouping or Stream	Does this course belong to a Group or Stream? ☐ Yes ☐ No If yes, please specify:
Cross-Listing	☐ Cross-Listed - this course may be credited towards
Learning Outcomes *(6-8 points, visible, measurable and in active voice)*	Teacher candidates will: • Develop appropriate teaching/assessment/learning methodologies to advance learner growth based on a process of gathering, reviewing, interpreting, and evaluating. • Demonstrate a consistent ability to communicate accurately and reliably in various written oral forms (e.g., multimedia,

	interviews, reports) • Demonstrate a deeper understanding of research conducted in Cree as a second language setting; • Demonstrate appropriate use of Ontario Ministry of Education policy documents. • Demonstrate a deeper understanding of the relationship between assessment, evaluation, instructional planning, and their impact on learning

Motion 10: That the Undergraduate Studies Committee recommend to Senate the addition of EDUC 1576 Lunaape Language 1 to the Teacher of Indigenous Language as a Second Language Program.

C) Descriptive Data:

Course Code	**EDUC 1576**
Course Title	Lunaape Language 1
Course Credits	☑ 3 credits ☐ 6 credits ☐ Other
Course Description	Teacher candidates explore and analyze the linguistic complexities of the Lunaape grammatical structures, as they pertain especially to teachers of the Lunaape language and the Ontario curriculum documents. The emphasis in all instruction is on the four key skills of language learners in connection to exploring varying levels of fluency.
Course Prerequisite	
Course Corequisite	
Antirequisite	
Restriction	
Instructional Method	☑ lecture ☐ tutorial ☐ laboratory work ☐ studio work ☐ private study ☐ service learning ☐ seminar ☐ clinical practice ☐ practical work ☐ online delivery ☐ independent study
Hours of contact time expected per week	
Hours of contact time expected per term	36
Program Implications (ie. Does this program belong to a Group or Stream?)	Does this course have program implications? ☐ Yes ☐ No If yes, please specify:
Course Grouping or Stream	Does this course belong to a Group or Stream? ☐ Yes ☐ No If yes, please specify:
Cross-Listing	☐ Cross-Listed - this course may be credited towards
Learning Outcomes	Teacher candidates will: • Selects appropriate teaching/assessment/learning

(6-8 points, visible, measurable and in active voice)	methodologies to advance learner growth based on a process of gathering, reviewing, interpreting, and evaluating. • Demonstrates an ability to communicate accurately and reliably in various written oral forms (e.g., multimedia, interviews, reports) • Demonstrate an understanding of research conducted in Lunaape as a second language settings; • Become familiar with Ontario Ministry of Education policy documents. • Demonstrate understanding of the relationship between assessment, evaluation, instructional planning, and their impact on learning

Motion 11: That the Undergraduate Studies Committee recommend to Senate the addition of EDUC 2576 Lunaape Language 2 to the Teacher of Indigenous Language as a Second Language Program.

D) Descriptive Data:

Course Code	**EDUC 2576**
Course Title	Lunaape Language 2
Course Credits	☑ 3 credits ☐ 6 credits ☐ Other
Course Description	Teacher candidates continue to analyze the linguistic complexities of the Lunaape grammatical structures, as they pertain to the Ontario curriculum documents. The emphasis in all instruction is on the four key skills of language learners in connection to exploring varying levels of fluency.
Course Prerequisite	
Course Corequisite	
Antirequisite	
Restriction	
Instructional Method	☑ lecture ☐ tutorial ☐ laboratory work ☐ studio work ☐ private study ☐ service learning ☐ seminar ☐ clinical practice ☐ practical work ☐ online delivery ☐ independent study
Hours of contact time expected per week	
Hours of contact time expected per term	36
Program Implications (ie. Does this program belong to a Group or Stream?)	Does this course have program implications? ☐ Yes ☐ No If yes, please specify:
Course Grouping or Stream	Does this course belong to a Group or Stream? ☐ Yes ☐ No

	If yes, please specify:
[Cross-Listing](#)	☐ Cross-Listed - this course may be credited towards
Learning Outcomes *(6-8 points, visible, measurable and in active voice)*	Teacher candidates will: • Develop appropriate teaching/assessment/learning methodologies to advance learner growth based on a process of gathering, reviewing, interpreting, and evaluating. • Demonstrate a consistent ability to communicate accurately and reliably in various written oral forms (e.g., multimedia, interviews, reports) • Demonstrate a deeper understanding of research conducted in Lunaape as a second language setting; • Demonstrate appropriate use of Ontario Ministry of Education policy documents. • Demonstrate a deeper understanding of the relationship between assessment, evaluation, instructional planning, and their impact on learning

Motion 12: That Undergraduate Studies Committee recommend to Senate the addition of EDUC 1586 Mohawk Language 1 to the Teacher of Indigenous Language as a Second Language Program.

E) Descriptive Data:

Course Code	**EDUC 1586**
Course Title	Mohawk Language 1
Course Credits	☑ 3 credits ☐ 6 credits ☐ Other
Course Description	Teacher candidates explore and analyze the linguistic complexities of the Iroquoian grammatical structures, as they pertain especially to teachers of the Mohawk language and the Ontario curriculum documents. The emphasis in all instruction is on the four key skills of language learners in connection to exploring varying levels of fluency.
Course Prerequisite	
Course Corequisite	
Antirequisite	
Restriction	
Instructional Method	☑ lecture ☐ tutorial ☐ laboratory work ☐ studio work ☐ private study ☐ service learning ☐ seminar ☐ clinical practice ☐ practical work ☐ online delivery ☐ independent study
Hours of contact time expected per week	
Hours of contact time expected per term	36

Program Implications (ie. Does this program belong to a Group or Stream?)	Does this course have program implications? ☐ Yes ☐ No If yes, please specify:
Course Grouping or Stream	Does this course belong to a Group or Stream? ☐ Yes ☐ No If yes, please specify:
Cross-Listing	☐ Cross-Listed - this course may be credited towards
Learning Outcomes *(6-8 points, visible, measurable and in active voice)*	Teacher candidates will: • Select appropriate teaching/assessment/learning methodologies to advance learner growth based on a process of gathering, reviewing, interpreting, and evaluating. • Demonstrate an ability to communicate accurately and reliably in various written oral forms (e.g., multimedia, interviews, reports) • Demonstrate an understanding of research conducted in Mohawk as a second language settings; • Become familiar with Ontario Ministry of Education policy documents. • Demonstrate understanding of the relationship between assessment, evaluation, instructional planning, and their impact on learning

Motion 13: That the Undergraduate Studies Committee recommend to Senate the addition of EDUC 2586 Mohawk Language 2 to the Teacher of Indigenous Language as a Second Language Program.

F) Descriptive Data:

Course Code	**EDUC 2586**
Course Title	Mohawk Language 2
Course Credits	☑ 3 credits ☐ 6 credits ☐ Other
Course Description	Teacher candidates continue to analyze the linguistic complexities of the Iroquoian grammatical structures, as they pertain especially to teachers of the Mohawk language and the Ontario curriculum documents. The emphasis in all instruction is on the four key skills of language learners in connection to exploring varying levels of fluency.
Course Prerequisite	
Course Corequisite	
Antirequisite	
Restriction	
Instructional Method	☑ lecture ☐ tutorial ☐ laboratory work ☐ studio work ☐ private study ☐ service learning ☐ seminar ☐ clinical practice ☐ practical work ☐ online delivery ☐ independent study

Hours of contact time expected per week	
Hours of contact time expected per term	36
Program Implications (ie. Does this program belong to a Group or Stream?)	Does this course have program implications? ☐ Yes ☐ No If yes, please specify:
Course Grouping or Stream	Does this course belong to a Group or Stream? ☐ Yes ☐ No If yes, please specify:
Cross-Listing	☐ Cross-Listed - this course may be credited towards
Learning Outcomes *(6-8 points, visible, measurable and in active voice)*	Teacher candidates will: • Develop appropriate teaching/assessment/learning methodologies to advance learner growth based on a process of gathering, reviewing, interpreting, and evaluating. • Demonstrate a consistent ability to communicate accurately and reliably in various written oral forms (e.g., multimedia, interviews, reports) • Demonstrate a deeper understanding of research conducted in Mohawk as a second language setting; • Demonstrate appropriate use of Ontario Ministry of Education policy documents. • Demonstrate a deeper understanding of the relationship between assessment, evaluation, instructional planning, and their impact on learning

Motion 14: That the Undergraduate Studies Committee recommend to Senate the addition of EDUC 1596 Cayuga Language 1 to the Teacher of Indigenous Language as a Second Language Program.

G) Descriptive Data:

Course Code	**EDUC 1596**
Course Title	Cayuga Language 1
Course Credits	☑ 3 credits ☐ 6 credits ☐ Other
Course Description	Teacher candidates explore and analyze the linguistic complexities of the Iroquoian grammatical structures, as they pertain especially to teachers of the Cayuga language and the Ontario curriculum documents. The emphasis in all instruction is on the four key skills of language learners in connection to exploring varying levels of fluency.
Course Prerequisite	
Course Corequisite	
Antirequisite	
Restriction	
Instructional Method	☑ lecture ☐ tutorial ☐ laboratory work ☐ studio work ☐ private study ☐ service learning

	☐ seminar ☐ practical work ☐ independent study	☐ clinical practice ☐ online delivery
Hours of contact time expected per week		
Hours of contact time expected per term	36	
Program Implications (ie. Does this program belong to a Group or Stream?)	Does this course have program implications? ☐ Yes ☐ No If yes, please specify:	
Course Grouping or Stream	Does this course belong to a Group or Stream? ☐ Yes ☐ No If yes, please specify:	
Cross-Listing	☐ Cross-Listed - this course may be credited towards	
Learning Outcomes *(6-8 points, visible, measurable and in active voice)*	Teacher candidates will: • Select appropriate teaching/assessment/learning methodologies to advance learner growth based on a process of gathering, reviewing, interpreting, and evaluating. • Demonstrate an ability to communicate accurately and reliably in various written oral forms (e.g., multimedia, interviews, reports) • Demonstrate an understanding of research conducted in Cayuga as a second language settings; • Become familiar with Ontario Ministry of Education policy documents. • Demonstrate understanding of the relationship between assessment, evaluation, instructional planning, and their impact on learning	

Motion 15: That the Undergraduate Studies Committee recommend to Senate the addition of EDUC 2596 Cayuga Language 2 to the Teacher of Indigenous Language as a Second Language Program.

