Lambton College | RESEARCH & INNOVATION Lambton College

Student Research Manual

2014-2015

Table of Contents

With thanks to the Niagara College Research & Innovation Division for providing training materials for adaptation.

Lambton College Applied Research and Innovation Division

Vision, Mission and Objectives

Vision

Lambton College will be recognized for collaborative applied research, scholarly activities, development, entrepreneurship, and commercialization.

Mission

The mission of Lambton College Research and Innovation is to support and advance industry and community through excellence in applied research, commercialization, and scholarship. Lambton College is committed to pursuing research and development activities that:

- Strengthen and enhance staff/faculty development and student learning through involvement in applied research
- Support economic development in the region and beyond through partnerships in applied research, innovation and commercialization activities
- Improve the productivity and increase the competitiveness of partnered industries and organizations, in particular small and medium sized enterprises (SMEs)
- Support the creation of new jobs through successful applied research and commercialization projects

Objectives

Our major research objectives include:

- Integration of applied research activities within the College programs, building upon our strengths, highly qualified faculty and students, and our robust capacity and infrastructure to support innovation and entrepreneurship,
- Pursuit of funding to support collaborative research,
- Promotion and incorporation of an applied research and innovation culture amongst faculty, staff, and students across Lambton College particularly in departments with historically less involvement in applied research activities,
- Enhancing the Lambton College research capacity and scope to support research conducted by faculty, staff, and students,
- Supplementing the student learning experience to improve employment opportunities by providing them with problem-solving experience in real world settings,
- Collaborating with industry, in particular SMEs, other academic and research institutions, and community organizations to advance applied research, business innovation, and commercialization projects toward mutual benefit,
- Provide leadership at the local, provincial, and national levels in applied research, innovation, and commercialization,
- Align applied research activities with the provincial and national innovation agendas,
- Support the degree program requirements for research and scholarly activity.

Defining Research

“Research” is defined as:

1. a careful or diligent search.
2. studious inquiry or examination; especially : investigation or experimentation aimed at the discovery and interpretation of facts, revision of accepted theories or laws in the light of new facts, or practical application of such new or revised theories or laws.
3. the collecting of information about a particular subject.

At Lambton College our focus is applied research, broadly defined as “the application of new or existing knowledge to solve practical, real-world problems, and advance the goals of our community”. We help business, industry, or community organizations to develop and test new products, processes, or services that will make them more competitive and successful.

- Research involves one or more of the following:
- Investigation
- Experimentation
- Examination
- Testing
- Literature Review
- Gathering information to answer research questions
- Problem Solving

Principles of Research Integrity

- **Be Honest.** Give credit to others for their work. Describe your own work accurately, and without embellishment. Report activities and results honestly.
- **Manage Resources with Care.** Use college and other resources efficiently, safely, and with care for the protection of the resources. These resources may include infrastructure (equipment, facilities), grounds and external environments.
- **Be Respectful of Agreements and Money.** Utilize grant and other monies as outlined in grant agreements. Respect all requirements and guidelines regarding the use of funds. This is the responsibility of your Lead Researcher, and they will advise you if these agreements impact your role in any way.
- **Be Respectful of Intellectual Property.** Follow the college policy on intellectual property. Respect privacy and confidentiality concerns in all research activities. Disclose any conflicts of interest. Sign and respect non-disclosure agreements where required.
- **Be Sensitive to Research with Human Subjects.** Bring any research activity that will involve human subjects to the attention of the Research Office, as approval by the Research Ethics Board may be required.
- **Record and Document your Work Carefully.** Maintain records of your activities including personnel timesheets. Document problems and how you dealt with them. Document successes. Use specific data and numbers. Keep receipts and records of costs and expenditures.
- **Conduct Research to the Best of your Ability.** Have personal integrity in all research activities. Do your very best and take responsibility for the quality of work.

Non-Disclosure and Confidentiality

As a Student Researcher, at times you will have certain proprietary information disclosed to you. It is very important that you understand your responsibilities regarding the confidentiality of this information. By accepting research work with Lambton College, it is expected that you will agree to follow the non-disclosure guidelines, as outlined below, and sign a Non-Disclosure Agreement (NDA) when requested.

What constitutes “proprietary information”?

“Proprietary information” includes, but is not limited to, data or other information relating to products, plans, methods, and processes. This is especially true regarding developmental or experimental work, due to the uncertainty of the results and conclusions. In addition, information concerning databases, research systems, software, concepts and performance features are vulnerable and require confidentiality. Anything that concerns original works of authorship, such as innovative designs and new inventions, is also covered by this provision. There are also the business aspects of “proprietary information”. These aspects include customer lists (including names and buying habits or practices of customers), the names of vendors or suppliers, marketing methods, reports, analyses, business plans, financial information, statistical information, or any other subject matter pertaining to the parties or clients that Lambton College works with. Any and all information of this nature must be treated with confidentiality.

What kinds of information are not proprietary?

The term “proprietary information” does not include information which:

- Is already known by the general public.
- Has been approved for release to the general public by written authorization of the company and/or partners.
- Has been independently developed without use of the disclosing party’s proprietary information.

In short, you can discuss anything that has been approved for release by the company or anything that is generally considered “common knowledge”, all other information should be considered sensitive and confidential.

Guide to the C4 Non-Disclosure Agreement

Summary

A Non-Disclosure Agreement (NDA), sometimes referred to as a Confidentiality Agreement (CA) or Confidential Disclosure Agreement (CDA), is an agreement under which two or more parties agree to exchange confidential information subject to certain conditions and limitations. It should be used whenever a college researcher or technology transfer officer is disclosing information which may have commercial value and is not yet in the public domain to a third party.

This Guide explains the individual clauses in the template NDA and identifies action items (marked with red flags) for those finalizing the NDA. It also suggests alternative approaches (marked with light bulbs) if there is resistance from the other party to a particular provision. At the end of the Guide, you'll find some general advice as to what to look out for when asked to sign an NDA from industry.

Agreement Provisions

1. Definition of Confidential Information

This section sets out what information the Agreement protects. It provides that the Agreement only protects information that is marked confidential or, if disclosed verbally, confirmed in writing as confidential within 30 days. Having the information marked or confirmed in writing as confidential is important so that there is a paper trail to show what was identified as confidential (and more importantly, what wasn't).

