Fleming College

TRENT UNIVERSITY

MEMORANDUM OF UNDERSTANDING FOR THE JOINT DEGREE/DIPLOMA OFFERING IN ECOLOGICAL RESTORATION

BETWEEN

THE SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY

AND

TRENT UNIVERSITY

RENEWAL

OCTOBER, 2020

The Sir Sandford Fleming College of Applied Arts and Technology's

Ontario College Diploma in Ecological Restoration Technician

and

Trent University's

Bachelor of Science (Honours) in Ecological Restoration

This agreement re-establishes the principles, guidelines and procedures for the development, implementation and delivery of the four-year joint degree/diploma program in Ecological Restoration between Trent University and The Sir Sandford Fleming College of Applied Arts and Technology (Fleming College).

1. PURPOSE

1.1. The purpose of this Memorandum of Understanding (MOU) is to set out the general terms and conditions for the development, implementation and delivery of the four-year joint diploma/degree program in Ecological Restoration.

2. ROLES AND RESPONSIBILITIES

2.1. Program Collaboration and Management

- A Joint Ecological Restoration Joint Steering Committee (Joint Steering Committee) will continue to oversee the curriculum and administration of the program. Steering committee members from each institution are as follows:
    - Dean, Arts and Science – Science, Trent University
    - Dean, School of the Environment and Natural Resource Science, Fleming College
    - Director, Trent School of the Environment, Trent University
    - Applicable Chair, School of the Environment and Natural Resource Science, Fleming College
    - Program Coordinators, Ecological Restoration, Trent University and Fleming College
    - Manager, Community Relations and Articulation, Trent University
    - Director, Academic Quality, Planning and Operations, Fleming College
    - Registrar (or designate) from each institution, as required
    - Marketing representatives from each institution, as required
- The Joint Ecological Restoration Joint Steering Committee will meet at least once per year. Sub-groups of the committee and/or additional college/university personnel may be called on to meet on an ad hoc basis to address specific issues. These meetings must occur outside of Fleming College Program Advisory Committee meetings. Responsibilities include:
    - Review and update the MOU, as required
    - Planning joint staffing and/or sharing of resources
    - Enrolment management, student tracking and retention
    - Develop the agenda for meetings of the External Program Advisory Committee
    - Review the program model and curriculum annually and implement approved changes to curriculum
    - Provide input into program review and curriculum renewal process as per each institution's Program Quality Assurance mechanisms
    - Plan student activities, such as orientation, guest lectures and events.
- It is the responsibility of each partner institution to review transcripts and course outlines as required to make assessments for course exemptions in the curriculum components under their responsibility.

A record of all such exemptions must be thoroughly documented and included in a student's file. Documentation will include originating institution, name and number of course to be considered, course weight, numerical grade, and the Fleming College or Trent University equivalent course for which the exemption is given. Back-up documents, such as course descriptions and outlines should be included where relevant. Parties agree that exemptions will be made only on the basis of academic courses completed in post-secondary institutions. Under no circumstances will transfer credit be awarded on the basis of PLAR. All requests for exemptions will be assessed with a dual focus on ensuring that students are appropriately prepared for success in subsequent courses in the program and ensuring that the program integrity and outcomes are maintained.

2.2. Student Supports

- Through communication with program faculty and orientation sessions, students will be advised to consult academic advisors and/or program coordinators to ensure they are successfully completing program requirements as specified in Article 5.3.

2.3. Admissions

- Fleming College will be responsible for processing all applications into the program through the Ontario College Application Service (OCAS) and confirming admission to the program.
- The Admissions Office at Trent will be responsible for reviewing the Declaration of Intent to Continue (progression form) and Authorization for Release of Information forms to determine eligibility to Year 3. In place of the hardcopy progression form, students may complete an electronic application form using a distinct URL provided by Trent's Recruitment and Admissions department. Either form is accepted by Trent University's Admissions Office.
- The Office of the Registrar at Trent University will be responsible for applying transfer credits onto the students' academic record upon successful progression to the degree portion of the program.

2.4. Recruitment and Marketing

- Recruitment and Marketing representatives at both institutions will be responsible for promoting the collaborative program agreement with jointly approved publicity materials.
- Fleming College herby grants to Trent University a non-exclusive, non-transferable revocable, royalty-free license (without right to sub-license) for the term of this agreement to use its name and logo in promotional materials (including advertisements, brochures, handbooks, webpages) in all media for the sole purpose of promoting the collaborative agreement.
- Trent University hereby grants to Fleming College a non-exclusive, non-transferable revocable, royalty-free license (without right to sub-license) for the term of this agreement to use its name and logo in promotional materials (including advertisements, brochures, handbooks, webpages) in all media for the sole purpose of promoting the collaborative agreement.

2.5. Students

- Students will be bound by the policies (including, but not limited to, policies governing academic integrity, accessibility, appeals, privacy) of the institution at which they are registered.
- The student will be expected to pay tuition fees to the institution at which they are registered.

3. TERMS AND CONDITIONS OF THE AGREEMENT

3.1. The terms of this MOU govern the program from its inception in Fall 2008, when program and funding approvals were received from the Board of Governors of Fleming College, the Senate of Trent University and the Ministry of Colleges and Universities (formerly the Ministry of Training, Colleges and Universities).