H) Descriptive Data:

Course Code	**EDUC 2596**
Course Title	Cayuga Language 2
Course Credits	☑ 3 credits ☐ 6 credits ☐ Other
Course Description	Teacher candidates continue to analyze the linguistic complexities of the Iroquoian grammatical structures, as they pertain especially to teachers of the Cayuga language and the Ontario curriculum documents. The emphasis in all instruction is on the four key skills of language learners in connection to exploring varying levels of fluency.
Course Prerequisite	
Course Corequisite	
Antirequisite	

Restriction	
Instructional Method	☑ lecture ☐ tutorial ☐ laboratory work ☐ studio work ☐ private study ☐ service learning ☐ seminar ☐ clinical practice ☐ practical work ☐ online delivery ☐ independent study
Hours of contact time expected per week	
Hours of contact time expected per term	36
Program Implications (ie. Does this program belong to a Group or Stream?)	Does this course have program implications? ☐ Yes ☐ No If yes, please specify:
Course Grouping or Stream	Does this course belong to a Group or Stream? ☐ Yes ☐ No If yes, please specify:
Cross-Listing	☐ Cross-Listed - this course may be credited towards
Learning Outcomes *(6-8 points, visible, measurable and in active voice)*	Teacher candidates will: • Develop appropriate teaching/assessment/learning methodologies to advance learner growth based on a process of gathering, reviewing, interpreting, and evaluating. • Demonstrate a consistent ability to communicate accurately and reliably in various written oral forms (e.g., multimedia, interviews, reports) • Demonstrate a deeper understanding of research conducted in Cayuga as a second language setting; • Demonstrate appropriate use of Ontario Ministry of Education policy documents. • Demonstrate a deeper understanding of the relationship between assessment, evaluation, instructional planning, and their impact on learning

Motion 16: That the Undergraduate Studies Committee recommend to Senate that the program requirements for the Teacher of Indigenous Language as a Second Language be changed to include:
Six credits from:
EDUC 1456 Anishnaabemwin Language I and EDUC 2456 Anishnaabemwin Language II, or
EDUC 1556 Cree Language I and EDUC 2556 Cree Language II, or
EDUC 1576 Lunaape Language I and EDUC 2576 Cree Language II, or
EDUC 1586 Mohawk Language I and EDUC 2586 Mohawk Language II, or
EDUC 1596 Cayuga Language I and EDUC 2596 Cayuga Language II

Motion 17: That the Undergraduate Studies Committee recommend to Senate that the course title and description for:
EDUC 4738 French as a Second Language (Intermediate)
Teacher candidates develop the knowledge and skills necessary to teach French as a second language (core, extended and immersion) at the intermediate division. Candidates use the French language for all aspects of this course (example: submitting assignments).

Be changed to:

EDUC 4738 French as a Second Language (Elementary)
Teacher candidates develop the knowledge and skills necessary to teach French as a second language (core, extended and immersion) at the elementary level (K-8). The course focuses on the development of listening, speaking, reading, and writing skills of French as a second language learners. Candidates use the French language for all aspects of this course.

Motion 18: That the Undergraduate Studies Committee recommend to Senate that the course title and description for:
EDUC 4739 French as a Second Language (Senior)
Teacher candidates develop the knowledge and skills necessary to teach French as a second language (core, extended, and immersion) at the senior level. Candidates use the French language for all aspects of this course (example: submitting assignments).

Be changed to:

EDUC 4739 French as a Second Language (Secondary)
Teacher candidates develop the knowledge and skills necessary to teach French as a second language (core, extended, and immersion) at the secondary level (7-12). The course focuses on the development of listening, speaking, reading, and writing skills of French as a second language learners. Candidates use the French language for all aspects of this course.

Report of the
Undergraduate Studies Committee

May 10, 2018

The meeting of the **Undergraduate Studies Committee** was held on Thursday, May 10, 2018, at 11:00 am in F303. The following members attended:

Arja Vainio-Mattila	Carole Richardson	Rick Vanderlee
Pavlina Radia (Designate)	Debra Iafrate	Tony Parkes
Laurie Peachey	Tyrel Sommerville	

Jane Hughes, Recording Secretary

Absent with Regrets: Lanyan Chen, Chris Hachkowski, Astrid Steele, Dan Walters, Keenan Kearney, Hannah Mackie

Guests: Jessica McMillan, Crystal Pigeau

Subcommittee Reports:
The Report of the Undergraduate Services and Awards Subcommittee dated January 17, 2018 was received and the Undergraduate Standing and Petitions Subcommittee dated April 26, 2018 was received.

The Undergraduate Studies Committee received and discussed changes from the Schulich School of Education. The outcomes of those discussions are reflected in the recommendations to Senate contained in the motions below. Supporting material is attached.

Respectfully submitted,

Dr. Arja Vainio-Mattila
Provost & Vice-President, Academic & Research

MOTION 1:   That Senate receive the Report of the Undergraduate Studies Committee, dated May 10, 2018.

1. SCHULICH SCHOOL OF EDUCATION

MOTION 2:   That Senate approve that the name of the Teacher of Anishnaabemwin as a Second Language (TASL) be changed to Teacher of Indigenous Language as a Second Language.

MOTION 3:   That Senate approve that the course title and description for:

EDUC 1436 Anishnaabemwin Curriculum I
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on Anishnaabemwin in the primary, junior, intermediate and senior divisions.

Be changed to:

EDUC 1436 Indigenous Languages Curriculum I
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on the primary, junior, intermediate and senior divisions.

MOTION 4:   That Senate approve that the course title and description for:

EDUC 1446 Ojibwe Team Teaching I
Faculty-supervised teaching of Ojibwe, in a team setting, to a small group of students in a local day care or summer camp.

Be changed to:

EDUC 1446 Indigenous Languages Team Teaching I
Faculty-supervised teaching of Indigenous Languages, in a team setting, to a small group of students in a local day care or summer camp.

MOTION 5:   That Senate approve that the course title and description for:

EDUC 1546 Anishnaabemwin Language Methodologies I
Teacher candidates develop the skills, knowledge and dispositions required to teach Anishnaabemwin as a second language. As an introductory course, students develop an understanding of language acquisition theory and its role in language development. They develop an understanding of second language learning methodology and develop an awareness of teaching and learning strategies for effective classroom instruction in grades Junior Kindergarten to grade 12.

Be changed to:

EDUC 1546 Indigenous Languages Methodologies I
Teacher candidates develop the skills, knowledge and dispositions required to teach Indigenous Languages as second languages. As an introductory course, students develop an understanding of language acquisition theory and its role in language development. They develop an understanding of second language learning methodology and develop an awareness of teaching and learning strategies for effective classroom instruction in grades Junior Kindergarten to grade 12.

MOTION 6:   That Senate approve that the course title and description for:

EDUC 2546 Anishnaabemwin Language Methodologies II
Teacher candidates examine second language learning pedagogy as it relates to learning in an Anishnaabemwin context and explore ways to incorporate and meet curriculum expectations and guidelines established by the Ministry of Education. Specifically, teacher candidates examine: planning of second language education programs, curriculum development, student assessment and program evaluation, multilingualism and cultural diversity, media and materials and innovative instructional SLE techniques and practices relevant to second language learning environment.

Be changed to:

EDUC 2546 Indigenous Languages Methodologies II
Teacher candidates examine second language learning pedagogy as it relates to learning in an Indigenous Language context and explore ways to incorporate and meet curriculum expectations and guidelines established by the Ministry of Education. Specifically, teacher candidates examine: planning of second language education programs, curriculum development, student assessment and program evaluation, multilingualism and cultural diversity, media and materials and innovative instructional Second Language Education techniques and practices relevant to second language learning environment.

MOTION 7:   That Senate approve that the course title and description for:

EDUC 2436 Anishnaabemwin Curriculum II
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on Anishnaabemwin in the primary, junior, intermediate and senior divisions.

Be changed to:

EDUC 2436 Indigenous Languages Curriculum II
Teacher candidates examine and develop strategies to implement the Ontario curriculum guidelines and policy documents for Native Languages, with an emphasis on the primary, junior, intermediate and senior divisions.

MOTION 8:   That Senate approve that the course title and description for:

EDUC 2446 Ojibwe Team Teaching II
Faculty-supervised teaching of Ojibwe, in a team teaching setting, to a small group of students in a local day care or summer camp.

Be changed to:

EDUC 2446 Indigenous Languages Team Teaching II
Faculty-supervised teaching of Indigenous Languages, in a team teaching setting, to a small group of students in a local day care or summer camp.

MOTION 9:   That Senate approve the addition of EDUC 1556 Cree Language 1 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 10:   That Senate approve the addition of EDUC 2556 Cree Language 2 to the Teacher of Indigenous Language as a Second Language Program.

MOTION 11:   That Senate approve the addition of EDUC 1576 Lunaape Language 1 to the Teacher of
Indigenous Language as a Second Language Program.

MOTION 12:   That Senate approve the addition of EDUC 2576 Lunaape Language 2 to the Teacher of
Indigenous Language as a Second Language Program.

MOTION 13:   That Senate approve the addition of EDUC 1586 Mohawk Language 1 to the Teacher of
Indigenous Language as a Second Language Program.

MOTION 14:   That Senate approve the addition of EDUC 2586 Mohawk Language 2 to the Teacher of
Indigenous Language as a Second Language Program.

MOTION 15:   That Senate approve the addition of EDUC 1596 Cayuga Language 1 to the Teacher of
Indigenous Language as a Second Language Program.

MOTION 16:   That Senate approve the addition of EDUC 2596 Cayuga Language 2 to the Teacher of
Indigenous Language as a Second Language Program.

MOTION 17:   That Senate approve that the program requirements for the Teacher of Indigenous Language
as a Second Language be changed to include:

Six credits from:
EDUC 1456 Anishnaabemwin Language I and EDUC 2456 Anishnaabemwin Language II,
or
EDUC 1556 Cree Language I and EDUC 2556 Cree Language II, or
EDUC 1576 Lunaape Language I and EDUC 2576 Cree Language II, or
EDUC 1586 Mohawk Language I and EDUC 2586 Mohawk Language II, or
EDUC 1596 Cayuga Language I and EDUC 2596 Cayuga Language II

MOTION 18:   That Senate approve that the course title and description for:

EDUC 4738 French as a Second Language (Intermediate)
Teacher candidates develop the knowledge and skills necessary to teach French as a second
language (core, extended and immersion) at the intermediate division. Candidates use the
French language for all aspects of this course (example: submitting assignments).