It is very important that you explain to researchers that they must mark all information that they consider important as 'confidential'. Failure to properly identify confidential information will leave the information unprotected.

For the one way NDA, you may wish to consider using a broader definition of confidential information to cover all information relating to the particular technology, whether marked or unmarked. That way, all information provided by the college is protected. As this is not the standard definition, and could receive some resistance from industry, it has not been included in the template, but you may wish to use it in special circumstances where marking information as confidential is not feasible or impractical.

Even with a NDA in place, researchers should always be advised to only disclose information that is needed for the purposes of the discussion.

Alternative 1: If it is not feasible for the researcher in question to mark all information as confidential and confirm the confidentiality in writing, you could broaden the definition of confidential information to 'all information relating to [Name of Technology]', so that absolutely everything disclosed is protected. This may, however, get push-back if dealing with industry.

Alternative 2: A compromise is 'all information relating to X that is identified as confidential, either verbally or in writing'. This means the researcher can say something is confidential but doesn't need to confirm it in writing. This is easier and more practical to comply with, but you lose the benefit of the paper trail and have to rely on 'he said, she said' to establish what was identified as confidential

2. Exceptions to Confidential Information

The paragraph makes clear that not all information is ‘confidential’ and specifies different classes of information that are not covered by the agreement, such as information that is already public or that was independently developed by the recipient.

If you are required to disclose certain information by law, this clause provides that the disclosure of the information will not be considered a breach of this agreement. However, the clause requires you to give notice of the required disclosure to the other party. Accordingly, if you are required to provide confidential information to a third party (for example, as part of a court case or as a reporting requirement imposed by a government agency), you must notify the party to give them an opportunity to challenge or limit the disclosure.

3. Designated Representatives

This clause names one person from each party who will be responsible for providing, receiving and distributing the confidential information. In the college’s case, the representative will usually be the principal investigator and/or the technology transfer officer responsible for the file. It is sometimes worth putting both the PI and someone from the technology transfer office so that the office is aware of what information has been shared. The PI must also sign to acknowledge the agreement and each party must notify the other in writing if the designated representative changes.

This clause serves 2 purposes: (1) it minimizes the risk of unrestricted and unauthorized sharing of information by limiting the sharing of information to designated persons; and (2) it makes the college researcher responsible for the exchange of information and aware of the confidentiality restrictions.

Alternative: If you are particularly concerned about excessive or unauthorized sharing of information, you could use a more restrictive clause under which the designated representative is the SOLE person authorized to provide or receive confidential information. Under this alternative, if information is disclosed by someone other than the designated representative it would fall outside of this agreement. This may be appropriate where highly sensitive information is being exchanged or where there are numerous participants in a project. The benefit of such a clause is that it means only information received from the designated representative has to be kept confidential (and not information from anyone else). The drawback is that if someone from the college who is not the designated representative (e.g. a student, technician or post-doc) discloses information, it will NOT be protected as it did not go through the authorized channels.

4. Use of Confidential Information

The purpose of this clause is to identify how the information being disclosed may be used. Any use of the confidential information outside of the permitted use is prohibited.

You must insert a description of the permitted purposes tailored to the particular circumstances of the case. Some example uses are:

Evaluation of technology - ‘discussing certain technical and business matters concerning Name/ Description of Technology, Tech ID if applicable, as developed by Researcher Name.’

Evaluation of potential research collaborations – ‘to evaluate the parties’ interest in a potential research collaboration relating to Name of Technology, Tech ID if applicable, as developed by Researcher Name.’

Thesis defense – 'evaluating the thesis of Student Name as satisfactory to fulfill the requirements of a graduate degree'.

These examples represent common uses only and will need to be modified to address specific circumstances.

5. Non-disclosure

This clause requires that confidential information is only disclosed to people within the organization (faculty, students etc.) who need to know it. If you want to provide the information to anyone not covered by the paragraph (such as a government agency) you must obtain the consent of the disclosing party.

It is important that you explain to the principal investigator that the confidential information should only be disclosed to those who need to know it and that they should be made aware of the confidentiality restrictions. They should also be reminded to mark all information as confidential.

The agreement allows the college to share the information with consultants and agents who have a need to know, but they must be advised of its confidentiality and be under an obligation to keep it confidential. You should therefore either have the consultant or agent sign an NDA themselves or have them agree in writing to respect the confidentiality of the information.

6. Standard of Care

This clause requires both parties to give at least the same standard of protection to confidential information as they give their own and at the very least a reasonable standard of care.

Researchers should be advised that they must use a reasonable standard of care in protecting the information, such as keeping it in locked cabinets or password protected e-mail accounts only accessible by those with a need to know. Keeping confidential information in an unlocked or unprotected area will not suffice, even if that is the standard of care they use for their own information.

If you discover that an unauthorized person has accessed the confidential information or the information has been disclosed to a third party beyond what is permitted by the agreement, you must immediately notify the other party.

7. Return of Confidential Information

This clause provides that the recipient must, upon written request from the discloser, destroy or return confidential information provided by the discloser. It may keep one copy of the confidential information for its records, but may not use it for any other purposes and must still maintain confidentiality. The nature of the information exchanged may determine whether it is appropriate to include the right to preserve an archival copy or request the return of information once discussions are completed.

If you elect to keep the confidential information for your records, you should make sure that it is archived in a secure location. Retaining confidential information is useful as proof of what was or wasn't disclosed, but it also exposes the college to risk if the information is not kept securely. You should have proper archival procedures and protections in place for these cases.

8. No License or Other Rights

This clause makes clear that there is no obligation for either party to share confidential information. If either party decides not to proceed with the discussions, this agreement does not create an entitlement to receive confidential information from the other party. Further, there is no implied grant of rights in respect of the information to either party, so there is no right for a party to use the information in their business or research. If a party wants to use the information in a way not covered by the 'permitted purpose', they must enter into a separate agreement.

9. Limited Warranty & Liability

This clause disclaims any warranties that would otherwise be implied at law. Many jurisdictions have legislation providing that whenever goods or services are provided, there is an implied guarantee that those goods and/or services are of a certain quality or will serve a certain purpose.

This clause excludes those implied guarantees to make clear that the college is not making any warranties whatsoever about the information. In addition, it limits the potential liability of the college by excluding any special damages arising from use of the information.
Both parties must warrant that they have the right to share the confidential information.