3.2. This MOU will be reviewed annually by the Joint Steering Committee and may be amended at any time by consent of both parties, by written addendum.

3.3. This agreement may be terminated by either party. In this case, notice of three years is required. In the event of termination of the Agreement, every effort will be made to ensure that students currently enrolled in the program will not be affected.

3.4. Students commencing studies in Fleming College's Ecological Restoration Technician Diploma as of September 2020 will receive the transfer credits outlined in Article 5.1. Students commencing studies prior to September 2020 will receive the transfer credits outlined in the corresponding agreement.

3.5. Changes to the program's curriculum including course additions or deletions, course codes, course hours, and course names at either institution or to transfer credits received will be outlined by written addendum. The institution implementing changes must inform the other by written notice. Each institution commits to maintaining written records of changes to ensure a seamless transition for students to ensure agreement reviews are initiated and that appropriate channels are notified. Curriculum changes must be communicated with the following individuals:

- Notification of changes to Fleming College curriculum should be directed to the Pathways Coordinator (Fleming College); and
- Notification of changes to Trent University curriculum should be directed to the Coordinator, Articulation and Transfer Pathways (Trent University).

4. ADMISSION REQUIREMENTS AND PROCEDURES

4.1. Students will apply to Fleming College through the Ontario College Application Service (OCAS) for the joint diploma/degree. Minimum admission requirements include:

- OSSD with the majority of credits at the College (C) and Open (O) level;
- Grade 12 College (C) English;
- Grade 12 College (C) Math; and
- Grade 11 College (C) Science.

4.2. To successfully progress to Semester 2 at Fleming College, students shall pass all Semester 1 courses and achieve a minimum course grade of 65% in the following courses:

- COMM 131 – Critical Thinking and Communication; and
- SCIE 118 – Environmental Science I.

4.3. In February/March each year, the Semester 4 Ecological Restoration students at Fleming College will be required to complete a Declaration of Intent to Continue and Authorization for Release of Information form (progression form). This form will be collected by Fleming College and provided to Trent University on the basis of which to create a student record. Fleming College will provide:

- Copies of all secondary and post-secondary transcripts that supported the student's application to Semester 1 of the joint diploma/degree program;
- An original transcript documenting the student's academic record in the first two years of the program;
- Copies of all documentation relating to the student's academic record in the program, such as records of transfer credit or course exemption assessments, academic appeals or academic dishonesty.

4.4. In order progress to Year 3 at Trent University, students shall have achieved:
- A minimum passing grade (50%) and have successfully achieved all course credits in all Year 1 and Year 2 courses;
- Section 4.2 program progression requirements; and
- A minimum overall average of 70% in all Fleming College courses.

4.5. Fleming College will provide Trent University with final transcripts for all students who have declared their intent to continue within two weeks of release of final grades. Upon receipt of the final transcript following Semester 4 and confirmation that the student meets the requirements for progression to Semester 5, Trent University will send a 'confirmation of eligibility to continue' letter to eligible students outlining transfer credits received and those required to complete the Bachelor of Science degree, as outlined in Articles 5.1 and 5.3 of this MOU, the process for accessing the MyTrent account and course registration. Students will be eligible for the early registration process for upper level students at Trent University. Students wishing to take courses in the summer term will be instructed to request an expedited review process. Transfer credits will be recorded on the student's record at Trent University as outlined in Article 5.1.

4.6. Trent University has the capacity to accommodate up to 60 students into Year 3 of the joint program.

4.7. Fleming College will provide cohort size numbers to Trent University in October and February each year. In October, Semester 1 enrolment numbers will be provided. In February, Semester 4 enrolment numbers will be provided.

5. TRANSFER OF CREDITS AND DIPLOMA/DEGREE PROGRAM COMPLETION REQUIREMENTS

5.1. Students who are eligible, passing all courses (minimum 50% grade) and have successfully achieved all course credits in Year 1 and Year 2 courses with a minimum average of 70% across all Fleming College courses will receive the following transfer credits on their Trent transcript:

Courses completed at Fleming College	Course equivalencies at Trent University	Credits received
SCIE 118 – Environmental Science I (60 hours)	ERSC 1010H – Environmental Science and Sustainability	0.5
SCIE 119 – Environmental Science II (60 hours)	ERSC 1020H – Cases in Environment and Sustainability	0.5
ECOS 13 – Ecosystem Skills (60 hours) SCIE 136 – Methods in Environmental Science (60 hours)	ERSC 2230H – Environmental Assessment: Sampling and Analysis ERSC 2240H – Ecological Assessment for Natural Resource Management	1.0
ECOS 30 – Introduction to Indigenous Studies: Culture and the Environment (45 hours) ECOS 31 – Introduction to Indigenous Environmental Studies: History and Culture (45 hours)	ERST-IESS-INDG 2601Y – Indigenous Knowledge Systems and the Natural Environment	1.0
APST 83 – Restoration Ecology Field Camp (80 hours)	ERSC 3860H – Field Course	0.5
SCIE 120 – Introductory Chemistry I (60 hours)	CHEM 1000H – Introductory Chemistry I	0.5
SCIE 121 – Introductory Chemistry II (60 hours)	CHEM 1010H – Introductory Chemistry II	0.5

