



M.Sc. in Environmental & Life Sciences
(MELS) Student Handbook

Welcome from the MELS Co-ordinator and Committee

Welcome to Brandon University and to the MELS program!

The MELS program was approved in Fall 2013 with special funding to Brandon University from the Province of Manitoba, and we began recruiting students into Brandon University's first graduate program in Science in January 2014. The first MSc degrees were awarded in fall 2016.

The MELS program combines the extensive teaching experience and world-class research expertise of qualified professors from the Departments of Biology, Chemistry, Geography, Geology and the Environmental Science program. Professors must be a member of Brandon University's Faculty of Graduate Studies to teach a course in MELS or to supervise a student's thesis. We're also busy adding scientists from our partner institutions in Brandon and the region to broaden the scope of our courses and the research topics available for students' thesis.

The environmental and life sciences areas cover a wide range of potential research topics, from the impact of pollutants in water catchments to the development of new drug therapies for treating parasitic diseases. Our group of professors offer a diverse range of research programs run by internationally recognized researchers; research that you can be a part of! The diversity of our researchers is evident as you walk the halls of the contributing departments.

Our **Biology** professors research interests range from molecular and developmental biology to whole organism studies of physiology, to community and ecosystem studies of ecology, behavior, and paleontology. In **Chemistry**, they range from materials science to environmental chemistry, and in **Geography** span glaciology, marine mammal conservation, and remote sensing. Our **Geology** department Professors' research includes petroleum geology and the discovery and management of minable ore bodies, and the mitigation of mining activities. We have new well equipped analytical laboratories. As a graduate student of MELS you will play a significant role in shaping these research directions, not only those of your own supervisor but also through interdisciplinary work with professors from other departments and with other graduate students. So cherish your time in the MELS team and make the most of the resources available to you. Enjoy your research, academic work and graduate studies! They will all bring rewarding and unforgettable experiences, and help shape your future!

We are glad to have you onboard!



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1. THE CITY

a. Housing/rental

Graduate student housing is available on campus through Ancillary Services:

<http://www.brandonu.ca/residence/>

For off-campus housing, rentals are listed on the local website ebrandon.ca

http://ebrandon.ca/browseads.aspx?cat_id=71 or through the local newspaper www.brandonsun.com

b. Health and dental care

In 2008, Brandon University students voted overwhelmingly in favour of creating a Health and Dental Plan for students who do not have coverage otherwise. Brandon University Students Union (BUSU) works with the Canadian Federation of Students' National student Health Network to provide health coverage to students. The coverage provided to students is provided through Student VIP (C&C Insurance), To learn more about your plan, visit the Student VIP online portal

here: https://studentvip.ca/frmpage.aspx?school_page_id=176f4094-3afb-4831-ab81-9567f6f08aff#parentVerticalTab1

Through the Health and Dental Plan, students at Brandon University enrolled in a minimum of 18 credit hours of studies during the regular academic year or Graduate Studies, are automatically enrolled in the plan and shall have \$250 charged to their student account. If you wish to opt out of the Health and Dental Plan you may do so providing you have alternate coverage. Just go to <https://studentplans.hroffice.com> to opt-out. To get more information please go to your Student Union office and speak to the Health Plan Administrator or call (204) 727-7314.

PLEASE CHECK THE BUSU Website for OPT-OUT DEADLINES!!!

Please visit the Brandon Regional Health Authority Homepage for more information regarding local healthcare options, programs and services: <http://brweb.pmh-mb.ca/>

c. Insurance

To obtain information about vehicle insurance/licensing in Manitoba please visit the Manitoba Public Insurance (MPI) website: <http://www.mpi.mb.ca/en/Pages/default.aspx>. Please note that MPI is the only car insurance provider in the Province of Manitoba.