Accordingly, you should confirm that there are no restrictions under any grant, sponsored research agreement or other agreement that limit the college's right to disclose the information to other parties.

10. Term

This clause provides that the obligations under the agreement last for 3 years from the Effective Date, so that even if nothing comes of the discussions, the information must be kept confidential for 3 years.

Alternative: You can reduce or increase the duration of the term depending on the circumstances, taking into account the nature of the technology, its 'product life' and the time needed to maintain a competitive advantage. For example, software and computer technology usually has a shorter lifespan, so shorter terms may be appropriate for discussions relating to those technologies, whereas pharmaceutical products would generally require a longer term.

11. General provisions

These are known as 'boilerplate' provisions as they are standard in most agreements.
Although these clauses add length to an agreement, they are standard for a reason and should not be removed or modified unless there are exceptional circumstances and proper consideration has been given to the consequences.

11.1 Notices
This is a standard notice clause and requires that all notices given under the agreement (such as a change of designated representative or return of confidential information) must be delivered by: (1) courier; (2) registered mail; or (3) facsimile.

Each party must appoint a person for receipt of notices. This person should be made aware of the agreement and their responsibilities in respect of notices.

11.2 Remedies
This clause is important as it makes it easier for a party to obtain equitable remedies such as an injunction against breach of this agreement. Equitable remedies such as injunctions are special remedies above normal legal remedies. To be entitled to them, a party must show that the remedies available at law are inadequate. This clause is important in establishing that normal legal remedies (such as damages) are insufficient compensation for breach.

11.3 No waiver
This clause clarifies that a party's waiver of particular rights (i.e. its failure to enforce a particular right) is not a waiver of any other rights. This ensures that a party is not prejudiced by inadvertently, or consciously, waiving or overlooking defaults by the other party.

11.4 Assignment
This is a standard clause preventing either party from assigning its rights under this agreement without the other party's consent. Without this clause, the company or entity with which the college is dealing could potentially transfer its rights under this agreement, and the Confidential Information received, to a third party.

11.5 Regulatory compliance
This clause provides that each party is responsible for complying with its own laws. Although this may appear to state the obvious ('you have to comply with the law'), it is important as it means that if a party breaches any law (such as the export regulations or misleading and deceptive trade practices), it is a breach of the agreement and grounds for a contractual remedy. Canada has export control regulations that govern the export of technology to other countries.

Technology is defined broadly to include 'technical data, technical assistance and information necessary for the development, production or use of an article included in the Export Control List'. This means that if your technology relates to an article in the Export Control List or is going to a country on the Area Control List, you may need an export permit even to verbally communicate information about the technology or give a physical presentation of technology and know-how. While there is an exception for 'base scientific research' (defined as 'experimental or theoretical work undertaken principally to acquire new knowledge of the fundamental principles of phenomena or observable facts, not primarily directed towards a specific practical aim or objective') many industry collaborations will fall outside its scope.

You should be familiar with the general categories of goods on the Export Control List and should be particularly careful about sharing information relating to any military and strategic uses, such as global navigation satellite systems or anything that could be used in chemical, biological or nuclear weapons. You should contact Foreign Affairs and International Trade Canada if you have any questions about whether a particular technology is covered.

11.6 Entire Agreement
This clause provides that the agreement represents the entire agreement of the parties. It is important as NDAs are often preceded by communications in written and non-written form and the researcher may have given undertakings or presentations which the college cannot uphold. This clause makes clear that the written agreement is the only provisions the college is agreeing to.

Any modifications to the agreement must be in writing and signed by duly authorized representatives of the party. It is not sufficient to obtain e-mail consent to any proposed changes.

11.7 Severability
This clause provides that if a clause of the contract becomes unenforceable for any reason (e.g. the law changes to prohibit such clauses, or a court rules that a clause is too vague), then the rest of the agreement still stands and the unenforceable clause is severed from the agreement.

11.8 Binding Effect
This clause provides that any successors (such as heirs) or permitted assigns (persons or entities to whom the agreement has been assigned, with the consent of the other party) are bound by the agreement and benefit from it, regardless of the fact that they were not a party to the original agreement.

11.9 Execution
This clause provides that each party may sign a separate copy of the agreement and once all parties have signed, the signed copies constitute one single agreement.

If the agreement is signed by facsimile, you must send an original copy of the signed agreement by courier to the above party (or, if the other party signed by facsimile, receive an original copy from that party). You should make sure this occurs as it is important to have original signed copies if there is any dispute about the agreement.

If the parties have each agreed that an electronic copy of the agreement is the acceptable format, and the contract is reproducible by each party, it may be signed "electronically" and be binding. However, not all jurisdictions in Canada support e-contracts. You should review the applicable laws for your jurisdiction and the subject matter.

11.10 Governing Law
There are two important parts to this clause: firstly, the parties agree that the law governing the contract is Ontario and Canadian law and secondly, that they agree to bring any claim before the courts of Ontario. This is important for many reasons, but largely because it is impracticable to be familiar with the laws of foreign jurisdictions and would be expensive, inconvenient and in some cases, impossible to enforce the agreement in a foreign jurisdiction. It should only be modified in exceptional circumstances.

Alternative 1: If the other party suggests a jurisdiction that is close and relatively familiar, such as New York, it may be reasonable to agree to it, but this should be confirmed with your manager, legal counsel or director, in accordance with your institutional policies and procedures.

Alternative 2: In some cases, as a compromise, the parties will agree to the laws and courts of a jurisdiction that is midway between the home jurisdictions of each party. This places a relatively equal burden, and benefit, on both parties but should only be done where the jurisdiction selected has a reasonable connection to the transaction. Where there is not a sufficient connection, the court may refuse to exercise jurisdiction.

In most cases, the choice of law and the choice of forum (which courts to use) should be the same as it can be expensive and cumbersome for courts to apply laws with which they are not familiar.

Acknowledgment by Principal Investigator

Having the PI sign the NDA is important as it makes the PI aware of the confidentiality restrictions on the discussions and makes them responsible for compliance, including making their students, staff and any other collaborators aware of these limitations.