GEOM 21 – GIS Principles (45 hours) GEOM 122 – Geospatial Data Techniques (90 hours) **OR** GEOM 163 – Fundaments of Geomatics (45 hours) GEOL 83 – Earth and Atmosphere (45 hours)	GEOG 2090H – Introduction to Geographical Information Systems	0.5
GEOL 21 – Principles of Hydrogeology (60 hours)	GEOG 3530H - Hydrology	0.5
MATH 86 – Math I (45 hours) MATH 87 – Math II (45 hours)	MATH 1051H – Non-Calculus Statistics I: Elementary Probability and Statistics MATH 1052H – Non-Calculus Statistics II: Elementary Statistical Methods	1.0
FSTY 50 – Trees and Shrubs of Ontario (60 hours) FSTY 75 – Introduction to Plant Community Systematics (60 hours)	0.5 unassigned Biology credit at the 2000 level	0.5
COMM 137 – Readings in Environment and Restoration (45 hours)	0.5 unassigned English credit at the 1000 level (excludes ENGL-ERST 2705H – Literature and the Environment)	0.5
ECOS 36 – Ecological Land Classification (45 hours)	0.5 unassigned Environmental and Resource Science credit at the 2000 level	0.5
ECOS 27 – Introduction to Ecology (45 hours)	0.5 unassigned Science-Environmental and Resource Science credit at the 2000 level (0.5 SCIE-ERS Y2 serves as a prerequisite equivalent of ERSC-BIOL 2260H and precludes taking ERSC-BIOL 2260H)	0.5
COMM 131 – Critical Thinking and Communication (60 hours) MATH 63 – Applied Mathematics in Natural Resource Sciences (45 hours) SCIE 135 – Applied Chemistry in Ecological Restoration (45 hours)	No equivalents received	0.0
Successful completion of Year 1 and Year 2	1.0 unassigned Science credit at the 1000 level 0.5 unassigned Science credit at the 2000 level	1.5

5.2. As these credits recognize areas covered at Fleming College in Year 1 and Year 2 of the program rather than the completion of Trent University courses, numerical grades will not be recorded on the Trent transcript. Completion of these credits will be recognized with a pass grade.

5.3. To complete the joint diploma/degree in Ecological Restoration, students will have to complete 10.0 Trent University credits in Year 3 and Year 4, as follows:

Required Credits
ERST-CAST 3780H – Canadian Renewable Resource Economics and Project Planning
ERSC 4520H – Restoration Ecology
ERSC 4530H – Remediation and Reclamation of Sites
1.0 ERST credit from the following: • ERST-PHIL 3301H – Environmental Ethics • ERST-PHIL-SAFS 3302H – Animals and Society • ERST 3311H – Environmental Risk and the Risk Society • ERST 3312H – Ecological Risk Assessment
0.5 ERST credit from the following: • ERST 3501H – Environment and Communication: Oral and Visual Presentation

- ERST 3502H – Environment and Communication: Writing and Reporting

Choice/Elective Credits

1.0 ERSC and/or ERST elective credit at the 4000 level in addition to the above, including at least 0.5 credit from Category D

2.0 ERSC and/or ERST elective credits in addition to the above

2.5 additional elective credits at the 3000 level or beyond

1.5 additional elective credits

NOTES:

- *4.5 of the 7.0 choice/elective credits must be science credits*
- *An approved field course at the 3000 or 4000 level must be included in the total 10.0 credits. Suggested field courses are listed in the Trent University calendar. Approval of unlisted options is normally communicated from the Trent degree coordinator to the Registrar's Office, for inclusion in a student's file.*

Recommended Elective Courses

The following Environmental and Resource Science/Studies courses as well as any of the required course options not completed, are recommended for their specific applicability to students in the Ecological Restoration program. Students are also encouraged to explore other course offerings in the Environmental and Resource Science/Studies program, as well as those available across the range of Trent departments. A current list of these courses will be provided on the Trent Ecological Restoration degree webpage.

2000 or 3000 level courses	4000 level courses
BIOL 3050H – Limnology	BIOL-FRSC 4510H – Species-at-Risk Biology and Policy
BIOL 3051H – River and Stream Biology	BIOL 4520H – Biology of Invasions
BIOL 3190H – Wild Plants of Ontario	ERSC/ERST 4010Y/4020D – Honours Thesis
EGEO-ERSC-GEOG 3003H – Field Methods in Environmental Geoscience	ERSC-BIOL 4030H – Research Design and Data Analysis
ERSC-GEOG-BIOL 2080H – Natural Science Statistics	ERSC-GEOG 4040H – Hydrochemical Fluxes in the Hydrosphere
ERSC-CHEM 2610H – Atmospheric Environmental Chemistry	ERSC-BIOL-GEOG 4070H – The Fate of Contaminants in the Aquatic Environment
ERSC-CHEM 2620H – Aquatic Environmental Chemistry	ERSC-BIOL 4240H – Fisheries Assessment and Management
ERST 3081H – Local Waste Management	ERST 4250H – Environmental Law and Regulation
ERST 3082H – Issues in Waste Management	ERSC 4350H – Climatic Change
ERST 3110H – Environmental Impact Assessment: A Case Study Approach	ERSC-BIOL 4390H – Conservation Biology
ERST-CASE-POST 3120H – Canadian Environmental Policy	ERSC-GEOG 4450H – Spatial Modelling with GIS
ERSC 3160H – Community-Based Natural Resource management	ERSC-GEOG 4640H – Integrated Watershed Management: Approaches and Methods
ERSC 3200Y – Management of Forest Ecosystems	ERSC-GEOG-WASC 4703H – Senior Seminar in Earth and Environmental Science
ERSC 3220H – Community Engaged Lacustrine Shoreline Assessment and Monitoring	ERST-POST 4704H – Senior Seminar in Environmental Politics