To find a local insurance broker for home, rental, life, personal accident etc. visit the Insurance Brokers Association of Manitoba: <http://www.ibam.mb.ca/findbroker.cfm>

d. Social aspects – where to go for bars, restaurants, culture, etc

Please visit the City of Brandon Webpage to find local attractions, recreation, festivals and events: <http://www.brandon.ca/>

e. Brandon transit

BUSU and Brandon Transit have an agreement where each student pays **only** \$15 automatically as a part of their student fees and receives complete access to the Brandon Transit system from September to August of their current school year. Students can use their student cards with the electronic reader on the buses for limitless access all year long! Perfect for those cold winter days when your car won't start! Regular fixed route bus service, and Handi-Transit services for people with disabilities are provided by Brandon Transit, which is operated and funded by the City of Brandon. For more information regarding routes, fares etc. please visit <http://www.brandontransit.ca/>

2. THE UNIVERSITY

a. Faculty of Graduate Studies

Brandon University offers Graduate programs in Music, Education, Psychiatric Nursing, Rural Development, and Science. The Faculty of Graduate Studies (FGS) serves as the principal Administrative Body overseeing all graduate programs offered through Brandon University.

Information for the Faculty of Graduate Studies can be found here:

<http://www.brandonu.ca/graduate-studies/>

The Graduate Studies Calendar can be found here: <https://www.brandonu.ca/calendar/>

b. Faculty of Science

The Faculty of Science website is located here: <http://www.brandonu.ca/science/>

c. Parking

Serviced car parking (i.e., with plug-ins for your car engine heater in winter) are available through a permit for a fee in several lots on campus. Parking for free is also available on the streets surrounding the campus, but these have posted time limits and fines are applicable for exceeding these time limits.

Permit parking can be obtained at the Parking Office for the following durations: 12 month, 8 month, 'per term', monthly, weekly and daily. Casual or visitor parking is available at ticket dispenser lots, metered areas, or by special permit in reserved areas. (Parking Meters: 1 cent per minute max. 100 minutes; Hourly Parking Tickets: cost per hour).

If you have any queries concerning on-campus parking, please contact the Parking Office, located on the main floor of McMaster Hall (Residence Office). Hours: 8:30 am – 4:30 pm (Monday to Friday)

<http://www.brandonu.ca/parking/> Telephone: (204)727-7394 or 9761

d. Healthy Living Centre

Brandon University has a new and well equipped gymnasium where students, University staff and Faculty members can exercise, receive training and sports therapy, and participate in intramural sports. The HLC is also the home to BU's teams, the Bobcats men's and women's basketball and volleyball teams. Use of the HLC is included in your tuition. <http://gobobcats.ca/index.aspx?path=hlc>

e. Workplace Health and Safety

For most emergencies dial 911 (Fire, Ambulance, Police). On campus dial 9-911, off campus dial 911

Report accidents and injuries to Denise Merrill on campus call ext. 389, or off campus call 727-7389, or email her at merrilld@brandonu.ca

The campus grounds and buildings are patrolled after hours by a security service. Please provide ID if asked by Security.

f. Campus Map



BRANDON UNIVERSITY
 Founded 1899

Campus Map

- | | |
|--|--|
| 1 Glen P. Sutherland Gallery of Art | 8 Knowles-Douglas Students' Union Centre |
| 2 Healthy Living Centre (Gymnasiums) | 9 Physical Plant Building |
| 3 Flora Cowan Hall (Women's Residence) | 10 Power Plant Building |
| 4 John R. Brodie Science Centre | 11 George T. Richardson Centre (John E. Robbins Library) |
| 5 McMaster Hall (Co-Ed Residence) | 12 Clark Hall (Arts Building) |
| 6 Main Dining Hall | 13 A.E. McKenzie Building (Admissions Office and Student Services) |
| 7 Darrach Hall (Men's Residence) | 14 Queen Elizabeth II Music Building (Kinsmen Hall, Lorne Watson Recital Hall) |
| | 15 BU Early Learning Centre |
| | 16 Education Building |
| | 17 Western Manitoba Centennial Auditorium |
| | 18 Dr. James & Lucille Brown Health Studies Complex |