You should explain the agreement and its practical implications to the PI before they sign the agreement. This is an opportunity for you to ensure the PI understands the agreement and is committed to complying with it and to give them practical tips on how to comply.

Dealing with external NDAs

In many cases, you may be presented with a company's NDA rather than being able to use the College's template NDA. In these cases, you should try to ensure that the provisions of the external NDA reflect as closely as possible those included in this template NDA. In particular, you should be watchful of:

- **Broad definitions of confidential information** – sometimes company NDAs are worded so broadly that they encompass information which the researcher may wish to publish, such as research results. You should be careful to ensure that the definition of confidential information will not prevent the researcher form publishing or presenting on their research. In some cases, the definition may also only provide a short time frame within which to confirm in writing the confidentiality of information disclosed verbally, sometimes as short as 10 days. This may be too short a time for a college whether processes generally take longer than industry.

- **Inclusion of intellectual property terms** – sometimes companies try to include rights to use intellectual property in an NDA. You should be careful to remove any such rights and make them subject to a separate license agreement.

- **Term** – industry will often push for a shorter term, such as a 1 year term. You should ensure that the term is long enough to allow the college to obtain the necessary protection and maintain a commercial advantage.

- **Reciprocity** – industry will often present 1-way NDAs, requiring the college to keep information confidential but not accepting any obligation to keep any college information confidential. If there is a chance the researcher will share their own confidential information with the company, you should ensure that the agreement is reciprocal.

- **Commonly excluded provisions** – industry may often exclude certain clauses from their NDAs, such as: exceptions to confidential information; limitation on rights of use; limits on damages; and remedies. Universities are unique as a commercial enterprise and must be protective of its rights and cognizant of broadening any obligations. You should make sure that these sorts of clauses are added to the industry NDA.

Basic Mutual Non-Disclosure Agreement Template

PARTIES: **The Lambton College of Applied Arts and Technology** (‘**College**’)
1457 London Rd
Sarnia, ON
Canada N7S 6K4

Company / organization name (‘**Company**’)
Company / organization address

DATE: Date: (‘**Effective Dat**e’)

In consideration of the mutual covenants set out in this Agreement and for other good and valuable consideration (the receipt and sufficiency of which is hereby acknowledged by each of the Parties), the Parties agree as follows:

9. DEFINITION OF CONFIDENTIAL INFORMATION

Confidential Information means any information disclosed by one party (the ‘Discloser’) to the other (the ‘Recipient’) relating directly or indirectly to

Name of Technology / Project, file #

Which is identified by the Discloser, either orally or in writing, as confidential, either at the time of disclosure or, if disclosed orally, confirmed in writing within thirty (30) days following the original disclosure.

1. EXCEPTIONS TO CONFIDENTIAL INFORMATION

This Agreement does not apply to information that:

i. was available to the public at the time of disclosure, or subsequently became available to the public without fault of Recipient;
ii. was known to Recipient at the time of disclosure or was independently developed by Recipient, provided there is adequate documentation to confirm such prior knowledge or independent development;
iii. was received by Recipient from a third party and Recipient was not aware that the third party had a duty of confidentiality to Discloser in respect of the information;
iv. is used or disclosed by Recipient with Discloser’s prior written approval; or
v. is required to be disclosed by law, provided that Recipient gives Discloser sufficient prior written notice of any such disclosure to allow Discloser to contest the disclosure. Any action taken by Discloser to contest the disclosure must not compromise the obligations of Recipient under the order to disclose or cause Recipient to be subject to any fine, penalty or prosecution.

2. DESIGNATED REPRESENTATIVES

Each party designates a representative for coordinating receipt, release and delivery of Confidential Information, which for the College will be

Name of designated representative for college,

and for Company:

Name of designated representative for company,

or another individual(s) as the party may designate in writing to the other party.

3. USE OF CONFIDENTIAL INFORMATIONS

Recipient may only use the Confidential Information for the purpose of

type of purpose (‘**Permitted Purpose**’).

Recipient must not use the Confidential Information for any other purpose without the prior written approval of Discloser.

4. NON-DISCLOSURE

Recipient must keep the Confidential Information in confidence. Recipient may only disclose the Confidential Information to its employees, directors, officers, agents, students (in College’s case) and consultants who have a need-to-know the Confidential Information for the Permitted Purpose, provided that they are advised of the confidential nature of the Confidential Information and are under an obligation to maintain its confidentiality. Recipient must not otherwise disclose Confidential Information to any person or third party without the prior written approval of Discloser.

5. STANDARD OF CARE

Recipient must use at least the same standard of care in protecting the confidentiality of the Confidential Information as it uses in protecting its own information of a similar nature and, in any event, no less than a reasonable standard of care. Recipient must notify Discloser promptly upon discovery that any Confidential Information has been accessed or otherwise acquired by or disclosed to an unauthorized person.

6. RETURN OF CONFIDENTIAL INFORMATION

If requested in writing by Discloser, Recipient must cease using, return to Discloser and/or destroy all Confidential Information and any copies of Confidential Information in its possession or control. Recipient may retain one archival copy of such Confidential Information for the sole purpose of establishing the extent of the disclosure of such Confidential Information, provided that such information is not used by Recipient for any other purpose and is subject to the confidentiality requirements set out in this Agreement.

7. NO LICENCE OR OTHER RIGHTS

All Confidential Information remains the property of Discloser and no license or any other rights to the Confidential Information is granted to Recipient under this Agreement. This Agreement does not obligate the Discloser to make any disclosure of Confidential Information to the Recipient or require the parties to enter into any business relationship or further agreement.

8. LIMITED WARRANTY & LIABILITY

Discloser warrants that it has the right to disclose the Confidential Information to Recipient. Discloser makes no other warranties in respect of the Confidential Information and provides all information “AS IS” without any express or implied warranty of any kind, including any warranty as to merchantability, fitness for a particular purpose, accuracy, completeness or violation of third party intellectual property rights. Neither party will be liable for any special, incidental or on sequential damages of any kind whatsoever resulting from the disclosure, use or receipt of the Confidential Information.

9. FIPPA

The Parties acknowledge that the College is an “institution” as defined in the *Freedom of Information* and *Protection of Privacy Act* R.S.O. 1990, c. F 31 (“**FIPPA**”) and all records prepared by the College in the performance of this Agreement are subject to the access and privacy provisions of which creates a right of access to records under the custody and control of public bodies subject to exceptions and in particular to the exceptions set out in Section 17 of the FIPPA, which include an exception to disclosure for trade secrets or scientific or technical information of competitive and commercial importance to a third party.