Be changed to:

EDUC 4738 French as a Second Language (Elementary)
Teacher candidates develop the knowledge and skills necessary to teach French as a second
language (core, extended and immersion) at the elementary level (K-8). The course focuses
on the development of listening, speaking, reading, and writing skills of French as a second
language learners. Candidates use the French language for all aspects of this course.

MOTION 19:   That Senate approve that the course title and description for:

EDUC 4739 French as a Second Language (Senior)
Teacher candidates develop the knowledge and skills necessary to teach French as a second
language (core, extended, and immersion) at the senior level. Candidates use the French
language for all aspects of this course (example: submitting assignments).

Be changed to:

EDUC 4739 French as a Second Language (Secondary)
Teacher candidates develop the knowledge and skills necessary to teach French as a second language (core, extended, and immersion) at the secondary level (7-12). The course focuses on the development of listening, speaking, reading, and writing skills of French as a second language learners. Candidates use the French language for all aspects of this course.

NIPISSING UNIVERSITY

ANNUAL REPORT OF THE
UNDERGRADUATE SERVICES AND AWARDS SUBCOMMITTEE

April 10, 2018

The Senate Subcommittee on Undergraduate Services and Awards Subcommittee met a total of 3 times between July 1, 2017 and February 14, 2018.

COMMITTEE MEMBERS	ATTENDANCE
Carole Richardson (Chair)	3
Tanya Lukin-Linklater	2
Andrea Parolin	2
Casey Phillips	2
Ken McLellan	2
Debra Iafrate	2
Dan Walters	2
Louela Manankil-Rankin	2
Terry Campbell	3
Kaitlyn Walker	3
Cory Tremblay	0
Tysina Mein	0
Cooper Allen	0

The committee heard appeals to renew previously awarded scholarships, selected the recipients of the Tembec Citizenship, Ivan and Joy Clysdale Memorial Achievement, Board of Governors, and the David Marshall Leadership Awards and provided feedback on the selection process for some of the awards.

Respectfully submitted,

Carole Richardson

Dr. Carole Richardson, Chair
Undergraduate Services and Awards Subcommittee

Motion 1:   That the Senate Committee receive the Annual Report of the Undergraduate Services and Awards Subcommittee dated April 10, 2018.

NIPISSING UNIVERSITY

ANNUAL REPORT OF THE
UNDERGRADUATE STANDING AND PETITIONS SUBCOMMITTEE

May 1, 2018

The Senate Subcommittee on Undergraduate Standing and Petitions Subcommittee met a total of 15 times between July 1, 2017 and May 1, 2018.

COMMITTEE MEMBERS	ATTENDANCE
Debra Iafrate	13
Carole Richardson	14
Pavlina Radia	11
Rick Vanderlee	11
Anahit Armenakyen	14
Logan Hoehn	15
John Vitale	12
Cooper Allen	1
Sydney Lamorea	1
Tysina Mein	0
Cory Tremblay	3
Kaitlyn Walker	2
Callie Mady (Designate)	1
Crystal Pigeau (Designate)	2
Mary Pat Sullivan (Designate)	1

The S&P Subcommittee heard a total of 170 petitions. These included consideration of late registrations, honourable withdrawal from courses and variations in degree requirements, Senate regulations, and admission requirements.

Respectfully submitted,

Debra Iafrate, Chair
Undergraduate Standing and Petitions Subcommittee

Motion 1:   That the Undergraduate Studies Committee receive the Annual Report of the Undergraduate Standing and Petitions Subcommittee dated May 1, 2018.

NIPISSING UNIVERSITY

ANNUAL REPORT OF THE
STUDENT APPEALS COMMITTEE

May 1, 2018

The Student Appeals Committee Individual Appeal Panels met 12 times between July 1, 2017 and May 1, 2018.

COMMITTEE MEMBERS

Debra Iafrate (Chair)
John Allison
Nathan Colborne
Stephen Kariuki
Jeff Scott
Mary Pat Sullivan
Ping Zou
Adam Higgins
Cory Tremblay
Kaitlyn Walker
Cooper Allen (July - November)
Tysina Mein (December – May)

Seven (7) appeals were submitted to the Student Appeals Committee, as follows:

4 – Faculty of Applied and Professional Studies
2 – Faculty of Arts and Science
1– Schulich School of Education

Respectfully submitted,

Debra Iafrate, Chair
Student Appeals Committee

Motion 1:   That the Annual Report of the Student Appeals Committee dated May 1, 2018, be received by Senate.

Nipissing University
Annual Report of the Library Advisory Senate Subcommittee – 2017/2018

April 20, 2018

The Library Advisory Senate Subcommittee met two times: Thursday October 26, 2017, and Friday January 26, 2018.

Membership	**Attendance**
Nancy E. Black (Chair)	2
John Allison (Vice Chair)	2
Anahita Baregheh (Skype)	2
Darren Campbell	2
Christine Cho (Skype)	2
Astrid Steele	1
Stephen Connor	1
Jeffery Overall	1
Student representative	0

Janet Coates (minute taker)

At our first meeting, the subcommittee terms of reference were reviewed and John Allison agreed to be Vice Chair.

Discussions at both meetings focused on various library activities, information resources, and services. There was general discussion about procedural practices with respect to collection development and that subject librarians welcome and accept suggestions from faculty. Some discussion took place about the NUFA donation from past years and questions about the potential for other financial donations for the library. During the discussion, it was noted that priorities for potential donations have been identified for the Funding Priorities initiative coordinated by Len Gamache. Following this discussion, the Chair contacted Advancement to inquire about the appropriate process with respect to potential donation opportunities and reported this information to the committee.

The focus of committee activities this year was the Special Acquisitions Fund (approximate amount $6,600). Faculty submitted suggestions for information resources, which were reviewed by the committee members. The items suggested were ordered for the Harris Learning Library collection.

I thank the committee members for their assistance and contributions.

Respectfully submitted,

Nancy E. Black

Nancy E. Black, PhD
Chair, Library Advisory Subcommittee

Motion 1: That the Teaching and Learning Committee receive the Annual Report of the Library Advisory Subcommittee dated April 20, 2018.

Nipissing University
Annual Report of the Technology and Infrastructure Committee

April 23, 2018

During the 2017-18 academic year, the Technology and Infrastructure Committee met three times, on September 22, October 6, and March 8. Members of the Committee also met with personnel from Operations, UTS, and the Registrar's Office over the year so as to make recommendations for the renovation and operational improvement of various classrooms.

Attendance

Rob Breton, Chair	3
Anahita Baregheh, Vice-Chair	2
John Vitale	2
Laura Rossi	2
Nancy Black	3
Cooper Allen	0
Heather Hersemeyer	3
Cheryl Sutton (or designate)	0
Shane Dunstall	0

In addition to the meetings listed above, members of the Committee audited classrooms over the summer and a number of our recommendations have been acted upon by UTS. These included putting more computers in classrooms, developing a strategy to regularly update software in classroom computers, and offering faculty training at the beginning of a semester in the use of classroom equipment.

The Committee began the year by discussing how best to follow up on the recommendations set out in our 2016-17 report and how best to make recommendations to Operations. We later met with David Drenth so as to establish a process by which the Committee can have a continuous presence when classroom changes are scheduled to be made. We discussed with David that it is especially important for the Committee to be able to be involved when recommendations by the classroom consultant are to be implemented.

The Chair acknowledges and thanks the Technology and Infrastructure Committee members for their many hours of work.

Respectfully submitted,

Rob Breton

Motion 1: That Senate receive the 2017-18 Annual Report of the Technology and Infrastructure Committee, dated April 23, 2018.

NIPISSING
UNIVERSITY

Report of the Graduate Studies Committee
May 14, 2018

The meeting of the Graduate Studies Council was held on Monday May 14, 2018 at 9:00 am.

Present:
Jim McAuliffe, Chair
Carole Richardson
Murat Tuncali
Benjamin Kelly (for Carly Dokis)
Barbi Law
Kurt Clausen
Derek Neal
Jeff Dech
Rick Vanderlee

Nancy Black
Adam Higgins

Guest:
Carly Snell
Amber McCarthy
Crystal Pigeau
Jessica McMillan
Dan St. Georges

Absent, with regrets:
Alex Karassev
Erin Truswell
An Nguyen
Debra Iafrate

Secretary:
April Gardiner

Jim McAuliffe chaired the meeting. The Graduate Studies Committee passed the following motions:

<u>Master of Sociology</u>

Motion 1: That the Major Research Paper supervisory committee structure for the MA in Sociology be changed from:

"The MRP committee will consist of the MRP supervisor approved by Nipissing University Graduate Studies Council and one consulting committee member drawn from the Regional Advisory Committee (RAC) membership."

to

"The MRP committee will consist of the MRP supervisor and one committee member who is either a member of the graduate faculty or is a member of the Regional Advisory Committee (RAC)."

(Kelly/Tuncali) CARRIED

Motion 2: That the Thesis Research Project supervisory committee structure for the MA in Sociology be changed from:

"The TRP committee will consist of a TRP supervisor and two committee members approved by Nipissing University Graduate Studies Council, and one consulting member drawn from the Regional Advisory Committee (RAC) membership."

to

"The TRP committee will consist of the TRP supervisor and two committee members who are members of the graduate faculty, or the TRP supervisor, one committee member who is a member of the graduate faculty, and one committee member drawn from the Regional Advisory Committee (RAC) membership.

 (Kelly/Tuncali) CARRIED

Rationale: The MA in Sociology has a focus on applied social research and encourages the direct involvement of regional and community agencies, organizations, municipal governments, non-profit agencies and government ministries in the form of the Nipissing University MA in Sociology Applied Social Research Regional Advisory Committee (RAC). The RAC serves to advise, guide, and support faculty and students in identifying practicum opportunities and opportunities for conducting applied socially relevant research. In this way, we invite RAC membership participation in MRP and TRP supervisory committees, however it was never our intention to require RAC participation in supervisory committees. Required RAC participation in supervisory committees is impractical in two ways: 1) RAC representatives may not be able to participate in all MRP or TRP supervisory committees and we risk RAC fatigue by requiring a RAC representative for all supervisory committees, and 2) RAC participation and involvement may not be suitable or relevant for all MRP or TRP projects. Therefore, we request that the supervisory committee structure for the MRP and TRP in the MA in Sociology be modified as outlined.

Master of Education

Motion 3: That the MEd admission requirements include a four-year undergraduate degree with a 70% average on the last 10 full courses.

(Clausen/Law) CARRIED

Motion 4: That MEd program no longer issue offers of admission with probation.
(Clausen/Richardson) CARRIED

The MEd program brought two motions forward, the 70% minimum admission average is to be consistent with the minimum graduate studies admission requirement of a "minimum B standing". Admission on probation did not alter the students' Program of Study in any meaningful way and should be removed and the practice of "offers on probation" be discontinued.