ERSC/ERST-IDST 3230H – Environmental Problems and Solutions in Small Island Developing States: A Field Course	ERST-INDG-IESS 4730Y – Sustainable Indigenous Communities
ERST 3250H – Introduction to Environmental Law	ERSC/ERST 4801H – Greening the Campus: Restoring and Sustaining Green Infrastructure
ERSC 3510H – Ecology and Management of Wetland Systems	ERSC/ERST 4802H – Greening the Campus: Reimagining Use of the Built Environment
ERSC 3551H – Pollution Ecology	ERST 4810H – Ecological Design
ERSC-GEOG-SAFS 3650H – Soil Management and Conservation	ERSC/ERST 4830Y, 4840H – Community-Based Research Project
ERSC/ERST-IESS-INDG 3730Y – Indigenous Peoples, Health, and the Environment	ERSC 4850Y, 4860H, 4870H, 4880H – Field Course
ERSC/ERST 3840H – Community-Based Research Project	
ERSC 3850Y, 3860H, 3870H, 3880H – Field Course	
ERSC/ERST 3905Y/3906H – Field Course Research Project	
GEOG 3540H – River Environments and Processes	

Note: It is recommended that students meet with an Academic Advisor or the degree Program Coordinator at Trent University prior to completing any course selections.

6. TRACKING OF STUDENTS

6.1. Trent University and Fleming College Program Coordinators agree to communicate as needed so that information regarding student performance, retention, graduation and graduate success statistics can be attained. Both institutions will work toward a process that obtains student permission for sharing of records at the start of the program to support seamless transition and tracking of student performance over the program.

7. PROGRAM STAFFING AND ACADEMIC CREDENTIALS

7.1. The appointment of the Ecological Restoration Program Coordinator at Fleming College shall be the sole responsibility of Fleming College. Prior to the appointment, Fleming College will provide the coordinator's curriculum vitae and related documentation to Trent University for information.

7.2 The appointment of an Ecological Restoration full-time faculty at Trent University shall be the sole responsibility of Trent University. Prior to the appointment, Trent University will provide the coordinator's curriculum vitae and related documentation to Fleming College for information.

7.3. All Ecological Restoration courses delivered by Fleming College excluding courses shared with other programs Fleming College shall be staffed by a professor who has, at minimum, a Master's degree in the field of study. If the course is jointly delivered, only the 'lead' professor will require this credential.

7.4. Trent University and Fleming College professors will have the opportunities to participate in all field courses, field study, and field camps throughout the program.

7.5. Partners agree to explore opportunities for students in both Fleming and Trent environments to integrate curricular and co-curricular aspects of their programs.

8. PROGRAM FUNDING AND REPORTING

8.1. The program is funded through the Ministry of Colleges and Universities as per existing funding mechanisms. Students registered in the first two years will be counted on the Fleming College audit and funded accordingly, with the final two years counted on the Trent University audit.

9. ACCESS TO STUDENT SUPPORTS AND SERVICES

9.1. Students will have regular access to student supports and services at each institution while enrolled at that institution, such as registrarial, accessibility and advising services.

9.2. Students will have access to library resources at both Fleming College and Trent University for the entire duration of the program.

9.3. Ecological Restoration students will have access to OSAP, bursaries and scholarships as per standard eligibility processes at each institution. Students can apply for scholarship and bursary consideration at Fleming College according to the deadlines advertised for that particular year. When progressing to Trent University, students will automatically be assessed for entrance scholarship eligibility based on their entering average from Fleming College.

10. CONVOCATION

10.1. The joint nature of the program will be recognized on the degree and diploma parchments that students receive. The convocation ceremony for the joint degree/diploma program will take place at Trent University, as a distinct program within the Bachelor of Science (Honours). Fleming College's School of Environmental & Natural Resource Sciences academic leadership and program will be invited to participate in the convocation ceremony at Trent University. Ecological Restoration graduates will also be listed in the Fleming College convocation program and mention will be made of the joint program during Fleming College's convocation ceremony.

11. FACULTY ACCESS TO RESOURCES

11.1. Trent University and Fleming College professors associated with this joint program will have access to program resources at each institution for initiatives in support of this program. At Fleming College this will include but not limited resources within the Biocommons, Arboretum, and Greenhouse

12. IMPLEMENTATION AND REVIEW

This agreement is subject to review whenever either party makes curricular changes that impact the agreement. When a change occurs, the program departments will notify their respective articulation designates so that the

agreement can be updated. Articulation designates at each institution will review the agreement annually to ensure it is current. This agreement may be terminated by either party. In this case, notice of three years is required. In the event of termination of the agreement, every effort will be made to ensure that students currently enrolled in the program will not be affected.