10. TERM

This Agreement and Recipient’s obligation to keep Confidential Information confidential expires three (3) years after the Effective Date.

12. GENERAL PROVISIONS

12.1 **Notices** - All notices given under this Agreement must be in writing and delivered by courier or registered mail, return receipt requested, or facsimile, to the address of the party set out on page one of this Agreement. All notices to the College must be addressed to

title/contact name for position

and all notices to the Company must be addressed to

title/contact name for position.

Notices will be deemed to have been received on the date of delivery, if delivered by courier, on the fifth business day following receipt, if delivered by registered mail or on the first business day following the electronic confirmation of the successful transmission of the facsimile, if sent by facsimile.

12.2 **Remedies** - Recipient agrees that damages may not be an adequate remedy for any breach or threatened breach of the Recipient's obligations under this Agreement. Accordingly, in addition to any and all other available remedies, Discloser will be entitled to seek a temporary or permanent injunction or any other form of equitable relief to enforce the obligations contained in this Agreement.

12.3 **No waiver** – Failure of a party to enforce its rights on one occasion will not result in a waiver of those rights on any other occasion.

12.4 **Assignment** - Neither party may assign any of its rights or obligations under this Agreement without the prior written consent of the other party.

12.5 **Regulatory compliance** – Each party must comply with all applicable laws, regulations and rules in its jurisdiction, including but not limited to those relating to the export of information and data.

12.6 **Entire Agreement** – This Agreement represents the entire agreement between the parties with regard to the Confidential Information and supersedes any previous understandings, commitments or agreements, whether written or oral. No amendment or modification of this Agreement will be effective unless made in writing and signed by authorized representatives of both parties.

12.7 **Severability** – If any provision of this Agreement is wholly or partially unenforceable for any reason, all other provisions will continue in full force and effect.

12.8 **Binding Effect** - This Agreement is binding upon and will ensure to the benefits of the parties and their respective successors and permitted assigns.

12.9 **Execution** - This Agreement may be executed in one or more counterparts, each of which will be deemed an original, but all of which will constitute one and the same instrument. If delivered by facsimile, the party must also send promptly and without delay an executed original by courier to the other party. This Agreement may also be created as an electronic document and executed by electronic signature.

12.10 **Governing Law** - This Agreement will be governed and construed in accordance with the laws of the Province of Ontario and the laws of Canada and the parties' attorney to the exclusive jurisdiction of the courts of the Province of Ontario. The parties have duly executed this Agreement by their duly authorized representatives as of the Effective Date.

COLLEGE

Title

Date

COMPANY

Title

Date

The Principal Investigator for the College acknowledges the terms and conditions set out in this Agreement and agrees to be bound by the confidentiality obligations contained within it. The Principal Investigator will ensure that any faculty or staff dealing with the Confidential Information are aware of the terms of this Agreement and agree to abide by them.

Name of Principal Investigator
Title

Date

NOTE: For reference, the Guide to the C4 Non-disclosure Agreement and Basic Mutual Non-Disclosure Agreement Template can be found on the College's computer network at **P:\Applied Research and Sustainable Development**.

Fundamentals of Conducting Applied Research

Communicative Practice

Good communication is the cornerstone of any relationship you will encounter, whether it is academic, social, or business. During your time spent at Lambton College, a time may come when you're faced with a challenge for which you do not have a solution. We believe that open communication can lead to the resolution of any issue that confronts you. We encourage you to communicate with your Lead Researcher as soon as possible, so problems, concerns and questions can be handled in an effective and expedient manner.

Discovery-based Research vs. Applied Research

While all research attempts to discover or establish facts or principles within a particular field, discovery-based research has traditionally focused on activities that test or advance theory and typically occurs at the college level. Lambton College focuses on applied research, which attempts to solve problems or take advantage of opportunities to serve business communities through the practical application of knowledge.

Here are a few ways a student can contribute to conducting applied research:

1: Collecting and managing data.

There are a variety of methods to collect data for various projects. The type of project will usually determine the best method to use. When dealing in "Applied Research", observation, documentation, and the use of case studies are the most common methods used. Sampling is another great way to collect data, as long as sampling procedures are uniform and properly documented. Reliability, validity, and repeatability are the ultimate goals when collecting data.

2: Organizing materials.

Develop an effective method of note-taking. Some researchers use logbooks divided into sections: one for compiling research activities, one for taking notes, and one for idea generating and making rough drafts. Others use separate note cards. You can adopt the method that suits you best, but keep in mind; these notes are the record of the research being done and must be accurate and complete. There is an "art" to keeping a proper research logbook, and some of the guidelines for logbooks are listed on page 29 of this manual.

NOTE: It may be requested that selected information and data be submitted to, and become the property of Lambton College upon completion of your involvement in a project.

3: Designing an evaluation plan.

An evaluation plan is a formal activity that measures the impact and effectiveness of a research activity. As a Student Researcher, you must keep in mind that evaluation is not necessarily the assigning of a success or failure "grade" during the data collection process. The goal is to assess and document the effectiveness of project activities (over the entire project duration). "Monitoring" is an excellent tool for tracking incremental steps during evaluation and provides insight into what is and is not working. This will help to identify ways that the project can be refocused. When a proper evaluation plan is in place, the result will provide verifiable indicators and the most objective basis for identifying and assessing the outcomes of a project.

4: Conducting Research activities.

Most applied research is “experiential”. This simply means we plan, execute, and document. The key element to conducting applied research is to develop a “work plan” - or to carefully follow an existing one. Be sure that your work plan follows all ethical guidelines established by LCARI. Once your plan is in place, the central aspect becomes documentation. Document all the findings and outcomes. If you need to change an activity, document the reasons. Don’t be afraid to ask for help if you or your team need it.

5: Analyzing and interpreting the results.

Data analysis is the process of assigning meaning to collected information, and determining conclusions and the significance of the findings. The steps involved in data analysis are a function of the type of data collected, but returning to the evaluation plan will provide a structure for the organization and focus of the analysis. The key to data analysis is to try to provide answers to the questions that were posed either at the outset of the project or during the evaluation process. Interpreting the analyzed data carefully allows the researcher to determine the significance and implications of the entire project.