- P** Permit Parking
8:30 a.m. - 4:30 p.m., Mon. - Fri.
- Pd** Pay & Display Parking
\$0.50 per hour, up to 8 hours
- ♿** Handicap Parking
Located in front of Clark Hall
- Metered Parking
\$0.01 per min., up to 100 min.
- ↕** Carpool Parking
- S** Campus Security Office
Located in the Physical Plant Bldg.
- 🚬** Designated Smoking Area
Smoking is permitted in these locations only.
- Ramp Access / Wheelchair Accessible Curbing
- ☎** Emergency Telephone

3. THE PROGRAM

a. People

The M.Sc. in Environmental and Life Sciences Program (or MELS) consists of a committee with representatives from the Departments of Biology, Chemistry, Geography, Geology, the Co-ordinator of the program, and the Dean of Science. There are currently 24 professors from the Faculty of Science who are members of the Faculty of Graduate Studies and are able to accept Graduate Students. We expect the number of Faculty members available to supervise graduate students in the MELS program to increase, and also to add scientists as available thesis advisors from nearby research institutions such as the Brandon Research Centre (Agriculture and Agri-Foods Canada).

b. Faculty

A Faculty Directory for MELS can be found here: <http://www.brandonu.ca/mels/mels-faculty-directory/>

c. Staff

The department has one Administrative Assistant, Heather Teeple. She can be reached at: Ph: 204-727-9608, FAX: 204-728-7346, email Teepleh@brandonu.ca. Please ask Heather first if you need something.

d. Courses

The MELS degree is an interdisciplinary program that provides students with:

- courses integrating knowledge and techniques drawn from the traditional disciplines of biology, chemistry, environmental science, geography, and geology;
- An interdisciplinary thesis that investigates the interactions within and among organisms and/or the environment at scales from the molecular to planet-wide;
- Training in the application of life and environmental science technologies.

For more detailed information on courses including descriptions and pre-requisites please visit the Graduate Studies Calendar <https://www.brandonu.ca/calendar/>

e. Student Support

Graduate teaching Assistantships (GTA)

Graduate teaching Assistantships are awarded each year to new and returning students. These allow students to gain experience leading labs for undergraduate classes. Please indicate your interest, or continuing interest to Heather Teeple, as these are chosen by the MELS Steering Committee.

Scholarships and awards

Information regarding both undergraduate and graduate research scholarships and grants may be found here: <http://www.brandonu.ca/research/scholarships-awards/>

f. Dates & deadlines

The deadline for application to scholarships, grants and research assistantships will vary on a year-to-year basis. Be sure to check websites for up-to-date information regarding submission deadlines. Scholarship applications are often due in the year before they are awarded, so **be sure to check early and ask your supervisor and other students!**

g. Graduate Student Offices

A new office for MELS Graduate Students was created to house the workspaces of all of our MELS students. This work space is furnished with nine brand-new work stations as well as three computers, a scanner and printer for all of our Graduate Students to use. The offices are located at 4-39 Brodie Building.

4. YOUR DEGREE

h. Registration

Registration is available to those students returning from one session to the next whose transcript of record indicates eligibility to continue or those who have been readmitted by the Graduate Studies Committee, and to new students who have received a letter of acceptance for admission.

Registration consists of completing all registration procedures, obtaining approvals (where necessary) for an appropriate program of studies, and making a payment for the tuition and fees assessed.

It is also your responsibility to notify Financial & Registration Services in writing if you decide to drop/withdraw from a course. Tuition refunds (if applicable) are calculated from the date that written notification is received by Financial & Registration Services.

i. Fees

You have access to all your financial information using the online student information system.

<https://webapp.brandonu.ca/pls/student/f?p=101:101:3838205464355> You are responsible for payment of all required fees by required deadlines even if you do not have online access. Paper copies of a student's financial statement will not be mailed out.