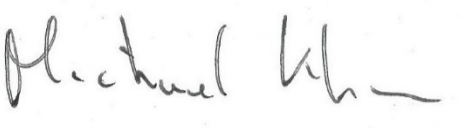
13. ACCEPTANCE OF AGREEMENT

We, the undersigned, as the representatives of Trent University and The Sir Sandford Fleming College of Applied Arts and Technology hereby demonstrate our commitment to full implementation of the Agreement.

For, and on behalf of,
Trent University

Dr. Holger Hintelmann
Dean of Arts & Science - Science

Oct 21, 2020
Date



Dr. Michael Khan
Provost & Vice-President Academic

November 2, 2020
Date

For, and on behalf of,
The Sir Sandford Fleming College of Applied Arts and Technology

Tania Clerac
Dean, School Of Environmental & Natural Resource Sciences

November 11, 2020
Date

Linda Poirier
Vice President, Academic Experience

November 9, 2020
Date

APRIL 2021

ADDENDUM

TO THE

MEMORANDUM OF UNDERSTANDING FOR THE JOINT DEGREE/DIPLOMA OFFERING IN ECOLOGICAL RESTORATION

BETWEEN

THE SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY

AND

TRENT UNIVERSITY

This Addendum recognizes the changes outlined below, which take effect for students entering the Trent University portion of the Ecological Restoration program as of Fall 2021. This change will remain effective until the above-mentioned Agreement expires or until a new Agreement is entered into, whichever occurs first.

The following changes have occurred in the agreement:

- Changes to transfer credits received;
- Program requirements have not changed.

These changes specifically refer to Section 5 Agreement.

BACHELOR OF SCIENCE (HONOURS), ECOLOGICAL RESTORATION: TRANSFER CREDITS

Students who are eligible, passing all courses (minimum 50% grade) and have successfully achieved all course credits in Year 1 and Year 2 courses with a minimum average of 70% across all Fleming College courses will receive the following transfer credits on their Trent transcript:

Courses completed at Fleming College	Course equivalencies at Trent University	Credits received
SCIE 118 – Environmental Science I (60 hours)	ERSC 1010H – Envirionmental Science and Sustainability	0.5
SCIE 119 – Environmental Science II (60 hours)	ERSC 1020H – Cases in Environment and Sustainability	0.5
ECOS 13 – Ecosystem Skills (60 hours) SCIE 136 – Methods in Environmental Science (60 hours)	ERSC 2230H – Environmental Assessment: Sampling and Analysis ERSC 2240H – Ecological Assessment for Natural Resource Management	1.0
FSTY 50 – Trees and Shrubs of Ontario (60 hours) FSTY 75 – Introduction to Plant Community Systematics (60 hours)	ERSC-BIOL 2260H – Introductory Ecology	0.5
ECOS 30 – Introduction to Indigenous Studies: Culture and the Environment (45 hours) ECOS 31 – Introduction to Indigenous Environmental Studies: History and Culture (45 hours)	ERST-IESS-INDG 2601Y – Indigenous Knowledge Systems and the Natural Environment	1.0
APST 83 – Resotration Ecology Field Camp (80 hours)	ERSC 3860H – Field Course	0.5

SCIE 120 – Introductory Chemistry I (60 hours)	CHEM 1000H – Introductory Chemistry I	0.5
SCIE 121 – Introductory Chemistry II (60 hours)	CHEM 1010H – Introductory Chemistry II	0.5
GEOM 21 – GIS Principles (45 hours) GEOM 122 – Geospatial Data Techniques (90 hours) **OR** GEOM 163 – Fundamentals of Geomatics (45 hours) GEOL 83 – Earth and Atmosphere (45 hours)	GEOG 2090H – Introduction to Geographical Information Systems	0.5
GEOL 21 – Principles of Hydrogeology (60 hours)	GEOG 3530H – Hydrology	0.5
MATH 86 – Math I (45 hours) MATH 87 – Math II (45 hours)	MATH 1051H – Non-Calculus Statistics I: Elementary Probability and Statistics MATH 1052H – Non-Calculus Statistics II: Elementary Statistical Methods	1.0
COMM 137 – Readings in Environment and Restoration (45 hours)	0.5 unassigned English credit at the 1000 level (excludes ENGL-ERST 2705H – Literature and the Environment)	0.5
ECOS 36 – Ecological Land Classification (45 hours)	0.5 unassigned Environmental and Resource Science credit at the 2000 level	0.5
ECOS 27 – Introduction to Ecology (45 hours)	0.5 unassigned Science-Environmental and Resource Science credit at the 2000 level	0.5
COMM 131 – Critical Thinking and Communication (60 hours)	No equivalents received	0.0
Successful completion of Years 1 and 2	1.0 unassigned Science credit at the 1000 level 0.5 unassined Science credit at the 2000 level	1.5

SEPTEMBER 2022

ADDENDUM

TO THE

MEMORANDUM OF UNDERSTANDING

BETWEEN

FLEMING COLLEGE

AND

TRENT UNIVERSITY

REGARDING THE JOINT DIPLOMA/DEGREE OFFER OF

ECOLOGICAL RESTORATION TECHNICIAN

AND

BACHELOR OF SCIENCE (HONOURS), ECOLOGICAL RESTORATION

This Addendum recognizes the changes outlined below, which shall become effective as of the Fall 2022 intake at Trent University. These changes will remain effective until the above-mentioned Agreement expires or until a new agreement is entered into, whichever occurs first.