6: Reporting the conclusions or findings.

The final component in our applied research guide concerns the reporting of results. There are many ways to report findings, depending on the needs or interests of the recipients. Reporting could be in the form of Technical Reports (including the evaluation purpose and questions, data collection methods, analysis and interpretation procedures, and relevant conclusions and findings), Executive Summaries (an abstract of the technical report, focusing on conclusions and implications), or Interim Reports (including updates on the status of the project during its execution). There may also be formal publication tools, including newsletters, research profiles or developing presentations.

As you gain experience at Lambton College, you will find and develop your own style, and become well-versed in the entire research process.

Attendance Policy, Pay Policy, Hours of Operation

Attendance Policy

At Lambton College, we pride ourselves in the quality of our work. Part of being "professional" is your reliability and punctuality. We are counting on you to be diligent when it comes to your attendance. For your research project to be successful we need you to report and be present at or ahead of your scheduled time. Here are a few guidelines:

- If you are sick or have an unavoidable absence, you must inform your Lead Researcher or a senior project member at your earliest opportunity.
- If you need time off for any reason, you must receive approval from your Lead Researcher. Any absences (either pre-arranged or unexpected), will normally be unpaid.
- All statutory holidays will be unpaid days off. Your normal pay includes a 4% "in lieu of vacation" compensation.

Pay Policy

The pay schedule is set according to the standard college practice for student employees at the time of their being hired. You will receive your pay every two weeks by direct bank deposit. You are responsible for providing a "VOID" cheque to Human Resources facilitate the banking/pay procedure, and should take care of this prior to the start of your tenure as per the form "Payroll Procedures for Other than Full-time positions". You will receive your paystub and T4 electronically via Canada Post's E-Post (electronic paystub from Canada Post) and detailed information about this is provided as part of your Human Resources package.

Hours of Operation: Normal hours of operation at Lambton College are as follows:

Academic Year (September – May)	8:30 a.m. to 4:30 p.m., Mon to Fri (with 1 hr lunch)
Summer Hours (May – August)	8:30 a.m. to 4:00 p.m., Mon to Fri (with ½ hr lunch)

This results in a 35 hour work week. Your hours may be altered depending on the nature of the work or project.

Students participating in a cooperative education placement will work full-time during the regular College working hours. Other students assigned under Lambton's Work Study or EBAT Programs will work a specified number of hours each week. These students are required to establish a work schedule with their Lead Researcher that suits the needs of the project and Research Team.

Orientation and Training

Before beginning your research, you are required to complete an orientation and training procedure, where you will get a chance to familiarize yourself with our policies and procedures. The purpose of this orientation is to give you an overview of the research program and to clarify our expectations, as well as your roles and responsibilities. We will introduce you to your key contacts, and provide access to training for your specific activities, which include, but are not limited to: Health and Safety, WHMIS, and the Accessibility for Ontarians with Disabilities Act (AODA). We will also acquaint you with items and software that your specific area of research may require, and, finally, some of the job-specific training that will be important to you as you commence with your work.

Health and Safety

Lambton College is committed to protecting ALL employees, faculty, and Student Researchers from accidental injury, loss and illness. In fulfilling this commitment, we will take a proactive approach and make every effort to promote and provide a safe, healthy, and hygienic work environment that reduces or eliminates foreseeable hazards that may result in personal injuries / illness or damage to environment or property. You are also responsible for ensuring that all machinery and equipment is safe to operate and that you are working in compliance with established safe work practices and that you comply with all federal, provincial and local laws regarding safe work procedures. Lambton College expects all workers and researchers to make a personal commitment to health and safety so to maintain the physical and mental wellbeing of themselves and their peers.

Health and Safety Training

In keeping with our commitment to health and safety, Lambton College provides several e-learning courses which must be completed as part of your orientation and training and prior to beginning your research.

WorkSmart Campus

The website you will visit to take this course was developed by the Ontario Ministry of Labour and the Workplace Safety and Insurance Board in association with, and using resources from, Passport to Safety and Minerva Canada. In the training modules, you will learn occupational health and safety principles and the importance of the effective management of safety in the workplace. There are three programs within the module that must be completed before you can obtain your virtual certificate and transcript. The three programs are:

- **Health and Safety 101.** The basics of health and safety in the workplace: the legislation, safety roles, and recognizing and controlling hazards.
- **SafeSmart for Workplace Leaders.** The details surrounding Ontario's health and safety legislation, the roles of the various workplace parties, and how the legislation is enforced.
- **Passport to Safety.** A test to challenge your knowledge of health and safety management, using different scenarios to determine if you know what a workplace leader needs to do to ensure the health and safety of everyone in the workplace.Visit Health and Safety in the workplace and enroll using the first time user registration and the Campus ID: **MEVT2747.**

Select **Lambton Engineering Technology** as your Institution & Faculty, and enter "**Student Research Training**" as your course. Upon completion of the course, send a digital or hard copy to Health and Safety Coordinator, Laura Burke at stafftraining@lambtoncollege.ca with a copy to Michael Nesdoly in the Department of Research and Innovation at Michael.Nesdoly@lambtoncollege.ca.

WHMIS

The Workplace Hazardous Materials Information System (WHMIS) is Canada's national hazard communication standard. The key elements of the system are cautionary labelling of containers of WHMIS "controlled products", the provision of material safety data sheets (MSDSs), and worker education and training programs.

Employee WHMIS Registration Instructions

1. Contact I.T. to register for Orientation to WHMIS training. An e-mail similar to below will be sent to your College e-mail account with instructions on how to launch the training.

From: KCC E-mail [mailto:sql@kccsoft.com]
Sent: May-24-12 9:33 AM
To: Jane Doe
Subject: Re: Login information for online training courses

Hello Jane Doe:

This is an information e-mail sent by Lambton College to provide you with login information for online training.

