

Course Based Research Project

A. Course Based Research Project Definition

Lambton College is committed to supporting course based research projects to enhance student competencies by applying course content on the real life examples, conducting research activities in an ethical and technical manner, respecting the college practices that define research projects, working collaboratively with faculty as well as outside organizations, and presenting the results of research in a professional manner.

Course-based applied research project is an experiential learning opportunity that enhances the student experience; it allows faculty and students to foster relationships with local industry and work on up-to-date, real-world business projects.

A **course based applied research project** is a multifaceted assignment which is either component of a course or an entirely a spate course such as **capstone project**. A **course based applied research project** serves as a culminating academic and intellectual experience for students, in particular at the end of an academic program or learning-pathway experience.

A **course based applied research project** is designed to encourage students to think critically, apply theory learnt in the course, solve challenging problems, and develop skills such as oral communication, public speaking, research skills, media literacy, teamwork, planning, self-sufficiency, or goal setting—i.e., skills that will help prepare them for modern careers, and adult life. Projects could also be interdisciplinary, in the sense that they would require students to apply skills or investigate issues across many different subject areas or domains of knowledge. Course based project could also tend to encourage students to connect their projects to industry projects, community issues or problems, and to integrate outside-of-college learning experiences, including activities such interviews and scientific observations.

It is clear that students have the most to gain from course-based research. This is no surprise, the College's mission is to provide outstanding applied education and training for a changing world. Course-based applied research contributes to this mission by providing students the following benefits.

B. Considerations

1. Student course based applied research project will be a required part of the curriculum of a program, and will receive grades that form a percentage of the overall student grade for the course or program. The project may be either individual or group, and may form a component of a course or the entire course. Each project will be conducted under the guidance of an appropriate faculty member or academic manager.

2. To qualify as a course based applied research project, the work must be designed to have a clear outcome (e.g.; prototype, improved technology or practices). It must follow accepted research methodologies in the field of study. It must involve investigation and analysis. There must be validation of the research findings to currently existing literature or research.
3. Course based research project can be designed by faculty, students or Lambton College researchers. The course based research committee supervised by the Applied Research and Innovation Office will review the proposal and will decide to accept or reject the project to be supported by the Applied Research and Innovation office.
4. Whatever the nature of the applied research project that a student may be involved in, the student must abide by college practices on the conduct of research and protection of intellectual property and Research Ethics.
5. Students may be required to sign a non-disclosure agreement (NDA) for any applied research project they are involved with industry and organizations.
6. Where a particular type of applied research project is routinely conducted as part of a course assignment, the project type may be approved once by the course based research committee, and thereafter subject to another review only if it is substantially changed.

C. Roles and Responsibilities

a) Applied Research and Innovation Department.

The Applied Research and Innovation Department will be responsible to:

- ▶ Coordinate and help Course based Research Committee to evaluate projects;
- ▶ Identify research topics based on ongoing applied research projects;
- ▶ Provide financial support through Research Innovation Fund (RIF) or funded projects;
- ▶ Provide administration, finance, and project management;
- ▶ Determine and facilitate obtaining approvals including safety and research ethics;
- ▶ Offers guidance on the operation of the projects as well as protection of intellectual property developed through the research activity;
- ▶ Assists with promotion, knowledge dissemination of the research findings where appropriate.

The Research Project application form will be signed by the Course based Research Committee, faculty and Dean of Research. The Research and Innovation office and faculty retain a copy of the form.

b) The Academic Division

The academic division faculty and/or staff are responsible for assigning research projects, assisting in the development of the research project plan, monitoring the conduct of the research project, and assigning and grading research project assignments and reports. The division also determines the nature of the presentation/publication of a student research project if the project is part of the academic course requirements.

c) The Student

It is the responsibility of the student(s) involved in a research activity to conduct research professionally, responsibly and ethically, and to report to their academic manager for further grading. The student(s) has to work closely with faculty and the Research and Innovation Department for any administration and finance related enquiry.

D. Procedures

1. Course based Research Application Form will be completed by a) faculty or b) researcher; the application form is signed by the faculty, or the researcher.
2. Signed Course based Research Application Form will be sent to the Research Development Coordinator at Research and Innovation Department and will be sent to the Course based Research Committee for evaluation.
3. The academic department and applicant will be informed about the committee's decision (acceptance or rejection).
4. If the academic department decides to use the project, the Research department will be informed.
5. Any required contract, non-disclosure agreement, REB and safety approval will be obtained prior to the start of research.
6. Research and Innovation Department will assist involved faculty and student(s) at any time regarding administration, finance and operation. The Research Operations Manager will be the main contact for the research activities.
7. Final project report/presentation will be provided/delivered by faculty and student(s) to the Research and Innovation Department.