The following changes have occurred:

- Students will now be jointly registered at Trent University and Fleming College, starting in the program's second semester. Fleming College's Business Intelligence and Research Services (BIRS) Office or designate office will provide a list of students who are enrolled in the second semester of the program to Trent University by the end of January of each academic year. These changes refer to Section 4.0 – Admissions Requirements and Procedures of the Agreement.

Fleming College will house and administer the Ecological Restoration data sharing waiver.

ACCEPTANCE OF ADDENDUM

We, the undersigned, as the representatives of Trent University and The Sir Sandford Fleming College of Applied Arts and Technology hereby demonstrate our commitment to full implementation of the Agreement.

For, and on behalf of,
Trent University
and

Dr. Holger Hintelmann
Dean of Science

Nov. 08, 2022
Date

For, and on behalf of,
The Sir Sandford Fleming College of Applied Arts Technology

Sandra Dupret
Executive Vice President, Academics and Student Experience

November 22, 2022
Date

Dr. Michael Khan
Provost & Vice-President Academic

November 14, 2022
Date

JULY 2023

ADDENDUM

TO THE

MEMORANDUM OF UNDERSTANDING FOR THE JOINT DEGREE/DIPLOMA OFFERING IN ECOLOGICAL RESTORATION

BETWEEN

THE SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY

AND

TRENT UNIVERSITY

This Addendum recognizes the changes outlined below, which shall become effective as of the Fall 2021 and Fall 2022 intakes at Fleming College. These changes will remain effective until the above-mentioned Agreement expires or until a new agreement is entered in to, whichever occurs first.

The following changes have occurred:

- ECOS 30 – Introduction to Indigenous Studies: Culture and the Environment (45 hours) is now coded INDG 30 (Fall 2021);
- ECOS 31 – Introduction to Indigenous Studies: History and Culture (45 hours) is now coded INDG 31 (Fall 2021);
- ECOS 13 – Ecosystem Skills (60 hours) is now named Field Skills (Fall 2022);
- GEOL 83 – Earth and Atmosphere has increased from 45 hours to 60 hours (Fall 2022);
- The transfer credits received remain unchanged.

These changes specifically refer to Section 5 of the Agreement.

BACHELOR OF SCIENCE (HONOURS), ECOLOGICAL RESTORATION: TRANSFER CREDITS

Students who are eligible, passing all courses (minimum 50% grade) and successfully completing all course credits in Year 1 and Year 2 courses with a minimum average of 70% across all Fleming College courses, will receive 10.0 credits on their Trent University transcript.

Credits for students beginning studies in the Ecological Restoration program in Fall 2021 will be transferred as follows:

Courses Completed at Fleming College	Course Equivalencies at Trent University	# of Credits Received
SCIE 118 – Environmental Science I (60 hours)	ERSC 1010H – Environmental Science and Sustainability	0.5
SCIE 119 – Environmental Science II (60 hours)	ERSC 1020H – Cases in Environment and Sustainability	0.5
ECOS 13 – Field Skills (60 hours); SCIE 136 – Methods in Environmental Science (60 hours)	ERSC 2230H – Environmental Assessment: Sampling and Analysis; ERSC 2240H – Ecological Assessment for Natural Resource Management	0.5
FSTY 50 – Trees and Shrubs of Ontario (60 hours); FSTY 75 – Introduction to Plant Community Systematics (60 hours)	ERSC-BIOL 2260H – Introductory Ecology	0.5

INDG 30 – Introduction to Indigenous Studies: Culture and the Environment (45 hours); INDG 31 – Introduction to Indigenous Studies: History and Culture (45 hours)	ERST-IESS-INDG 2601Y – Indigenous Knowledge Systems and the Natural Environment	1.0
APST 83 – Restoration Ecology Field Camp (80 hours)	ERSC 3860H – Field Course	0.5
SCIE 120 – Introductory Chemistry I (60 hours)	CHEM 1000H – Introductory Chemistry I	0.5
SCIE 121 – Introductory Chemistry II (60 hours)	CHEM 1010H – Introductory Chemistry II	0.5
GEOM 163 – Fundamentals of Geomatics (45 hours); GEOL 83 – Earth and Atmosphere (60 hours)	GEOG 2090H – Introduction to Geographical Information Systems	0.5
GEOL 21 – Principles of Hydrogeology (60 hours)	GEOG 3530H – Hydrology	0.5
MATH 86 – Math I (45 hours); MATH 87 – Math II (45 hours)	MATH 1051H – Non-Calculus Statistics I: Elementary Probability and Statistics; MATH 1052H – Non-Calculus Statistics II: Elementary and Statistical Methods	1.0
COMM 137 – Readings in Environment and Restoration (45 hours)	0.5 unassigned English credit at the 1000 level (excludes ENGL-ERST 2705H – Literature and the Environment)	0.5
ECOS 36 – Ecological Land Classification (45 hours)	0.5 unassigned Environmental and Resource Science credit at the 2000 level	0.5
ECOS 27 – Introduction to Ecology (45 hours)	0.5 unassigned Science-Environmental and Resource Science credit at the 2000 level	0.5
COMM 131 – Critical Thinking and Communication (60 hours)	No equivalents received	0.0
Successful completion of Years 1 and 2	1.0 unassigned Science credit at the 1000 level; 0.5 unassigned Science credit at the 2000 level	1.5