You can login for online training at: Online Orientation to WHMIS training

You will need this information:

CompanyID: 1406
Your loginID: C0123456

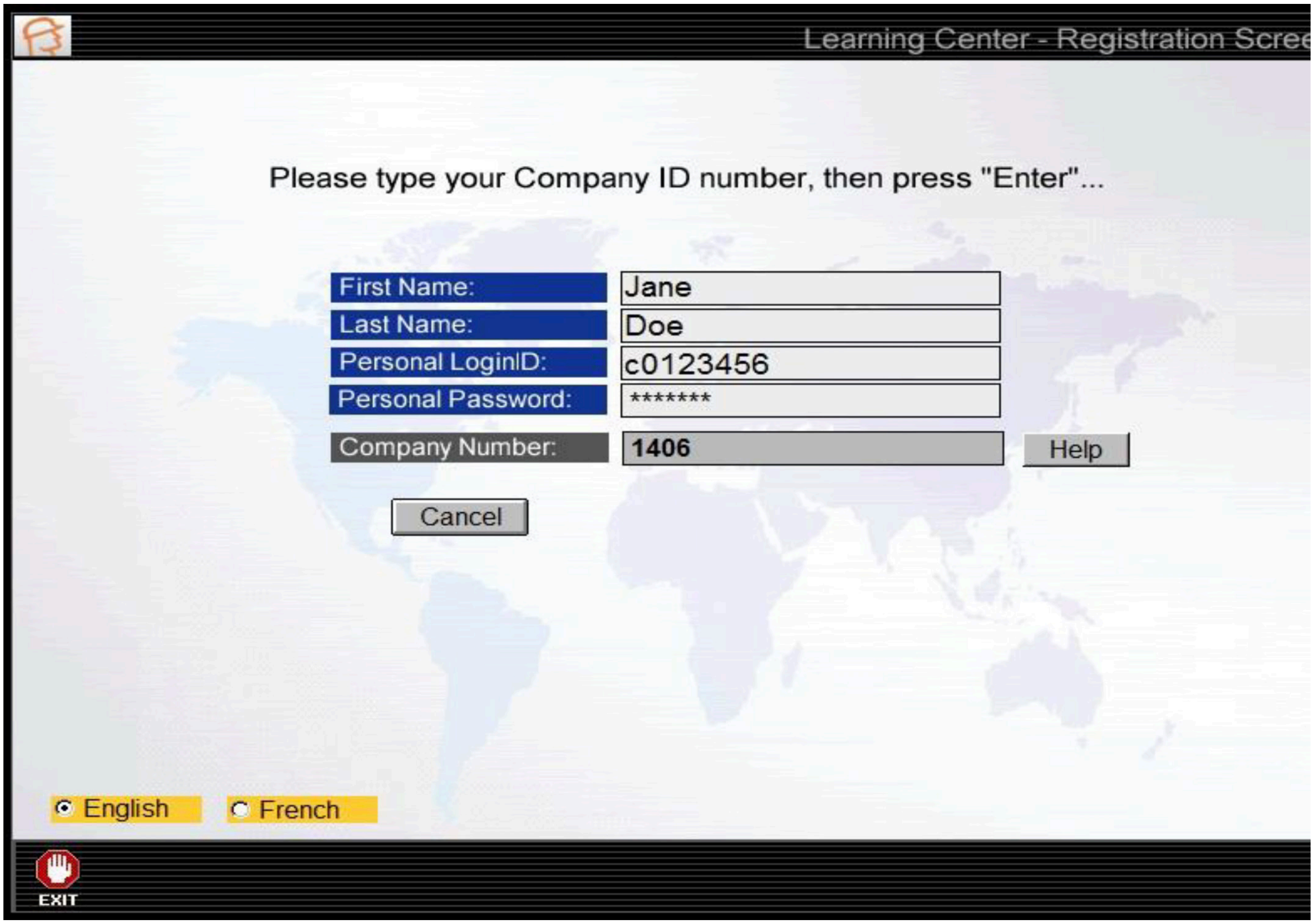
Your password: JaneDoe

If you require further information please contact your training manager.

This message has been automatically generated by the Simply!® Tracking software program. Please do not reply to this message.

2. When you click on the link Online Orientation to WHMIS training you will be brought to the Online Training Centre. Click Student Login.

3. Enter your First and Last name, Personal LoginID, Personal Password and Company Number from the e-mail that was sent to you and Press “Enter”.



Click on Orientation to WHMIS Course and then Click Launch Course.

4. Print and sign your certificate.
5. Submit your certificate to your Supervisor.

Upon completion of the course, send a digital or hard copy to Health and Safety Coordinator, Laura Burke at Laura.Burke@lambtoncollege.ca with a copy to Michael Nesdoly in the Department of Research and Innovation at Michael.Nesdoly@lambtoncollege.ca.

AODA

The Accessibility Standards for Customer Service, Ontario Regulation 429/07, was created under the Accessibility for Ontarians with Disabilities Act, 2005 (AODA). The customer service standard came into effect on January 1, 2008 and sets out obligations for certain persons, businesses and other organizations in Ontario to provide goods or services in a way that is accessible to people with disabilities. The Act was designed to be implemented in stages over the next 20 years and includes the compliance with five Standards. The first of five AODA Accessibility Standards, the Accessible Customer Service Standard, established a public sector compliance date of January 1, 2010. It requires that Lambton College develop and implement mandatory training for all employees, including student employees, agents, and volunteers who deal with members of the public on behalf of the College, on the AODA and Customer Service Standards by January 1, 2010, to ensure that policies, practices and procedures are consistent with the key principles of independence, dignity, integration and equality of opportunity. An "Accessible Customer Service" training module has been developed by Algonquin College (in collaboration with Colleges Ontario) for use throughout the college system. The Human Resources Department and LINC at Lambton College have developed an online training module for staff to complete this required AODA training.

You are able to access AODA training through your Lambton College D2L account. If you are unable to view "**AODA 1001, 2001, and 3001**" in your list of courses, please contact the IT Helpdesk at:

E-mail: support@lambton.on.ca
Phone: 519-542-7751 ext. 3385

Once you have completed the training, deliver a digital or hard copy to Staff Training in the Facilities Department stafftraining@lambtoncollege.ca and Michael Nesdoly in the Department of Research and Innovation at Michael.Nesdoly@lambtoncollegeca.

NOTE: It is advised that you retain a digital or hard copy of each certificate of completion for your own records.

