



FACULTY OF SCIENCE

EXPERIENTIAL AND WORK-INTEGRATED LEARNING

Experiential Learning positions lived experiences and hands-on learning as foundations for work-integrated learning opportunities.

EL can encompass a wide range of transferable skills and opportunities that allow students to explore the job-training potential of their Science degree beyond an on-campus laboratory setting, while acquiring new knowledge and applied frameworks to help them become “job-ready.”

Experiential and Work-Integrated Learning supports University of Winnipeg activities to strengthen faculty, student and community success with work-integrated learning initiatives and placements. These opportunities are directly tied to a course or plan of study, and usually take one or more of the following forms:

Field Trips, Service Learning and On-Site Field Work

These opportunities allow students to:

- Do hands-on, applied work in the environment of a chosen field.
- Experience community learning and local culture.
- Contribute to knowledge mobilization with surrounding communities.
- Discuss shared experiences outside the classroom.

Field/Applied Research

These opportunities allow students to:

- Apply and enhance understanding of theoretical principles
- Facilitate skill building
- Encourage transformative learning and critical thinking on the ground
- Apply prior learning to current education

Internships/Practicum Placements

These opportunities allow students to:

- Develop hands-on work experience in an industry of interest.
- Enhance skills and theoretical frameworks learned in the classroom.
- Receive practical application and portfolio-building through real-world work assignments.

SAMPLE CAREERS

UWinnipeg students have noted the clear path to future careers stemming from an undergraduate degree in the Sciences. Students are able to study and apply innovative ideas, conduct research, hypothesize, and expand their understanding of the world. In many cases, science courses with a work-integrated learning component can open up doors to employment, graduate programs, or professional studies in dentistry, medicine, optometry, or veterinary medicine.

Examples of occupations include: radiologist, arborist, astrophysicist, geneticist, environmental scientist, pharmacist, data analyst, developer, energy manager, exploration geologist, lab supervisor, respiratory specialist, chemist.

SAMPLE COURSES

Anthropology - International Field School ANTH-4230 (6): This field school in Archaeology and Bioarchaeology provides in-depth training in excavation, documentation, and analysis of material from an archaeological site and is typically located outside Canada (previous sessions were held in Serbia and Jamaica). Undergraduate students from University of Winnipeg are given preference in registration, however, the field course is open to upper undergraduate and graduate students from other universities.

Geography - Geography & Environmental Studies and Sciences Internship GEOG-3419 (3):

The internship provides students with an opportunity to integrate academic learning volunteer placements with local organizations, including local non-for-profits and corporations. Students provide service to the community while gaining the benefit of practitioner experience. Students are matched based on the skills, interests and the needs of the host. Assessment is based on the host's evaluation and work submitted by the student (assessed by the faculty instructor). The grade is pass/fail. The cohort will meet together at least three times per semester. Cross-Listed: ENV-3419. Restrictions: Students may not hold credit for this course and ENV-3419.

Radiation Therapy Program – Clinical Education Courses I – VI (CCMB-2904, 3914, 3924, 3934, 3944, 4902): Students must first complete 24 credit hours of Pre-Radiation coursework and then apply for admission to the Radiation Therapy program through UWinnipeg. The student is then assigned to a variety of clinical areas, with the majority of time spent in the planning and delivery of treatment. Students continue to apply fundamental concepts of radiation therapy to the care of cancer patients of all ages, and their families, during the time in which they are undergoing radiation therapy. The focus is on critical thinking, communication skills, team work, and advocacy. The level of clinical responsibilities is increased as the student performs competencies under the supervision of a registered radiation therapist (R.T.T.)

Kinesiology - Athletic Therapy Program (KIN-3500 & 4500): Third-year Kinesiology students can partake in the two Athletic Therapy practicum courses during their third and fourth year of study. In these courses, students are placed in a clinic or with a sports team, either within or outside of the University. These courses provide both on-field and clinical experience in athletic therapy under the appropriate supervision. Students learn to apply the theoretical knowledge of injury prevention and management while working in a field setting for approximately 125 hours. A concurrent clinical placement of approximately 125 hours provides an opportunity to assess and rehabilitate injuries experienced by the athletic and physically active population.

MORE SAMPLE COURSES

- Archaeological Field School
- Material Culture in Northern Plains Indigenous History Field Course
- Health Informatics Practicum
- Field Research in Urban Geography
- Forest Field Skills Camp
- Dendrochronology: Principles and Applications
- Behavioural Ecology and the Prairie Grasslands Field Course
- Field Research in Animal Ecology and Energetics

These courses are offered across a wide variety of Science departments.

There is a comprehensive list of courses with experiential and work-integrated learning components available on the UWinnipeg Experiential Learning website here: <https://www.uwinnipeg.ca/experiential-learning/courses-by-department.html>

For details on specific courses with an experiential learning or work-integrated learning component, refer to the EL website or contact your department Chair.

CONTACT US

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