Masters of Environmental Science/Studies

Motion 5: That the MES/MESc program expectations be approved (appendix A).
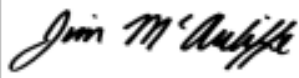(Dech/Richardson) CARRIED

Motion 6: That the MES/MESc course expectations and outcomes be approved as listed (Appendix B).
(Dech/Neal) CARRIED

Rationale: Program expectations, course expectations and outcomes were not required when the MESc/MES programs were originally approved and as a result were not received by Senate. The

motions presented correct that omission and assist in the preparation of documentation for the IQAP self study.

Respectfully submitted,

Dr. Jim McAuliffe
Dean of Graduate Studies and Research

Motion 1:   That the report of the Graduate Studies Council, dated Monday May 14, 2018, be received by Senate.

Motion 2:   That Senate approves the changes in the MA in Sociology Committee structure for the Major Research Paper as outlined.

Motion 3:   That Senate approves the changes in the MA in Sociology Committee structure for the Thesis as attached.

Motion 4:   That Senate approves the MEd admission requirements include a four-year undergraduate degree with a 70% average on the last 10 full courses.

Motion 5:   That Senate approves that MEd program no longer issue offers of admission with probation.

Motion 6:   That Senate receives the MES/MESc program expectations as attached. (Appendix A)

Motion 7:   That Senate receives the MES/MESc course expectations and outcomes as attached. (Appendix B)

Appendix A

b) *Clarity and appropriateness of program requirements and associated learning outcomes*

The Nipissing University Master's Degree Level Expectations are outlined below:

A master's degree will be awarded to students who have demonstrated the following:

1. Depth and breadth of knowledge:
A systematic understanding of knowledge, including, where appropriate, relevant knowledge outside the field and/or discipline, and a critical awareness of current problems and/or new insights, much of which is at, or informed by, the forefront of their academic discipline, field of study, or area of professional practice.

2. Research and scholarship:
A conceptual understanding and methodological competence that
(a) Enables a working comprehension of how established techniques of research and inquiry are used to create and interpret knowledge in the discipline;
(b) Enables a critical evaluation of current research and advanced research and scholarship in the discipline or area of professional competence; and
(c) Enables a treatment of complex issues and judgments based on established principles and techniques.

On the basis of that competence 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:
Competence in the research process by applying an existing body of knowledge in the critical analysis of a new question or of a specific problem or issue in a new setting.

4. Professional capacity/autonomy:
   a) The qualities and transferable skills necessary for employment requiring:
      i) The exercise of initiative and of personal responsibility and accountability; and
      ii) 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. Levels of communications skills:
The ability to communicate ideas, issues and conclusions clearly.

6. Awareness of limits of knowledge:

Cognizance of the complexity of knowledge and of the potential contributors of other interpretations, methods, and disciplines.

The MESc. Environmental Science degree will offer students the opportunity to complete the program of study in either (1) one year, by completing the required coursework requirements and a library/secondary source Major Research Paper (MRP) or (2) two years, by completing the required coursework requirements and a primary source original thesis research project (TRP). Based on the Nipissing University Master's Degree Level Expectations, the MESc. Environmental Science degree program learning outcomes are presented below, separately for the MRP and TRP options.

The Nipissing University MESc. Environmental Science will be awarded to students in the **one-year, Major Research Paper (MRP) option** who have demonstrated the following:

1. Depth and breadth of knowledge
   A systematic knowledge of one of the core disciplines within environmental science (e.g. Biology, Chemistry, Physical Geography) and its major sub-discipline specialities, along with a critical awareness of current problems and new insights within the discipline, informed by the student's own involvement in writing a Major Research Paper (MRP) based on existing data, library research and/or secondary source materials.

   A critical awareness in the argument of the MRP and an original contribution in the application of the MRP to addressing an environmental problem or environmental issue, as identified in systematic review of the academic literature and in consultation with the student's MRP supervisor and committee members, and where appropriate in working with agencies, organizations and government ministries.

   A critical understanding of the values and limitations of different approaches to studying human-environment interactions developed through dialogue and composition in core courses that elucidate different ways of thinking about environmental problems, comparing and contrasting the scientific method and its application in natural and social sciences to humanistic approaches, ultimately challenging different paradigms and recognizing value beyond the boundaries of their individual background disciplines.

2. Research and Scholarship
   A conceptual understanding and methodological competence that:
   a) enables a working comprehension of how established scientific theories and research methods are used to create and interpret knowledge;
   b) enables a critical evaluation of current research in the discipline, and advanced research and scholarship in relation to the student's own involvement in applying knowledge to the investigation of an environmental problem or issue;
   c) enables an awareness and evaluation of complex issues and decisions based on established scientific theories, methods and current research in the discipline; and,
   d) demonstrates the ability to develop and support a sustained argument in written form, and the ability to present such an argument orally.

3. Level of application of knowledge

Competence in the research process by applying an existing body of theoretical and methodological knowledge to the critical analysis and evaluation of an environmental problem or issue, including the design and implementation of a research strategy to gather information about the problem or issue based on library research and/or secondary source materials and in consultation with the student's MRP supervisor and committee members. Competence in the research process includes reporting of the results of the research strategy in a sustained argument in written form.

4. Professional capacity/autonomy
   a) The qualities and transferable skills necessary for employment and future education including:
      i. the exercise of initiative and of personal responsibility and accountability;
      ii. decision-making in complex situations involving environmental problems or issues;
      iii. the development of agency, organization contacts and a professional network; and,
      iv. superior research and oral and written communication skills.

   b) The intellectual independence required for continuing professional development, including the need to remain informed of ongoing developments and innovations in scientific theories and research methods, by involvement in professional associations, presentations at conferences, and continuing involvement in the field of environmental science at the community, national and international level.

   c) The ethical behaviour consistent with academic integrity and social responsibility, and the use of appropriate guidelines and procedures for responsible conduct of research, including sensitivity to the cultural dynamics of conducting research in diverse ethnic communities, including First Nations, Inuit and Métis communities.

   d) The ability to appreciate the broader implications and social impacts of applying knowledge to particular environmental contexts and to the conduct of environmental research generally.

5. Levels of communication skills
   The ability to communicate ideas, problems and issues, and conclusions clearly through the application of the scientific method and the use of both oral and written communication.

6. Awareness of the limits of knowledge
   Cognizance of the complexity of knowledge and of the potential contribution of other perspectives, interpretations, methods and disciplines to addressing environmental problems and issues.

The Nipissing University MESc. Environmental Science degree will be awarded to students in the **two-year, Thesis Research Project (TRP) option** who have demonstrated the following:

1. Depth and breadth of knowledge

   A systematic knowledge of one of the core disciplines within environmental science (e.g. Biology, Chemistry, Physical Geography) and its major sub-discipline specialities, along with a critical awareness of current problems and new insights within the discipline, informed by the student's own involvement in designing, implementing and reporting on in a written argument a thesis research project (TRP) based on original, primary data, or a meta analysis of primary data from several other published sources.

   A critical awareness in the argument of the TRP, which makes an original contribution in collecting, analyzing and reporting on primary data in the field in support of an argument addressing an environmental problem or issue, as identified in systematic review of the academic literature and in consultation with the student's TRP supervisor and committee members, and where appropriate in working with and conducting research with agencies, organizations and government ministries.

   A critical understanding of the values and limitations of different approaches to studying human-environment interactions developed through dialogue and composition in core courses that elucidate different ways of thinking about environmental problems, comparing and contrasting the scientific method and its application in natural and social sciences to humanistic approaches, ultimately challenging different paradigms and recognizing value beyond the boundaries of their individual background disciplines.

    Research and Scholarship
   A conceptual understanding and methodological competence that:
   a) enables a working comprehension of how established scientific theories and research methods are used to create and interpret knowledge;
   b) enables a critical evaluation of current research in the discipline, and advanced research and scholarship in relation to the student's own involvement in designing, implementing and reporting on in a written argument a thesis research project (TRP) that makes an original contribution in collecting, analyzing and reporting on primary data in the field in support of an argument addressing an environmental problem or issue, as identified in systematic review of the academic literature and in consultation with the student's TRP supervisor and committee members;
   c) enables an awareness and evaluation of complex issues and decisions based on established theories, methods and current research in the discipline, and the students own involvement in designing an original research thesis project, including analyzing and reporting on primary data they have collected or obtained from primary sources as part of a meta analysis; and,
   d) demonstrates the ability to develop and support a sustained argument in written form, and the ability to present such an argument orally.

3. Level of application of knowledge
   Competence in the research process by applying an existing body of theoretical and methodological knowledge to the critical analysis and evaluation of an environmental

problem or issue, including the design and implementation of a research strategy to gather information about the problem or issue based on an original thesis research project involving the collection, analysis and reporting on primary data in the field or data obtained from primary sources as part of a meta analysis, in support of an argument addressing an environmental problem or issue, and in consultation with the student's TRP supervisor and committee members. Competence in the research process includes reporting of the results of the research strategy in a sustained argument in written form;

4. Professional capacity/autonomy
   a) The qualities and transferable skills necessary for employment including:
      i.   the exercise of initiative and of personal responsibility and accountability;
      ii. decision-making in complex situations involving environmental problems and issues;
      iii. experience and competence in the design and execution of an original, primary data research project;
      iv. the development of agency, organization contacts and a professional network; and,
      v.   superior research and oral and written communication skills.

   b) The intellectual independence required for continuing professional development, including the need to remain informed of ongoing developments and innovations in scientific theories and research methods, by involvement in professional associations, publications of research, presentations at conferences, and involvement at the community, national and international level.

   c) The ethical behaviour consistent with academic integrity and social responsibility, and the use of appropriate guidelines and procedures for responsible conduct of research, including the preparation, submission and approval of Research Ethics Board (REB) documents when necessary, and sensitivity to the cultural dynamics of conducting research in diverse ethnic communities, including First Nations, Inuit and Métis communities.

   d) The ability to appreciate the broader implications and social impacts of applying knowledge to particular environmental contexts and to the conduct of environmental research generally.

5. Levels of communication skills
   The ability to communicate ideas, problems and issues, and conclusions clearly through the application of the scientific method and the use of both oral and written communication.

6. Awareness of the limits of knowledge
   Cognizance of the complexity of knowledge and of the potential contribution of other perspectives, interpretations, methods and disciplines to addressing environmental problems and issues.

