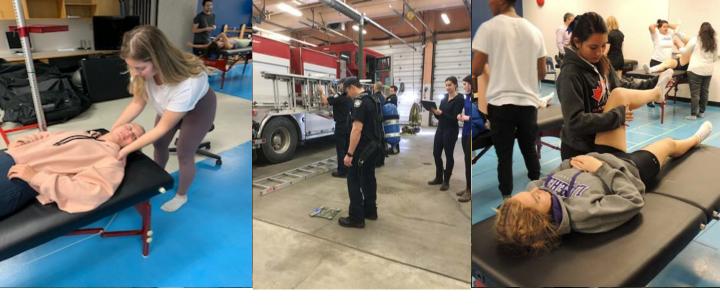
# SCHOOL OF KINESIOLOGY Graduate Programs

## MASTER OF SCIENCE COURSE-BASED







# Master of Science in Kinesiology Course-Based Program 16 months, STUDY FROM ANYWHERE

Kinesiologists are clinical specialists who have the ability to help people manage limitations that are linked to chronic illness and disease.

The course-based Master of Science in Kinesiology is a program for those that are interested in undertaking a more applied, evidence-based pathway that will add value to their credentials both academically and experientially. The program provides professional training, clinical skills upgrading, and research opportunities for current and future practitioners of Kinesiology.

The MSc program is offered over a 16-month time frame commencing in September. Students enroll on a full-time basis and complete course work as required. The program includes 8 online courses and four 5-day on-site practical courses.

The combination of online and on-campus courses gives students the option to live in Thunder Bay or to live in an alternate location and attend the Thunder Bay campus to complete the practical courses. This distance-friendly MSc degree offers students the opportunity to study from home and still engage with professors and peers. The format of course delivery may also allow students to maintain employment while attending their studies.

"Attending LU where there are small class sizes enabled me to develop strong relationships with my professors and research supervisors that I maintain today. We continue to collaborate in a professional capacity where research and physical activity promotion can support one another."

**April Hadley**, Lakehead MSc Alumni, Health Promoter on the Healthy Living Team, Thunder Bay District Health Unit



### **COURSE CONTENT**

Content in the program includes the following advanced level topics: research methods and statistics; assessment skills related to peripheral and spinal joints; exercise prescription for both healthy individuals and those with chronic disease; communication and leadership in the context of ergonomics and disability management; business, ethics, and risk management related to kinesiology; knowledge translation; and research skills.

### **PROGRAM DELIVERY**

Online courses consist of self-directed learning as well as bi-weekly Grand Rounds. Students are required to complete the necessary readings, online learning modules, and assignments as scheduled by the professor. Approximately every second week students participate in a three-hour Grand Rounds discussion in addition to their research and statistics courses. Students in Thunder Bay attend in person, while those out of town attend via video conference. Grand Rounds are structured in a problem-based learning style where students work through case scenarios and discuss relevant research as a group.

## ADMISSION REQUIREMENTS

Admission to the program is consistent with Lakehead University's policy for admission to Graduate Programs.

Students must successfully complete a four-year degree in Kinesiology, Human Kinetics or a related degree, with at least second class standing (B) based on their last 20 half courses or equivalent.

Unlike our thesis-based offering, students will <u>not</u> be required to secure a faculty supervisor to be considered for admission.

Applicants are required to submit contact information for three references; two academic and one professional.

## ON-SITE PRACTICAL COURSE FORMAT

On-site practical courses are five days in length and take place at the Thunder Bay campus. Students gain hands on experience performing the skills and assessments they learned the theory behind during the corresponding online course. Attendance is mandatory in order to pass the course and complete the program.



#### **COURSE DESCRIPTIONS**

Six full course equivalents (FCEs) are required to fulfill the requirements for graduation.

#### KINE 5111 CLINICAL RESEARCH METHODS IN KINESIOLOGY

Focuses on the analysis and understanding of methodology used in clinical health research. A variety of research designs will be discussed including their conceptual and methodological issues. Examples of approaches include evaluation of therapeutic / intervention-based research with true experimental design and determination of etiology and causation using observational methods and evaluation of diagnostic techniques.

## KINE 5310 ADVANCED CLINICAL ASSESSMENT IN KINESIOLOGY

Provides the theoretical foundations of advanced clinical assessment. Topics include gathering relevant medical history, conducting functional assessment, understanding the role of posture, balance, and gait in the assessment process, and performing upper and lower body muscular testing and neurological screening.

## KINE 5315 ADVANCED CLINICAL ASSESSMENT PRACTICAL

Focuses on the practical application of the theoretical foundations of advanced clinical assessment. Students are provided with the opportunity to gain practical experience in taking a medical history, performing functional tests and assessments, and analyzing balance, gait and posture.

## **KINE 5210** CLINICAL DATA ANALYSIS IN KINESIOLOGY

An emphasis will be placed on understanding and applying quantitative statistical methods as well as critical review of reporting and interpretation of statistical approaches common in clinical research. Data analytics in qualitative and mixed methods research designs and knowledge synthesis will also be introduced.

#### KINE 5331 COMMUNICATION AND LEADERSHIP IN ADVANCED ERGONOMICS AND DISABILITY MANAGEMENT

Provides the theoretical foundations of returnto-work, disability management, and ergonomics while considering organizational context and basic principles of behaviour change. Models of communication and leadership with respect to rehabilitation and disability management are also examined.

# **KINE 5336** COMMUNICATION AND LEADERSHIP IN ADVANCED ERGONOMICS AND DISABILITY MANAGEMENT PRACTICAL

Focuses on the practical application of theoretical foundations of ergonomics, return-to-work, and disability management, using learned models of communication and leadership. Students will gain practical experience in developing and implementing physical demands analyses, functional capacity evaluations, and return-to-work programs, within the context of organizational disability management programs.