All fees are payable at Financial & Registration Services. Cheques/money orders should be made payable to Brandon University. A charge of \$40.00 (subject to change) will be made for any returned cheques. Interac Direct Payment may also be used.

Visit www.brandonu.ca/pay/ to make payments by web or telephone banking through one of the major financial institutions. Payments can also be made directly from your financial institution's web site.

Students who are sponsored are required to consult with Financial & Registration Services to have their registration approved.

Registration is not complete until you have complied with all the requirements of the enrolment routine and have paid the prescribed fees to Financial & Registration Services. Fee information is available from Financial & Registration Services or through the Tuition Information link. For full information regarding miscellaneous fees, please refer to the General Calendar. <https://www.brandonu.ca/calendar/>

Payment of fees in a timely manner is required to avoid cancellation of registration. A reinstatement process may be available and a fee will be charged for reinstatement. See Financial & Registration Services for further details.

Note: Neither final grades nor transcripts will be released until all debts to the University have been paid in full. You will not be eligible for graduation until all fees are paid.

j. Expectations

The MELS program consists of a minimum of 30 credit hours including the thesis.

All students must complete a thesis in the area of Environmental and/or Life sciences. The thesis carries a 16 credit hour weight. The topic for the thesis must be approved by your supervisor, a Graduate Advisory Committee, normally consisting of two other members, and the MELS Graduate Co-ordinator .

All students must complete a minimum of 9 credit hours of course work at the graduate level (600-level or above) normally drawn from the list of courses offered by the Faculty of Science at BU, including courses offered by at least 2 of the following distinct disciplines.

All students will be required to complete an additional 3 credit hour Research Methodology course or have completed the equivalent, as recommended by the student's Graduate Advisory Committee.

All students must attend and participate in the Science Seminar series (including presentation of at least one seminar per year based on their research) throughout the duration of their program through enrollment in the course *48:663 Graduate Seminars in Science*. This course is taken twice in their program.

Course requirements (selection and number) will be determined by the student's Graduate Advisory Committee in consultation with the student. This may include the addition of courses beyond the 30 credit hour minimum requirement (e.g., Conditional admission; please see page 12), subject to approval by the Graduate Co-ordinator.

Individual courses within a program of study may be taken elsewhere for credit at this University or by transfer. In such cases, students must have the prospective course approved by their Graduate Advisory Committee, and the Graduate Co-ordinator.

Students may earn up to 3 credit hours by attending approved non-credit professional development sessions (workshops, and in-service sessions) for credit in the course *48:661 Graduate Research Practicum*. Normally, one credit hour is earned for attendance at 24 hours of relevant non-credit sessions.

Prior approval must be sought in the following manner to determine eligibility for credit for 48:661 *Graduate Research Practicum*: The student must submit a written request with the supporting materials/documentation to his/her advisory committee who will make a recommendation to the MELS Program Coordinator for her/his approval. It is expected that workshops, conferences, and professional in services for which credit is sought will be completed during the student's program and before graduation. Content material should reflect an identifiable theme in Environmental and/or Life Sciences and be appropriate for graduate level study. These credit hours will be graded "Pass" or "Fail". Normal per credit hour fees will apply. If a program of 3 credit hours is planned and approved, students will receive credit for 48:661 *Graduate Research Practicum*.

Prospective students with little direct background in the areas/disciplines/methodologies relevant to Environmental and Life Sciences may be required to satisfy the MELS Graduate Admissions Committee that they will be able to complete the required courses. This may occur, for example, by receiving successful standing in a maximum of two 3 credit hour courses taken at the undergraduate level. The nature of these courses is to be established by the MELS Graduate Admissions Committee.

Transfer credits will be accepted, consistent with University policy. Students may transfer a maximum of 6 credit hours taken at the post-degree level into the Master's program.