The MES Environmental Studies degree will offer students the opportunity to complete the program of study in either (1) one year, by completing the required coursework requirements and a library/secondary source Major Research Paper (MRP) or (2) two years, by completing the required coursework requirements and a primary source original thesis research project (TRP). Based on the Nipissing University Master's Degree Level Expectations, the MES Environmental Studies degree program learning outcomes are presented below, separately for the MRP and TRP options.

The Nipissing University MES Environmental Studies degree will be awarded to students in the **one-year, Major Research Paper (MRP) option** who have demonstrated the following:

1. Depth and breadth of knowledge

   A systematic knowledge of one of the core disciplines within environmental studies (e.g. History, Human Geography) and its major sub-discipline specialities, along with a critical awareness of current problems and new insights within the discipline, informed by the student's own involvement in writing a Major Research Paper (MRP) based on existing data, library research and/or secondary source materials.

   A critical awareness in the argument of the MRP and an original contribution in the application of the MRP to addressing an environmental problem or environmental issue, as identified in systematic review of the academic literature and in consultation with the student's MRP supervisor and committee members, and where appropriate in working with agencies, organizations and government ministries.

   A critical understanding of the values and limitations of different approaches to studying human-environment interactions developed through dialogue and composition in core courses that elucidate different ways of thinking about environmental problems, comparing and contrasting the scientific method and its application in natural and social sciences to humanistic approaches, ultimately challenging different paradigms and recognizing value beyond the boundaries of their individual background disciplines.

2. Research and Scholarship
   A conceptual understanding and methodological competence that:
   a) enables a working comprehension of how established theories and research methods are used to create and interpret knowledge;
   b) enables a critical evaluation of current research in the discipline, and advanced research and scholarship in relation to the student's own involvement in applying disciplinary (e.g. historical, geographic) knowledge to the investigation of an environmental problem or issue;
   c) enables an awareness and evaluation of complex issues and decisions based on established theories, methods and current research in the discipline; and,
   d) demonstrates the ability to develop and support a sustained argument in written form, and the ability to present such an argument orally.

3. Level of application of knowledge
   Competence in the research process by applying an existing body of theoretical and methodological knowledge to the critical analysis and evaluation of an environmental problem or issue, including the design and implementation of a research strategy to gather information about the problem or issue based on library research and/or secondary source materials and in consultation with the student's MRP supervisor and committee members. Competence in the research process includes reporting of the results of the research strategy in a sustained argument in written form.

4. Professional capacity/autonomy
   a) The qualities and transferable skills necessary for employment and future education including:
      i.   the exercise of initiative and of personal responsibility and accountability;
      ii.   decision-making in complex situations involving environmental problems and issues;
      iii.   the development of agency, organization contacts and a professional network; and,
      iv.   superior research and oral and written communication skills.

   b) The intellectual independence required for continuing professional development, including the need to remain informed of ongoing developments and innovations in theories and research methods, by involvement in professional associations, presentations at conferences, and continuing involvement in the field of environmental studies at the community, national and international level.

   c) The ethical behaviour consistent with academic integrity and social responsibility, and the use of appropriate guidelines and procedures for responsible conduct of research, including sensitivity to the cultural dynamics of conducting research in diverse ethnic communities, including First Nations, Inuit and Métis communities.

   d) The ability to appreciate the broader implications and social impacts of applying knowledge to particular environmental contexts and to the conduct of environmental research generally.

5. Levels of communication skills
   The ability to communicate ideas, problems and issues, and conclusions clearly through both oral and written communication.

6. Awareness of the limits of knowledge
   Cognizance of the complexity of knowledge and of the potential contribution of other perspectives, interpretations, methods and disciplines to addressing environmental problems and issues.

The Nipissing University MES Environmental Studies degree will be awarded to students in the **two-year, Thesis Research Project (TRP) option** who have demonstrated the following:

2. Depth and breadth of knowledge

    A systematic knowledge of one of the core disciplines within environmental studies (e.g. History, Human Geography) and its major sub-discipline specialities, along with a critical awareness of current problems and new insights within the discipline, informed by the student's own involvement in designing, implementing and reporting on in a written argument a thesis research project (TRP) based on original, primary sources.

    A critical awareness in the argument of the TRP, which makes an original contribution in collecting, analyzing and reporting on primary sources in the field in support of an argument addressing an environmental problem or issue, as identified in systematic review of the academic literature and in consultation with the student's TRP supervisor and committee members, and where appropriate in working with and conducting research with agencies, organizations and government ministries.

    A critical understanding of the values and limitations of different approaches to studying human-environment interactions developed through dialogue and composition in core courses that elucidate different ways of thinking about environmental problems, comparing and contrasting the scientific method and its application in natural and social sciences to humanistic approaches, ultimately challenging different paradigms and recognizing value beyond the boundaries of their individual background disciplines.

    Research and Scholarship
    A conceptual understanding and methodological competence that:
    a) enables a working comprehension of how established theories and research methodologies are used to create and interpret knowledge;
    b) enables a critical evaluation of current research in the discipline, and advanced research and scholarship in relation to the student's own involvement in designing, implementing and reporting on in a written argument a thesis research project (TRP) that makes an original contribution in collecting, analyzing and reporting on primary sources in the field in support of an argument addressing an environmental problem or issue, as identified in systematic review of the academic literature and in consultation with the student's TRP supervisor and committee members;
    c) enables an awareness and evaluation of complex issues and decisions based on established theories, methods and current research in the discipline, and the students own involvement in designing an original applied research thesis project, including collecting, analyzing and reporting on primary sources they have collected; and,
    d) demonstrates the ability to develop and support a sustained argument in written form, and the ability to present such an argument orally.

5. Level of application of knowledge

Competence in the research process by applying an existing body of theoretical and methodological knowledge to the critical analysis and evaluation of an environmental problem or issue, including the design and implementation of a research strategy to gather information based on an original thesis research project involving the collection, analysis and reporting on primary sources in the field in support of an argument addressing an environmental problem or issue, and in consultation with the student's TRP supervisor and committee members. Competence in the research process includes reporting of the results of the research strategy in a sustained argument in written form.

6. Professional capacity/autonomy
   a) The qualities and transferable skills necessary for employment including:
       vi.   the exercise of initiative and of personal responsibility and accountability;
       vii. decision-making in complex situations involving environmental problems and issues;
       viii. experience and competence in the design and execution of an original, primary source research project;
       ix.   the development of agency, organization contacts and a professional network; and,
       x.   superior research and oral and written communication skills.

   b) The intellectual independence required for continuing professional development, including the need to remain informed of ongoing developments and innovations in environmental theories and research methods, by involvement in professional associations, publications of research, presentations at conferences, and involvement at the community, national and international level.

   c) The ethical behaviour consistent with academic integrity and social responsibility, and the use of appropriate guidelines and procedures for responsible conduct of research, including the preparation, submission and approval of Research Ethics Board (REB) documents when necessary, and sensitivity to the cultural dynamics of conducting research in diverse ethnic communities, including First Nations, Inuit and Métis communities.

   d) The ability to appreciate the broader implications and social impacts of applying knowledge to particular environmental contexts and to the conduct of environmental research generally.

7. Levels of communication skills
   The ability to communicate ideas, problems and issues, and conclusions clearly through both oral and written communication.

8. Awareness of the limits of knowledge
   Cognizance of the complexity of knowledge and of the potential contribution of other perspectives, interpretations, methods and disciplines to addressing environmental problems and issues.

MES/MESc GRADUATE PROGAM

COURSE EXPECTATIONS

COURSE CODE: ENST 5027 SPATIAL COMPUTING

CALENDAR COURSE DESCRIPTION:
This course is a presentation of concepts in programming, imaging, and visualization in geography and geomatics. Topics we will examine include computational techniques for solving spatially based problems.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO
1. PERFORM BASIC MATHEMATICAL COMPUTATIONS REQUIRED IN GEOSPATIAL IMAGING AND ANALYSIS USING COMPUTER TOOLS.
2. UNDERSTAND THE MATHEMATICS AND COMPUTATIONAL TECHNIQUES FOUND IN THE GEOSPATIAL LITERATURE.
3. USE COMPUTER SCRIPTING LANGUAGES TO AUTOMATE SPECIFIC PROCESSES IN GEOSPATIAL ANALYSIS BY WRITING USEFUL, NON-TRIVIAL SCRIPTS.
4. CRITICALLY READ, ANALYZE, UNDERSTAND, AND PRESENT STATE-OF-THE-ART AND LEADING-EDGE LITERATURE IN GEOSPATIAL COMPUTING.
5. IMPLEMENT SOME ASPECTS OF GEOSPATIAL IMAGING.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE
1. A GENERAL KNOWLEDGE AND UNDERSTANDING OF KEY CONCEPTS AND METHODOLOGIES IN GEOSPATIAL IMAGING AND ANALYSIS.
2. AN ABILITY TO READ AND UNDERSTAND THE COMPUTATIONAL AND MATHEMATICAL TECHNIQUES FOUND IN THE GEOSPATIAL LITERATURE.
3. AN ABILITY TO WRITE TECHNICAL REPORTS (THROUGH LABORATORY WORK).
4. AN ABILITY TO PRESENT HIS/HER RESEARCH FINDINGS THROUGH A FINAL PRESENTATION AND A FINAL REPORT.
5. AN ABILITY TO WRITE COMPUTER SCRIPTS TO SOLVE PROBLEMS IN GEOSPATIAL SCIENCE.

COURSE CODE: ENST 5115 MAJOR RESEARCH PAPER

CALENDAR COURSE DESCRIPTION:
Students in the MRP option write an MRP constituting either an original literature review or limited primary research. This paper will be evaluated by the supervisor and one other member of the graduate faculty, but will not be subject to an oral defence.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO

1. CONDUCT A SYSTEMATIC REVIEW OF THE ACADEMIC LITERATURE THAT ADDRESSES THE MAJOR RESEARCH PAPER TOPIC OR ISSUE
2. DESIGN A MAJOR RESEARCH PAPER PROJECT ADDRESSING AN APPLIED RESEARCH QUESTION OR ISSUE.
3. PROVIDE EVIDENCE IN SUPPORT OF AN ARGUMENT ADDRESSING AN ENVIRONMENTAL PROBLEM OR ISSUE.
4. RECOGNIZE ETHICAL ISSUES INVOLVED IN CONDUCTING ANALYSES IN ENVIRONMENTAL RESEARCH, INCLUDING:
   a. DEMONSTRATED FAMILIARITY WITH THE TRI-COUNCIL POLICY STATEMENT ON ETHICAL RESEARCH INVOLVING HUMANS AND THE NIPISSING UNIVERSITY RESEARCH ETHICS BOARD (REB) PROTOCOLS.