## KINE 5350 ADVANCED EXERCISE PRESCRIPTION

Provides the theoretical foundation of advanced exercise prescription for apparently healthy individuals and for populations with chronic disease and/or related disorders, including cardiovascular diseases, obesity, cancer, diabetes, and musculoskeletal disorders. Advanced training concepts to improve health, fitness, and performance are discussed in relation to client needs.

## KINE 5355 ADVANCED EXERCISE PRESCRIPTION PRACTICAL

Focuses on the practical application of advanced exercise prescription for apparently healthy individuals, and for populations with chronic diseases and/or related disorders. Encompasses development, implementation, and critical analysis of treatment plans through the discussion of case scenarios.

## KINE 5370 BUSINESS, ETHICS, AND RISK MANAGEMENT ISSUES

Provides conceptual knowledge that has real-world applications in business, ethics, and risk management for the profession of kinesiology. Topics may include the development of marketing and business plans, project management, business financing, and accounting principles. Legal liability, risk management, and fitness and safety standards are discussed from an ethical practitioner approach.

## KINE 5375 THE PRACTICE OF KINESIOLOGY

Theoretical and practical aspects of assessment, prescription, communication and leadership, and business practice are incorporated in this culminating course. Scenarios provide a comprehensive overview of the practice of kinesiology drawing from experiences gained by the students throughout the program.

## **KINE 5012** KNOWLEDGE TRANSLATION IN KINESIOLOGY AND HEALTH

An introductory course in principals of knowledge translation (KT) focused towards application in Kinesiology with possible extension to other health research disciplines. Theoretical and practical issues of KT will be discussed as students develop a KT intervention related to their research area.

#### KINE 5411 COURSE-BASED MSC PROJECT

Involves a comprehensive review and analysis of existing knowledge pertaining to the project topic. The project may take various forms such as secondary data analysis; systematic/scoping reviews; development of a program or model seen in professional practice; analysis of an issue/problem seen in professional practice.



### Semester Outline

#### **Fall Semester**

Kinesiology 5310 Kinesiology 5310 Kinesiology 5315

#### Winter Semester

Kinesiology 5210 Kinesiology 5331 Kinesiology 5336

#### **Spring Semester**

Kinesiology 5350 Kinesiology 5355

#### **Summer Semester**

Kinesiology 5370 Kinesiology 5375

#### Fall Semester (Year 2)

Kinesiology 5012 Kinesiology 5411

Lakehead University's vision is to provide a transformative university experience that is far from ordinary. Our mission is to be recognized as an innovative comprehensive university that provides an education that is about how to think, not what to think.

The following courses are offered on campus only:

KINE 5315 KINE 5336 KINE 5355 KINE 5375

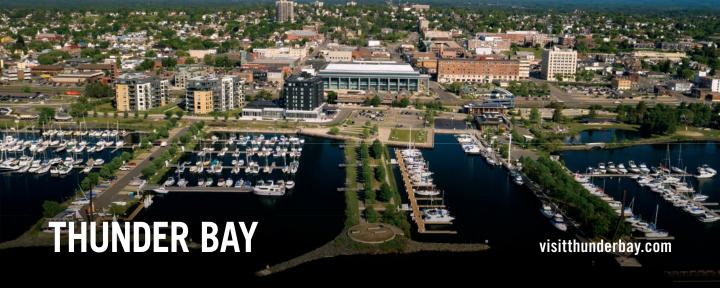
Living accommodations are available on campus for a very reasonable fee or students can arrange their own.

Contact the Program Coordinator for more information.

## ENGLISH LANGUAGE PROFICIENCY REQUIREMENTS

Applicants whose first language is not English must demonstrate they can cope with the language demands of an English language university. Applicants to an undergraduate or graduate program may meet our English language requirements if 3 full years of recent study in an English language school system have been successfully completed or are in the process of being successfully completed.

Applicants whose native language is not English, and who cannot verify having recently studied in an English language school system for more than 3 full years of full-time study, will be required to present proof of English language proficiency.



Located on the northwest shore of Lake Superior under the watchful gaze of Nanabijou, (also known as the Sleeping Giant), the city of Thunder Bay is built around the harbour of the largest inland port in Canada.

- ➤ Population of 110,000
- 1.5 hour fl ight from Toronto, served by WestJet, Porter Airlines, Air Canada, and regional airlines
- ➤ 5 minute walk from campus to the historic Finnish district, waterfront, and downtown north core with cafes, pubs & boutiques
- Vibrant local farmer's market open twice weekly
- 2 alpine ski, snowboarding and Nordic ski centres a 30 minute drive from campus; 7 area golf courses; over 34 km of paved recreational trails throughout the City

- Home to a professional symphony orchestra, theatre, art galleries, and many live music venues, including the Thunder Bay Community Auditorium
- A four-season outdoor paradise, a city rich in wide open green space, parks and wilderness, Thunder Bay is the gateway to outdoor adventure in Northwestern Ontario.
- Growing scene of talented young people representing diverse professions and backgrounds. Small businesses and new innovations are constantly emerging with enthusiastic support from the community

## Connect with Us - Visit, contact us or ask questions!

Our campus is stunning, the city is friendly and we would love to meet you! We are happy to chat with you about any questions you have about out program, the school or the city.



Follow us on Twitter @mylakehead for regular updates about what's happening.



Friend us on Facebook www.facebook.com/LakeheadGradStudies/



## EXCEPTIONAL. UNCONVENTIONAL.

### **CONTACT INFORMATION**

Should you have any questions about the Master of Science Course-based program, please email our Program Coordinator.

### **Erin Sargent**

E: esargent@lakeheadu.ca