100, 200 and 300 level courses may not be taken for credit toward the Master of Science (Environmental and Life Sciences). Normally only 600 level (or above) courses are acceptable.

Any student enrolled in 48:798 *Thesis* and actively engaged in thesis completion as determined on an annual basis by the supervisor, their Graduate Advisory Committee and the Graduate Co-ordinator (MELS), shall be considered a full-time student of Brandon University

k. Responsibilities

Of the student

As a student of the MELS program the completion of your degree is ultimately your responsibility. **It is your responsibility** to register for the appropriate courses, pay the fees, be aware of and prepared for scheduled meetings with your Graduate Advisory Committee with the assistance of the MELS Co-ordinator and Office Assistant, to write proposals and progress reports, and a thesis. Adhere to appropriate timelines and manage your time accordingly.

Of the Supervisor

It is the responsibility of your supervisor to direct you in your program of study and research. This begins with your supervisor's aid in developing your proposal. An additional requirement of your supervisor is to provide guidance, help you learn to be an effective researcher, and suggest possible sources of funding. Your supervisor should provide timely feedback to you on your proposal, progress reports, drafts of your thesis, presentations, and answer your questions. Your supervisor can also help you communicate with the advisory committee, the department, funding agencies, and the FGS.

Of the Graduate Advisory Committee

The advisory committee must ensure that you, the graduate student, follow the guidelines set out by the MELS program and the Faculty of Graduate Studies (FGS). Your committee must approve your

proposed research as well as provide comment and feedback on the progress that you make on a yearly basis.

Of the MELS Graduate Studies Committee

The Graduate Studies Committee (GSC) oversees the graduate programs within the University. Members are elected from the various departments, and are knowledgeable about the issues related to graduate training and research, and are great sources of information for you and your supervisor, as you progress through your graduate studies.

1. Contact people for support

There are a variety of people within the program who have the ability to help when problems or concerns arise. The MELS Program Co-ordinator, Dr. Derrek Eberts, and the Dean of Graduate Studies, Dr. Demetres Tryphonopolous, can be approached if you experience difficulties (e.g., between you and your supervisor and/or advisory committee) that can't be resolved by the involved parties. The Office Assistant for MELS, Heather Teeple, should be able to assist you with any questions regarding your program, registration, general inquiries, etc.

5. Important Dates/Timelines

September 2016

- **Monday 5 University closed:** LABOUR DAY -- no classes scheduled
- **Tuesday 6 University open** -- no classes scheduled
- **Wednesday 7 First day of classes** for first term Fall and both-term Fall & Winter courses
- **Wednesday 21 Last date for registration** and course additions for first term Fall and both-term Fall & Winter courses
Last date for 100% refund for first term Fall courses

October 2016

- **Monday 10 University closed:** THANKSGIVING DAY -- no classes scheduled
- **Tuesday 18 Graduation** (no ceremony)

November 2016

- **Thursday 10 Fall study break:** no classes scheduled
- **Friday 11 University closed:** REMEMBRANCE DAY observed -- no classes scheduled
- **Friday 25 Last date for voluntary withdrawal** from first term Fall courses
Last date for 50% refund for both-term Fall & Winter courses

December 2016

- **Tuesday 6 Last day of classes** for first term Fall courses
- **Friday 9 Final examinations begin** for first term Fall courses
Examinations begin for both-term Fall & Winter courses
- **Friday 16 Last date to apply for February 2017 Graduation**
- **Monday 19 Final examinations end** for first term Fall courses
Examinations end for both-term Fall & Winter courses
- **Friday 23 University closed:** For the holidays -- no classes scheduled

January 2017

- **Tuesday 3 University open** -- no classes scheduled
- **Winter Orientation for new students**
- **Wednesday 4 First day of classes** for second term Winter courses.
Classes resume for both-term Fall & Winter courses
- **Wednesday 18 Last date for registration** and course additions for second term Winter courses
Last date for 100% refund for second term Winter courses