      OR;

   b. DEMONSTRATED FAMILIARITY WITH NSERC'S GUIDELINES ON ENVIRONMENTAL REVIEW AND ASSESSMENT

5. UNDERSTAND AND FOLLOW STANDARDIZED GUIDELINES FOR ACADEMIC PUBLICATION, SUCH AS THOSE USED BY A RELEVANT JOURNAL IN THE FIELD OF STUDY.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE

1. SYSTEMATIC KNOWLEDGE OF A COGNATE DISCIPLINE WITHIN ENVIRONMENTAL STUDIES OR SCIENCE AND ITS MAJOR SUB-DISCIPLINE SPECIALTIES
2. AN ABILITY TO EXECUTE A PROJECT ADDRESSING AN APPLIED ENVIRONMENTAL PROBLEM OR ISSUE.
3. AN ABILITY TO DEVELOP AND SUPPORT A SUSTAINED ARGUMENT IN WRITTEN FORM, AND THE ABILITY TO PRESENT SUCH AS ARGUMENT ORALLY.
4. AN ABILITY TO FOLLOW ETHICAL GUIDELINES RELATED TO ENVIRONMENTAL RESEARCH.
5. AN ABILITY TO FOLLOW CONVENTIONS OF ACADEMIC PUBLISHING.

COURSE CODE: ENST 5116 PERSPECTIVES ON THE ENVIRONMENT

CALENDAR COURSE DESCRIPTION:
This course will explore the philosophy and ideas of the natural and social sciences, as well as the humanities, with respect to their application in defining the causes, consequences of and solutions to environmental problems. Students will pursue a critical understanding of the values and limitations of these different approaches to studying human-environment interactions. The course will elucidate different ways of thinking about environmental problems, comparing and contrasting the scientific method and its application in natural and social sciences to humanistic approaches. Students will be challenged to consider these different paradigms and think beyond the boundaries of their individual background disciplines.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO

1. IDENTIFY AND APPLY THE FUNDAMENTAL PRINCIPLES THAT GUIDE COLLECTION AND ASSESSMENT OF INFORMATION REGARDING ENVIRONMENTAL ISSUES FROM SCIENTIFIC, HUMANISTIC, AND INDIGENOUS PERSPECTIVES.
2. COMPARE AND CONTRAST SCIENCE AND HUMANITIES AS APPROACHES TO THINKING ABOUT ENVIRONMENTAL PROBLEMS, IDENTIFYING STRENGTHS, WEAKNESSES AND COMMONALITIES.
3. IDENTIFY INTERDISCIPLINARY APPROACHES TO ENVIRONMENTAL RESEARCH AND CONSIDER THEIR OPPORTUNITIES AND OBSTACLES.
4. RECOGNIZE OPPORTUNITIES FOR IMPROVED UNDERSTANDING THROUGH INTERDISCIPLINARY COLLABORATION, WHILE RECOGNIZING ITS BENEFITS AND CHALLENGES.
5. DEMONSTRATE THE APPLICATION OF INTERDISCIPLINARY ANALYSIS TO ENVIRONMENTAL PROBLEM SOLVING.
6. FOSTER INTERDISCIPLINARY DISCOURSE FOCUSED ON ANALYSIS AND RESOLUTION OF ENVIRONMENTAL CASE STUDIES.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE

1. A BROAD KNOWLEDGE AND CRITICAL UNDERSTANDING OF THE FUNDAMENTAL PRINCIPLES THAT GUIDE COLLECTION AND ASSESSMENT OF INFORMATION REGARDING ENVIRONMENTAL ISSUES FROM SCIENTIFIC AND HUMANISTIC, AND INDIGENOUS PERSPECTIVES.
2. ABILITY TO RECOGNIZE OPPORTUNITIES FOR IMPROVED UNDERSTANDING THROUGH INTERDISCIPLINARY COLLABORATION.
3. APPLICATION OF INTERDISCIPLINARY ANALYSIS TO ENVIRONMENTAL PROBLEM SOLVING.
4. EFFECTIVE COMMUNICATION SKILLS THAT ENABLE THE EXCHANGE OF INFORMATION AND IDEAS TO A BROAD AUDIENCE ENGAGED IN INTERDISCIPLINARY WORK.
5. DEMONSTRATED ABILITY TO WORK EFFECTIVELY AS PART OF AN INTERDISCIPLINARY TEAM.

COURSE CODE: ENST 5117 – METHODS OF INQUIRY IN ENVIRONMENTAL RESEARCH

COURSE DESCRIPTION:
The exchange of credible information and its correct interpretation are fundamental to achieving a clear understanding of environmental problems and making good decisions in policy development and management. This challenge requires a broad knowledge of the different methods of information collection and communication used in scientific and humanistic studies of environmental issues. The objective of this course will be to provide students with the necessary skills and experience they require to evaluate and interpret information from these disparate sources in an interdisciplinary setting.

Credit is based on writing assignments, presentations and discourse, and providing feedback to colleagues. Emphasis is placed on developing an overview of the current state of knowledge based on review of the published literature and other sources, and development of a clear research agenda.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL DEVELOP:
1. COMPREHENSION OF, AND PRACTICAL EXPERIENCE WITH, THE PROCESS OF RESEARCH.
2. APPRECIATION OF THE VALUE AND VALIDITY OF DIVERSE APPROACHES TO INQUIRY, WITH SPECIFIC REFERENCE TO ENVIRONMENTAL ISSUES.
3. PRACTICE AT SEARCHING PUBLISHED LITERATURE TO ACCESS KEY INFORMATION.
4. AWARENESS OF DIVERSE RESOURCES FOR RESEARCH INCLUDING ORAL SOURCES AND TRADITIONAL ECOLOGICAL KNOWLEDGE, "GREY" LITERATURE, MONITORING REPORTS, ETC. AS WELL AS PEER-REVIEWED ARTICLES.
5. PROFICIENCY IN INTERPRETATION, CRITICAL ANALYSIS, AND DISCUSSION OF SOURCES RELEVANT TO THE STUDENT'S RESEARCH TOPIC.
6. A WELL-DEVELOPED ABILITY TO COMMUNICATE INFORMATION THROUGH WRITTEN AND ORAL REPORTS, AND MAKING RELEVANT CONTRIBUTIONS AT THE COURSE WEBSITE AND IN CLASS.
7. EXPERIENCE OF THE BENEFITS OF CAMARADERIE, AND THE CONTRIBUTIONS OF FELLOW-RESEARCHERS AS PART OF A COMMUNITY OF SCHOLARS.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE:
1. A SOLID COMPREHENSION OF, AND PRACTICAL EXPERIENCE WITH, THE PROCESS OF RESEARCH.
2. APPRECIATION OF THE VALUE AND VALIDITY OF DIVERSE APPROACHES TO INQUIRY, WITH SPECIFIC REFERENCE TO ENVIRONMENTAL ISSUES.
3. PRACTICE AT SEARCHING PUBLISHED LITERATURE AND OTHER SOURCES TO ACCESS KEY INFORMATION.
4. PROFICIENCY AT INTERPRETATION, CRITICAL ANALYSIS, AND DISCUSSION OF LITERATURE RELEVANT TO THE RESEARCH TOPIC.
5. A WELL-DEVELOPED ABILITY TO COMMUNICATE INFORMATION THROUGH WRITING, PRESENTING ILLUSTRATED ORAL REPORTS, AND MAKING RELEVANT CONTRIBUTIONS ONLINE AND IN CLASS.
6. THE ABILITY TO PARTICIPATE CONSTRUCTIVELY IN THE COMMUNITY OF SCHOLARS, ACKNOWLEDGING THE CONTRIBUTIONS OF COLLEAGUES AND VALUING DISCOURSE AND THE DIVERSE PERSPECTIVES OF THOSE WITH BACKGROUNDS IN OTHER FIELDS.

COURSE CODE: ENST 5126 GEOMATICS FOR MES/MESc GRADUATE STUDENTS

CALENDAR COURSE DESCRIPTION:
This course will be offered for all MES/MESc students who have selected the MRP option and will cover a range of techniques and applications.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO

1. EXPLAIN WHAT IS GIS, AND ITS OPERATIONS AND USES
2. EXPLAIN GIS THEORIES AND CONCEPTS
3. WORK WITH GIS DATA, AND CREATE MAPS AND LAYOUTS
4. USE DIFFERENT ANALYTICAL TECHNIQUES INCLUDING QUERIES, SPATIAL JOINS, OVERLAY, RASTER ANALYSIS, GEOCODING, AND NETWORK ANALYSIS
5. UNDERSTAND THE COORDINATE SYSTEMS, EDITING, GEODATABASE, AND METADATA
6. UNDERSTAND AND USE GIS SOFTWARE

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE
1. A BETTER UNDERSTANDING OF THEORIES AND CONCEPTS BEHIND GIS
2. CRITICAL KNOWLEDGE OF HOW TO CLEARLY DEFINE AND SOLVE SPATIAL PROBLEMS AND COMMUNICATE RESULTS
3. A BETTER APPRECIATION OF SPATIAL METHODOLOGIES AND PROCEDURES FOR INDEPENDENT RESEARCH PROJECTS

COURSE CODE: ENST 5316 REMOTE SENSING FOR ENVIRONMENTAL MONITORING

CALENDAR COURSE DESCRIPTION:
The aim of this course is to explore advanced techniques in remote sensing, digital image analysis, processing and interpretation. Depending on the interest of the student, applications for classification and monitoring of terrestrial landscapes may include the use of polarimetric radar data, object-oriented classification algorithms or hyperspectral data analysis techniques. Tools for remote sensing field validation will include the use of field spectroradiometers, global positioning systems, weather stations, and indirect leaf area index instruments.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO

1. APPLY OBJECT-ORIENTED AND PER PIXEL CLASSIFICATION TECHNIQUES FOR MONITORING TERRESTRIAL LANDSCAPES.
2. DESCRIBE THE VARIOUS REMOTE SENSING DATA OPTIONS (OPTICAL AND RADAR) AVAILABLE FOR ENVIRONMENTAL MONITORING AND MAPPING.
3. EXPLAIN HOW HYPERSPECTRAL REMOTE SENSING CAN BE USED FOR ENVIRONMENTAL MONITORING.
4. EXPLAIN STANDARD FIELD SAMPLING TECHNIQUES FOR REMOTE SENSING APPLICATIONS.
5. DEMONSTRATE HOW HYPERSPECTRAL DATA IS COLLECTED AND ANALYZED IN A FIELD SETTING.
6. EXPLAIN HOW POLARIMETRIC SYNTHETIC APERTURE RADAR CAN BE USED IN ENVIRONMENTAL MAPPING AND MONITORING ENDEAVOURS.
7. BE ABLE TO SEARCH FOR AND INTERPRET RESEARCH ARTICLES PERTAINING TO REMOTE SENSING APPLICATIONS FOR ENVIRONMENTAL MONITORING.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE

1. AN ADVANCED UNDERSTANDING OF BOTH OBJECT-ORIENTED AND PER-PIXEL CLASSIFICATION TECHNIQUES.
2. DEMONSTRATE AN ADVANCED ABILITY TO SAMPLE FIELD DATA USED IN CONJUNCTION WITH REMOTE SENSING IMAGE PROCESSING.
3. AN ADVANCED KNOWLEDGE OF REMOTE SENSING IMAGE PROCESSING SOFTWARE.