Credits for students beginning studies in the Ecological Restoration program as of Fall 2022 will be transferred as follows:

Courses Completed at Fleming College	Course Equivalencies at Trent University	# of Credits Received
SCIE 118 – Environmental Science I (60 hours)	ERSC 1010H – Environmental Science and Sustainability	0.5
SCIE 119 – Environmental Science II (60 hours)	ERSC 1020H – Cases in Environment and Sustainability	0.5
ECOS 13 – Ecosystem Skills (60 hours); SCIE 136 – Methods in Environmental Science (60 hours)	ERSC 2230H – Environmental Assessment: Sampling and Analysis; ERSC 2240H – Ecological Assessment for Natural Resource Management	0.5
FSTY 50 – Trees and Shrubs of Ontario (60 hours); FSTY 75 – Introduction to Plant Community Systematics (60 hours)	ERSC-BIOL 2260H – Introductory Ecology	0.5
INDG 30 – Introduction to Indigenous Studies: Culture and the Environment (45 hours); INDG 31 – Introduction to Indigenous Studies: History and Culture (45 hours)	ERST-IESS-INDG 2601Y – Indigenous Knowledge Systems and the Natural Environment	1.0
APST 83 – Restoration Ecology Field Camp (80 hours)	ERSC 3860H – Field Course	0.5
SCIE 120 – Introductory Chemistry I (60 hours)	CHEM 1000H – Introductory Chemistry I	0.5
SCIE 121 – Introductory Chemistry II (60 hours)	CHEM 1010H – Introductory Chemistry II	0.5

GEOM 163 – Fundamentals of Geomatics (45 hours); GEOL 83 – Earth and Atmosphere (45 hours)	GEOG 2090H – Introduction to Geographical Information Systems	0.5
GEOL 21 – Principles of Hydrogeology (60 hours)	GEOG 3530H – Hydrology	0.5
MATH 86 – Math I (45 hours); MATH 87 – Math II (45 hours)	MATH 1051H – Non-Calculus Statistics I: Elementary Probability and Statistics; MATH 1052H – Non-Calculus Statistics II: Elementary and Statistical Methods	1.0
COMM 137 – Readings in Environment and Restoration (45 hours)	0.5 unassigned English credit at the 1000 level (excludes ENGL-ERST 2705H – Literature and the Environment)	0.5
ECOS 36 – Ecological Land Classification (45 hours)	0.5 unassigned Environmental and Resource Science credit at the 2000 level	0.5
ECOS 27 – Introduction to Ecology (45 hours)	0.5 unassigned Science-Environmental and Resource Science credit at the 2000 level	0.5
COMM 131 – Critical Thinking and Communication (60 hours)	No equivalents received	0.0
Successful completion of Years 1 and 2	1.0 unassigned Science credit at the 1000 level; 0.5 unassigned Science credit at the 2000 level	1.5

SEPTEMBER 2023

ADDENDUM

TO THE

MEMORANDUM OF UNDERSTANDING FOR THE JOINT DEGREE/DIPLOMA OFFERING IN ECOLOGICAL RESTORATION

BETWEEN

THE SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY

AND

TRENT UNIVERSITY

This Addendum recognizes the changes outlined below, which shall become effective as of the Fall 2023 intake at Trent University. These changes will remain effective until the above-mentioned Agreement expires or until a new agreement is entered in to, whichever occurs first.

The following changes have occurred:

- ERST 3311H – Environmental Risk and the Risk Society is no longer offered at Trent University. As a result, ERST 3110H – Environmental Impact Assessment: A Case Study Approach will replace ERST 3311H as one of the required ERST choice credit options.

These changes specifically refer to Sections 5 of the Agreement.

ECOLOGICAL RESTORATION: PROGRAM REQUIREMENTS

To complete the joint diploma/degree in Ecological Restoration, students will have to complete 10.0 Trent University credits in Year 3 and Year 4, as follows:

Required Credits
ERST-CAST 3780H – Canadian Renewable Resource Economics and Project Planning
ERSC 4520H – Restoration Ecology
ERSC 4530H – Remediation and Reclamation of Sites
1.0 ERST credit from the following: • ERST 3110H – Environmental Impact Assessment: A Case Study Approach • ERST-PHIL 3301H – Environmental Ethics • ERST-PHIL-SAFS 3302H – Animals and Society • ERST 3312H – Ecological Risk Assessment
0.5 ERST credit from the following: • ERST 3501H – Environment and Communication: Oral and Visual Presentation • ERST 3502H – Environment and Communication: Writing and Reporting
Choice/Elective Credits
1.0 ERSC and/or ERST elective credit at the 4000 level in addition to the above, including at least 0.5 credit from Category D
2.0 ERSC and/or ERST elective credits in addition to the above
2.5 additional elective credits at the 3000 level or beyond
1.5 additional elective credits
NOTES: • *4.5 of the 7.0 choice/elective credits must be science credits*

- *An approved field course at the 3000 or 4000 level must be included in the total 10.0 credits. Suggested field courses are listed in the Trent University calendar. Approval of unlisted options is normally communicated from the Trent degree coordinator to the Registrar's Office, for inclusion in a student's file.*

Recommended Elective Courses

The following Environmental and Resource Science/Studies courses as well as any of the required course options not completed, are recommended for their specific applicability to students in the Ecological Restoration program. Students are also encouraged to explore other course offerings in the Environmental and Resource Science/Studies program, as well as those available across the range of Trent departments. A current list of these courses will be provided on the Trent Ecological Restoration degree webpage.