February 2017

- **Tuesday 14 Graduation** (no ceremony)
- **Monday 20 University closed:** LOUIS RIEL DAY -- no classes scheduled
- **Tuesday 21 Winter study break begins:** no classes scheduled in second term Winter and both-term Fall & Winter courses
- **Friday 24 Winter study break ends:** no classes scheduled in second term Winter and both-term Fall & Winter courses
- **Monday 27 Classes resume** following Winter study break

March 2017

- **Wednesday 1 Last date for voluntary withdrawal** from both-term Fall & Winter courses
- **Friday 17 Last date for voluntary withdrawal** from second term Winter courses
- **Friday 24 Last date to apply to graduate for May 2017 Convocation**

April 2017

- **Friday 7 Last day of classes for second term** Winter and both-term Fall & Winter courses
- **Wednesday 12 Final examinations begin** for second term Winter and both-term Fall & Winter courses
- **Friday 14 University closed:** Good Friday – no classes scheduled
- **Monday 24 Final examinations end** for second term Winter and both-term Fall & Winter courses

May 2017

- **Monday 1 Registration** for first term and both-term Spring courses
First day of classes for first term and both-term Spring courses
- **Tuesday 2 Last date for 100% refund** for first term Spring courses
Last date for registration and course additions for first term and both-term Spring courses
- **Tuesday 16 Last date for voluntary withdrawal** for first term Spring courses
Last date for 50% refund for both-term Spring courses
- **Thursday 18 Last day of classes** for first term Spring courses
- **Monday 22 University closed: VICTORIA DAY**--no classes scheduled
- **Tuesday 23 Final examinations** for first term Spring courses
No lectures or labs scheduled for both-term Spring courses
- **Friday 26 Spring Convocation** for all Faculties/Schools

June 2017

- **Monday 5 Registration** for second term Spring courses
First day of classes for second term Spring courses
Classes resume in both-term Spring courses
- **Tuesday 6 Last date for registration** and course additions for second term Spring courses
Last date for 100% refund for second term Spring courses
- **Thursday 15 Last date for voluntary withdrawal** for both-term Spring courses
- **Monday 19 Last date for voluntary withdrawal** from second term Spring courses
- **Thursday 22 Last day of classes** for second term and both-term Spring courses
- **Monday 26 Final examinations** for second term and both-term Spring courses
- **Tuesday 27 Final examinations** for second term and both-term Spring courses

July 2017

- **Saturday 1 CANADA DAY**
- **Monday 3 University closed:** -- no classes scheduled
- **Tuesday 4 Registration** for first term and both-term Summer courses
First day of classes for first term and both-term Summer courses
- **Wednesday 5 Last date** for registration and course additions for first term and both-term Summer courses
Last date for 100% refund for first term Summer courses
- **Wednesday 19 Last date for voluntary withdrawal** from first term Summer courses
Last date for 50% refund for both-term Summer courses
- **Monday 24 Last day of classes** for first term Summer courses
- **Wednesday 26 Final examinations** for first term Summer courses
- **Monday 31 Registration** for second term Summer courses, **First day of classes** for second term Summer courses, **Classes resume** in both-term Summer courses

August 2017

- **Tuesday 1 Last date for registration** and course additions for second term Summer courses
- **Last date for 100% refund** for second term Summer courses
- **Monday 7 University closed: CIVIC HOLIDAY** -- no classes scheduled
- **Monday 14 Last date for voluntary withdrawal** for both-term Summer courses
- **Wednesday 16 Last date for voluntary withdrawal** from second term Summer courses
- **Monday 21 Last day of classes** for second term and both-term Summer courses
- **Wednesday 23 Final examinations begin** for second term and both-term Summer courses
- **Thursday 24 Final examinations end** for second term and both-term Summer courses
- **Friday 25 Last date to apply for October 2017 graduation**