COURSE CODE: 5317 TOPICS IN FOREST ECOLOGY AND MANAGEMENT

CALENDAR COURSE DESCRIPTION:
This course will explore the concept of forest ecosystem management and its application in Canada. Topics will include, the watershed concept and long-term ecological research (e.g. hubbard brook forest), the coarse filter approach to biodiversity management, reconstruction of disturbance histories, emulation of natural disturbance regimes, biological and economic aspects of ecosystem services from Canadian forests, social and community forestry, forest regeneration and restoration, and the unique importance of old growth. An emphasis will be placed on examining threats to the diversity and stability of forest ecosystem functions with respect to climate change, habitat destruction and fragmentation.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO

1. CONVEY A CRITICAL UNDERSTANDING OF KEY CONCEPTS, METHODS, AND THEORETICAL APPROACHES OF FOREST ECOSYSTEM-BASED MANAGEMENT.

2. SYNTHESIZE AND APPLY KNOWLEDGE GAINED FROM VARIOUS SOURCES (E.G. PRIMARY LITERATURE, GOVERNMENT REPORTS, NON-TRADITIONAL SOURCES), AND DISCUSS THE MERITS OF SPECIFIC IDEAS WITHIN THE SCOPE OF FOREST ECOLOGY AND MANAGEMENT.

3. DEVELOP ARGUMENTS THROUGH CRITICAL WRITING THAT ASSESS KEY CONCEPTS, METHODOLOGIES, AND THEORETICAL APPROACHES OF FOREST ECOLOGY AND MANAGEMENT.

4. INITIATE AND SUSTAIN GROUP DISCUSSIONS THAT EXPLORE CRITICAL THEMES WITHIN THE SCOPE OF FOREST ECOLOGY AND MANAGEMENT.

5. CONTRIBUTE ORIGINAL IDEAS AND CRITICAL ANALYSES TO EXAMINATION OF TOPICS WITHIN THE FIELD FOREST ECOLOGY AND MANAGEMENT.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE

1. A DETAILED KNOWLEDGE AND CRITICAL UNDERSTANDING OF KEY CONCEPTS, METHODS, AND THEORETICAL APPROACHES OF FOREST ECOSYSTEM-BASED MANAGEMENT.

2. AN ABILITY TO SYNTHESIZE AND APPLY KNOWLEDGE GAINED FROM VARIOUS SOURCES, AND COMMUNICATE LOGICAL, ANALYTICAL ARGUMENTS IN CLEAR, CORRECT, CONVINCING MANNER.

3. AN ADVANCED ABILITY TO DEVELOP AND SUPPORT ANALYTICAL ARGUMENTS THAT COMPARE THE MERITS OF DIFFERENT CRITICAL AND THEORETICAL APPROACHES

4. AN ABILITY TO INITIATE CRITICAL DISCUSSION AND TO PARTICIPATE IN A SUSTAINED SCHOLARLY CONVERSATION

5. DEMONSTRATION OF ORIGINAL THOUGHT THAT IS DISTINGUISHED FROM IDEAS ARISING FROM OTHER SOURCES SUCH AS THE SCIENTIFIC LITERATURE.

COURSE CODE: ENST 5326 TOPICS IN WATERSHED HYDROLOGY

CALENDAR COURSE DESCRIPTION:
The goal of this course is to explore tools of watershed analysis, field data collection techniques, sampling and analysis of natural tracers (e.g. stable isotopes, hydrochemistry), use of data in the conceptualization and development of catchment models.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO:
1. EXPLAIN KEY CONCEPTS, METHODOLOGIES AND THEORETICAL APPROACHES INVOLVED IN UNDERSTANDING THE HYDROLOGY (OR ASPECTS THEREOF) OF A WATERSHED;
2. BE ABLE TO SEARCH FOR RESEARCH MATERIALS AND DATA (E.G. RESEARCH ARTICLES, GOVERNMENT REPORTS, WEB-BASED DATA SOURCES, MAPS) RELATED TO WATERSHED HYDROLOGY AND ITS APPLICATIONS.
3. SYNTHESIZE AND APPLY KNOWLEDGE GAINED FROM VARIOUS SOURCES (E.G. PRIMARY LITERATURE, GOVERNMENT REPORTS, DATA SOURCES, MAPS) TO EVALUATE THE HYDROLOGY (OR ASPECTS THEREOF) OF A SELECTED WATERSHED;
4. INITIATE AND SUSTAIN GROUP DISCUSSIONS THAT EXPLORE CRITICAL THEMES WITHIN WATERSHED HYDROLOGY.
5. EFFECTIVELY AND EFFICIENTLY COMMUNICATE RESEARCH THROUGH WRITTEN, ORAL AND VISUAL PRESENTATIONS.
6. WRITE AND PRESENT A WELL-FORMULATED RESEARCH PAPER.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE:

1. A CRITICAL UNDERSTANDING OF KEY CONCEPTS, METHODOLOGIES AND THEORETICAL APPROACHES INVOLVED IN ASSESSING THE HYDROLOGY (OR ASPECTS THEREOF) OF A WATERSHED;
2. A BROADER APPRECIATION OF WATERSHED-RELATED ANALYSIS, DATA AND TOOLS USED IN GOVERNMENT AND RESEARCH;
3. AN ABILITY TO CRITICALLY REVIEW LITERATURE AND IDENTIFY GAPS IN KNOWLEDGE OR UNDERSTANDING;
4. AN ABILITY TO SYNTHESIZE AND APPLY KNOWLEDGE GAINED FROM VARIOUS SOURCES (E.G. PRIMARY LITERATURE, GOVERNMENT REPORTS, DATA SOURCES, MAPS ETC...) TO EVALUATE THE HYDROLOGY (OR ASPECTS THEREOF) OF A SELECTED WATERSHED;
5. AN ABILITY TO EFFECTIVELY COMMUNICATE INFORMATION, ARGUMENTS, ANALYSES IN A VISUAL/ORAL PRESENTATION TO A DIVERSE AUDIENCE.
6. AN ABILITY TO EFFECTIVELY COMMUNICATE INFORMATION, ARGUMENTS, ANALYSES THROUGH A FINAL WRITTEN REPORT.

COURSE CODE: ENST 5327 TOPICS IN AQUATIC BEHAVIOURAL ECOLOGY

CALENDAR COURSE DESCRIPTION:
This course will examine interactions between aquatic organisms (invertebrates, fishes and amphibians) focusing on key ecological activities such as predation, foraging, mating/reproduction, homing/migration, kin/individual recognition and how these processes are intrinsic in developing management strategies.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO:

1. CONVEY CRITICAL CONCEPTS IN UNDERSTANDING INTERACTIONS BETWEEN AQUATIC ORGANISMS AT THE POPULATION AND COMMUNITY LEVEL
2. DEVELOP AN ADVANCED KNOWLEDGE OF ECOLOGICAL ACTIVITIES OF AQUATIC ORGANISMS
3. SYNTHESIZE AND COLLATE KEY CONCEPTS OF BEHAVIOURAL ECOLOGY FROM THE LITERATURE
4. CONTRIBUTE KEY IDEAS REGARDING INTERACTIONS IN AQUATIC SYSTEMS AND CRITICALLY ANALYZE ECOLOGICAL CONCEPTS VIA WRITING EXERCISES
5. DEVELOP AN ADVANCED KNOWLEDGE OF THE ROLE OF BEHAVIOURAL ECOLOGY AND ECOLOGICAL ACTIVITIES IN DEVELOPING MANAGEMENT STRATEGIES
6. DEVELOP AN ADVANCED UNDERSTANDING OF AQUACTIC ECOSYSTEMS

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE:

1. AN ADVANCED KNOWLEDGE OF KEY CONCEPTS IN BEHAVIOURAL ECOLOGY
2. AN ABILITY TO SYNTHESIZE KEY CONCEPTS FROM THE LITERATURE AND PRODUCE CRITICAL ANALYSES
3. A DETAILED KNOWLEDGE OF INTERACTIONS AMONG AQUATIC ORGANISMS
4. AN ADVANCED KNOWLEDGE OF LINKING ECOLOGICAL ACTIVITIES TO MANAGEMENT STRATEGIES
5. AN ABILITY TO COMMUNICATE SCIENTIFIC IDEAS IN WRITING
6. AN ADVANCED UNDERSTANDING OF THE IMPORTANCE OF BEHAVIOURAL ECOLOGY IN ECOSYSTEM MANAGEMENT

COURSE CODE: ENST 5336 TOPICS IN THE ENVIRONMENTAL HISTORY OF LAND AND SUBSISTENCE

CALENDAR COURSE DESCRIPTION:
This course will explore selected topic(s) in the environmental histories of food systems, agriculture, land, and/or settler colonialism. The focus will be on the different approaches by which historians have understood how systems for producing and distributing critical subsistence resources (primarily food) have been created over time out of an interaction between human societies and the environment (focusing on land). What role has been played in this shaping by economic, political, and legal systems and human agents, and with what effects on society and the environment?