2000 or 3000 level courses	4000 level courses
BIOL 3050H – Limnology	BIOL-FRSC 4510H – Species-at-Risk Biology and Policy
BIOL 3051H – River and Stream Biology	BIOL 4520H – Biology of Invasions
BIOL 3190H – Wild Plants of Ontario	ERSC/ERST 4010Y/4020D – Honours Thesis
EGEO-ERSC-GEOG 3003H – Field Methods in Environmental Geoscience	ERSC-BIOL 4030H – Research Design and Data Analysis
ERSC-GEOG-BIOL 2080H – Natural Science Statistics	ERSC-GEOG 4040H – Hydrochemical Fluxes in the Hydrosphere
ERSC-CHEM 2610H – Atmospheric Environmental Chemistry	ERSC-BIOL-GEOG 4070H – The Fate of Contaminants in the Aquatic Environment
ERSC-CHEM 2620H – Aquatic Environmental Chemistry	ERSC-BIOL 4240H – Fisheries Assessment and Management
ERST 3081H – Local Waste Management	ERST 4250H – Environmental Law and Regulation
ERST 3082H – Issues in Waste Management	ERSC 4350H – Climatic Change
ERST 3110H – Environmental Impact Assessment: A Case Study Approach	ERSC-BIOL 4390H – Conservation Biology
ERST-CASE-POST 3120H – Canadian Environmental Policy	ERSC-GEOG 4450H – Spatial Modelling with GIS
ERSC 3160H – Community-Based Natural Resource management	ERSC-GEOG 4640H – Integrated Watershed Management: Approaches and Methods
ERSC 3200Y – Management of Forest Ecosystems	ERSC-GEOG-WASC 4703H – Senior Seminar in Earth and Environmental Science
ERSC 3220H – Community Engaged Lacustrine Shoreline Assessment and Monitoring	ERST-POST 4704H – Senior Seminar in Environmental Politics
ERSC/ERST-IDST 3230H – Environmental Problems and Solutions in Small Island Developing States: A Field Course	ERST-INDG-IESS 4730Y – Sustainable Indigenous Communities
ERST 3250H – Introduction to Environmental Law	ERSC/ERST 4801H – Greening the Campus: Restoring and Sustaining Green Infrastructure
ERSC 3510H – Ecology and Management of Wetland Systems	ERSC/ERST 4802H – Greening the Campus: Reimagining Use of the Built Environment
ERSC 3551H – Pollution Ecology	ERST 4810H – Ecological Design
ERSC-GEOG-SAFS 3650H – Soil Management and Conservation	ERSC/ERST 4830Y, 4840H – Community-Based Research Project
ERSC/ERST-IESS-INDG 3730Y – Indigenous Peoples, Health, and the Environment	ERSC 4850Y, 4860H, 4870H, 4880H – Field Course
ERSC/ERST 3840H – Community-Based Research Project	
ERSC 3850Y, 3860H, 3870H, 3880H – Field Course	
ERSC/ERST 3905Y/3906H – Field Course Research Project	

GEOG 3540H – River Environments and Processes	

JANUARY 2024

ADDENDUM

TO THE

MEMORANDUM OF UNDERSTANDING

BETWEEN

THE SIR SANDFORD FLEMING COLLEGE OF APPLIED ARTS AND TECHNOLOGY

AND

TRENT UNIVERSITY

REGARDING THE JOINT DIPOMA/DEGREE OFFERING OF

ECOLOGICAL RESTORATION TECHNICIAN

AND

BACHELOR OF SCIENCE (HONOURS), ECOLOGICAL RESTORATION

This Addendum recognizes the changes outlined below, which shall become effective immediately. These changes will remain effective until the above-mentioned Agreement expires or until a new agreement is entered in to, whichever occurs first.

The following clause will be added to the agreement as Article 4.8:

- A student who completes course credits at Trent University within years one and two of the Ecological Restoration program can transfer back to Fleming College. Fleming College will accept an unofficial transcript as necessary documentation to award the transfer credit to the student's Fleming academic record. All courses articulated within Article 5 subsection 5.1 or superseding equivalency tables are eligible. Courses not explicitly referenced within Article 5 subsection 5.1 or superseding equivalency tables are subject to the College's transfer credit policy and procedure, as outlined in Fleming College's Transfer Credit Procedure, OP 2-210.

  For course enrolment at Trent University, a student must fulfill the University's course enrollment requirements, including satisfying course prerequisites and corequisites. Enrollment depends on course and seat availability. The student is responsible for submitting the unofficial transcript to Fleming College to ensure that the credit is officially acknowledged on the Fleming academic record.

  It is advised that the student consult with the Fleming College Ecological Restoration program coordinator before enrolling in any course(s) at Trent University during the first two years of the Ecological Restoration program.

These changes specifically refer to Section 4 of the Agreement.