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO

1. ANALYZE, UNDERSTAND AND BE ABLE TO CRITICALLY EVALUATE MAJOR DEBATES IN THE ENVIRONMENTAL HISTORY OF AGRICULTURE, FOOD SYSTEMS, LAND AND/OR SETTLER COLONIALISM
2. ACTIVELY PARTICIPATE IN SEMINAR DISCUSSION AND CONTRIBUTE TO THE CLASS'S UNDERSTANDING OF THE ASSIGNED MATERIAL
3. WRITE GRADUATE LEVEL ESSAYS THAT CLEARLY AND CRITICALLY EVALUATE MAJOR ARGUMENTS
4. WRITE CLEAR, LOGICAL, AND SUSTAINED ARGUMENTS IN COHERENT AND PERSUASIVE PROSE
5. EXPRESS AND DEBATE ARGUMENTS ORALLY
6. DEVELOP AN UNDERSTANDING OF HOW HISTORICAL KNOWLEDGE AND DEBATES CAN PROVIDE CONTEXT TO DEBATES IN OTHER DISCIPLINES WITHIN ENVIRONMENTAL STUDIES

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE

1. KNOWLEDGE OF MAJOR DEBATES IN THE ENVIRONMENTAL HISTORY OF AGRICULTURE, FOOD SYSTEMS, LAND AND/OR SETTLER COLONIALISM AND AN ABILITY TO CRITICALLY EVALUATE ONE OR MORE OF THESE DEBATES
2. THE ABILITY TO COMMUNICATE ADVANCED IDEAS AND ARGUMENTS ORALLY AS WELL AS THE ABILITY TO SUSTAIN CLEAR, LOGICAL, CORRECT AND PERSUASIVE ARGUMENTS IN WRITING
3. AN UNDERSTANDING OF AND ABILITY TO ASSESS THE WAYS IN WHICH THE STUDY OF ENVIRONMENTAL HISTORY CONTRIBUTES TO AND INFORMS DEBATES IN OTHER DISCIPLINES WITHIN ENVIRONMENTAL STUDIES
4. THE ABILITY TO CONDUCT INDEPENDENT RESEARCH AND STUDY TO IDENTIFY AND ADVANCE THEIR OWN ACADEMIC AND/OR PROFESSIONAL GOALS

COURSE CODE: ENST 5346 WATERSHED GOVERNANCE

CALENDAR COURSE DESCRIPTION:
This course will introduce students to themes and principles of integrated watershed management and good governance. We will examine water resource issues in northern Ontario and how these principles are integrated into water related decision processes.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO
1. EXPLAIN THE COMPLEXITIES OF THE HYDRO-SOCIAL SYSTEM
2. EXPLAIN THE HISTORICAL FOUNDATIONS WATER ALLOCATION LAWS
3. EXPLAIN THE HISTORICAL NEGLECT OF ABORIGINAL RIGHTS TO WATER
4. EXPLAIN CONSEQUENCES THE FRAGMENTATION OF RESPONSIBILITY BETWEEN FEDERAL AND PROVINCIAL GOVERNMENTS
5. EXPLAIN INTEGRATED WATER RESOURCE MANAGEMENT (IWRM) AND THE IMPLEMENTATION BARRIERS
6. DESCRIBE THE MYTHS ABOUT CANADA'S WATER SUPPLY
7. EXPLAIN WATER PRICING MECHANISMS
8. DESCRIBE THE CONSEQUENCES OF WATER MARKETS

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE
1. AN ABILITY TO EVALUATE FEDERAL AND PROVINCIAL WATER LAWS
2. AN ABILITY TO JUDGE THE FAIRNESS OF DRINKING WATER PRICING MECHANISMS
3. THE ABILITY TO EFFECTIVELY COMMUNICATE INFORMATION, ARGUMENTS, AND ANALYSES - ORALLY AND WRITTEN
4. A BROADER APPRECIATION OF THE DIVERSE VALUES OF WATER

COURSE CODE: ENST 5347 SPECIAL TOPICS IN MES/MESc

CALENDAR COURSE DESCRIPTION:
This course will accommodate guest lecturers/ adjunct or regular faculty to direct a reading course.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO

1. EXPLAIN CRITICAL IDEAS AND CONCEPTS WITHIN THE SPECIAL TOPIC AREA.
2. IDENTIFY EPISTEMOLOGICAL AND METHODOLOGICAL ASSUMPTIONS OPERATING IN THE SPECIAL TOPIC AREA.
3. APPLY CLASSICAL AND CONTEMPORARY THEORIES OF ENVIRONMENTAL STUDIES OR SCIENCE TO THE CRITICAL ANALYSIS OF ENVIRONMENTAL ISSUES AND PROBLEMS WITHIN THE SPECIAL TOPIC AREA.
4. FORMULATE A SUSTAINED ARGUMENT MAKING USE OF THEORETICAL CONCEPTS AND PROPOSITIONS IN THE CRITICAL ANALYSIS OF ENVIRONMENTAL ISSUES AND ENVIRONMENTAL PROBLEMS WITHIN THE SPECIAL TOPIC AREA.
5. DEMONSTRATE WORKING KNOWLEDGE OF STANDARDIZED GUIDELINES FOR ACADEMIC PUBLICATION, SUCH AS THOSE USED BY A RELEVANT JOURNAL IN THE SPECIAL TOPIC AREA.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE

1. ADVANCED, CRITICAL UNDERSTANDING OF A SPECIAL TOPIC AREA IN ENVIRONMENTAL STUDIES OR SCIENCE.
2. AN ADVANCED KNOWLEDGE OF EPISTEMOLOGICAL AND METHODOLOGICAL ASSUMPTIONS IN THE SPECIAL TOPIC AREA.
3. APPLICATION OF THEORETICAL CONCEPTS TO ANALYZE ENVIRONMENTAL ISSUES OR PROBLEMS.
4. AN ABILITY TO MAKE CLEAR AND WELL-SUPPORTED ARGUMENTS BASED ON THEORY AND/OR DATA.
5. **AN ABILITY TO FOLLOW CONVENTIONS OF ACADEMIC PUBLISHING.**

COURSE CODE: ENST 5454 MASTER'S THESIS

CALENDAR COURSE DESCRIPTION:
A thesis, involving primary research and making a significant contribution to scholarship, will be completed. Students will be encouraged to publish the results arising from this work in a refereed journal. This paper will be defended before a three-person committee.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO

1. DEMONSTRATE SYSTEMATIC KNOWLEDGE OF A COGNATE DISCIPLINE WITHIN ENVIRONMENTAL STUDIES OR SCIENCE AND ITS MAJOR SUB-DISCIPLINE SPECIALTIES
2. CONDUCT A SYSTEMATIC REVIEW OF THE ACADEMIC LITERATURE THAT ADDRESSES THE THESIS TOPIC OR ISSUE
3. DEMONSTRATE CRITICAL AWARENESS OF CURRENT PROBLEMS AND NEW INSIGHTS WITHIN THE DISCIPLINE, INFORMED BY THE STUDENT'S OWN INVOLVEMENT IN DESIGNING, IMPLEMENTING AND REPORTING ON, IN A WRITTEN ARGUMENT, A THESIS RESEARCH PROJECT.
4. COLLECT, ANALYZE AND REPORT ON PRIMARY DATA IN THE FIELD IN SUPPORT OF AN ARGUMENT ADDRESSING AN ENVIRONMENTAL PROBLEM OR ISSUE.
5. RECOGNIZE ETHICAL ISSUES INVOLVED IN CONDUCTING ANALYSES IN ENVIRONMENTAL RESEARCH, INCLUDING:
    a. DEMONSTRATED FAMILIARITY WITH THE TRI-COUNCIL POLICY STATEMENT ON ETHICAL RESEARCH INVOLVING HUMANS AND THE NIPISSING UNIVERSITY RESEARCH ETHICS BOARD (REB) PROTOCOLS.

        OR;

    b. DEMONSTRATED FAMILIARITY WITH NSERC'S GUIDELINES ON ENVIRONMENTAL REVIEW AND ASSESSMENT

6. DEMONSTRATE KNOWLEDGE OF STANDARDIZED GUIDELINES FOR ACADEMIC PUBLICATION, SUCH AS THOSE USED BY A RELEVANT JOURNAL IN THE FIELD OF STUDY.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE

1. SYSTEMATIC KNOWLEDGE OF A COGNATE DISCIPLINE WITHIN ENVIRONMENTAL STUDIES OR SCIENCE AND ITS MAJOR SUB-DISCIPLINE SPECIALTIES
2. AN ADVANCED ABILITY TO EXECUTE A RESEARCH PROJECT ADDRESSING AN ENVIRONMENTAL QUESTION OR ISSUE.
3. AN ABILITY TO COLLECT, ANALYZE AND REPORT ON PRIMARY DATA IN THE FIELD IN SUPPORT OF AN ARGUMENT ADDRESSING AN ENVIRONMENTAL PROBLEM OR ISSUE.
4. AN ABILITY TO DEVELOP AND SUPPORT A SUSTAINED ARGUMENT IN WRITTEN FORM, AND THE ABILITY TO PRESENT SUCH AS ARGUMENT ORALLY.
5. AN ABILITY TO FOLLOW ETHICAL GUIDELINES RELATED TO ENVIRONMENTAL RESEARCH.
6. AN ABILITY TO FOLLOW CONVENTIONS OF ACADEMIC PUBLISHING.

COURSE CODE: ENST 5656 CHEMICAL APPROACHES TO AIR AND WATER POLLUTANTS

CALENDAR COURSE DESCRIPTION:
Topics include a study of air pollutants that can alter the atmosphere and affect human health, organic pollutants, toxicity arising from heavy metals, chemistry of natural waters and purification of water, pre-concentration techniques of toxics, and techniques for qualitative and quantitative analysis of toxics in various matrices.

EXPECTATIONS OR OUTPUTS
BY THE END OF THE COURSE STUDENTS WILL BE ABLE TO
1. COMPARE AND CONTRAST RESEARCH FINDINGS OF VARIOUS SCIENTISTS ON HOW METAL HEAVY METALS GET INTO SURFACE WATER.
2. STUDY THE VARIOUS METHODS USED TO PRE-CONCENTRATE POLLUTANTS THEREBY ENHANCING THEIR DETECTION THROUGH ANALYTICAL TECHNIQUES.
3. WRITE A REVIEW PAPER THAT SHOWS A COMPARISON/CONTRAST OF HOW THE AIR-POLLUTANTS, THE HEAVY METAL POLLUTANTS, OR THE ORGANIC POLLUTANTS HAVE BEEN ANALYZED OVER THE LAST FIVE-TEN YEARS.

OUTCOMES
SUCCESSFUL GRADUATES OF THIS COURSE WILL DEMONSTRATE
1. HOW HEAVY METALS LEACH INTO THE SURFACE WATER.
2. THE VARIOUS METHODS USED FOR PRE-CONCENTRATING POLLUTANTS BEFORE THEIR ANALYSIS.
3. THE VARIOUS ANALYTICAL BASED TECHNIQUES USED FOR THE ANALYSIS OF GASEOUS AND ORGANIC TOXINS.