☐ **WorkSmart Campus** ☐ **WHMIS** ☐ **AODA** ☐ **Health Safety & the Law**
☐ **Respectful Workplace** ☐ **Workplace Violence**

Personal Safety Practices in the Workplace

Everyone has a responsibility for safety in the workplace. Any suspicious persons, events, or circumstances must be reported to Security. The campus emergency phone is Ext. 3333.

Your Immediate Work Area:

Your area should have a door with a lock.

- Ensure that there is a working telephone nearby. If there isn't, use your cell phone, if you have one.
- Fire and Lock-down Drills will occur during the academic year. Your participation is mandatory. Please follow college policy which is posted throughout the campus.
- If you work in an area that does not have a door, lock or telephone, look for a secure area nearby, which you can access in case of emergency.
- Do not leave your purse, wallet or personal valuables in plain sight. If they can be locked in a desk, do so. Do not expose expensive jewellery, money, or the contents of your purse, wallet, or bag.

Personal Safety Guidelines in the Building:

For the purpose of safety, Student Researchers are permitted to utilize laboratories or equipment only when at least one other researcher present within the facility, never alone.

Fire Emergencies

In any facility and at all times you must be aware of the two nearest exits.

Upon Discovery of Fire or Upon Hearing the Alarm:

- Sound the fire alarm (manual pull stations are located near all the exits).
- If you can call 911 from a safe area, report:
    - College name
    - Building name
    - The floor on which the fire is located
    - Your name
- You must follow the instructions of the Fire Wardens and/or Emergency Response Personnel at all times.
- Leave the building via the nearest safe exit, and move to a minimum of 100 meters away from the building.
- Close, but do not lock doors when leaving.
- If smoke is encountered in a hallway, use an alternate exit.
- Do not use elevators.
- Do not return to the building until the "All Clear" signal has been given by the Emergency Response Personnel.

Emergency Telephone Numbers

General emergencies may include such things as inappropriate behaviour, medical emergencies, security or safety related issues.

Emergency: Ext. 3333 **Lambton College Security:** Ext. 3208

If you are unable to reach an internal responder using these numbers, you can dial 9 (for outside line) and then 911 to access Police, Fire or Ambulance.

Work-Related Hazards

There are a number of work-related hazards that Student Researcher need to be aware of. Awareness and prevention, as well as a few pointers on how to handle each situation after it happens, must be known before setting out to work in a Research Laboratory.

Equipment Safety

The job of a Student Researcher requires the use of various tools and/or machines. Every tool being used can be harmful if you have not been properly trained or if precautions are not being followed. Equipment could cause serious damage if not handled properly. Please always follow these precautions:

- Accurately document your safety training for each piece of equipment.
- Make sure you are properly trained by an instructor.
- Never work alone.
- Check your surroundings before and during usage.
- Keep a first-aid kit nearby, at all times.

If a serious injury should occur, call Ext. 3333 for Campus Emergencies and follow proper first aid procedures. An accident report must be filled out within 24 hours if such an event should happen. This form can be accessed through the College's computer network at **P:/Safety & Security.**

Hazardous Environments

You can better avoid injury by:

- Ensuring that you are properly trained on any equipment you may use.
- Always checking and analyzing your surroundings.
- Practicing safe lifting techniques.
- Using extreme caution when working with equipment.
- Wearing proper safety attire.
- Always having a partner help with heavy work.
- Using common sense.

If there is an injury, do not move the patient unless you're absolutely sure there is no head or neck injury present. Seek medical attention if there are signs of serious injury. For less serious situations, be sure to describe and document the hazard to your co-workers and supervisors.

Lab Chemicals/Hazardous Materials

When using lab chemicals take the following into account:

- Never work alone with hazardous chemicals. If an accident occurs, you may need emergency help from a peer.
- Always read the Material Safety Data Sheet (MSDS) for information on any chemical that you are not familiar with before use. The MSDS will inform you of any emergency procedures you may require.
- Be aware of all safety equipment in the lab, and how to use it.
- Only do what you have been instructed to do. Never experiment with chemicals.

The Material Safety Data Sheets are located in the research lab and can also be accessed through the College's computer network at P:/MSDS.

Job Specific Training

During your orientation, you will be given a chance to learn more about the specific job that you were hired to perform during your term with LCARI. This training will include a meeting with your faculty lead, an introduction to the research program you will be involved with, and any other job specific training required for you to successfully perform your work. This training will also include learning the proper operation of any machines or equipment essential to your work with LCARI. Some items of information regarding your position that orientation will explain are:

- What your role as a Student Researcher will be.
- What procedures you will need to learn, know, and perform each week.
- What paperwork/documentation you will need to fill out, and how to do it properly.
- Whether you will be using construction, design, or testing equipment.
- Which specific goals you will be required to meet each week.
- Who you will need to know, aside from your faculty lead, in order to do your job.
- How much "field work" and how much "office / inside work" you will be assigned.

Please ask questions if you find that the topics discussed in the orientation require further clarification. If you're unsure about how to perform any task, ask that it be reviewed. It is better to clear up any issues before you get into the field and make a mistake that could threaten your research or safety.

Additional safety practices and procedures can be found on the Lambton College website at:
Lambton College Website.

Team Building

Project-driven teams are essential in the field of applied research. The success of your research project (as well as success in many other pursuits) requires the skill of functioning effectively as part of a team. You need to understand how to get the most out of your team by taking advantage of each other's strengths. Some of the skills you will need as you become part of an effective team are:

- Understanding team dynamics.
- Learning team member roles and responsibilities.
- Good communication for team effectiveness.
- Self-management within the team context.
- Skills in decision-making, problem-solving, achieving consensus, and working through problems.

Since your experience with LCARI is meant to be a learning one, you will be introduced to the concept of "learning teams". Because teams are natural learning centers, creating opportunities for personal growth and providing energy and stimulation through interaction with others, individual team members will have the opportunity to achieve and surpass their educational goals. The four aspects of "learning teams" that assist members to meet real-world goals are referred to as "SOAR".

Effective Teams SOAR above the rest.
The skills learned in this workshop will not only help you in the immediate future with your LCARI team, but also for the long-term, in every walk of life where the "team concept" is involved.

- S – support for each other.
- O – options (for problem solving).
- A – acceptance (of team differences).
- R – response (to each other's needs).

The Basics of Internet Research

The Internet is a terrific resource, but it can be easy to get lost. Knowing the types of search tools available, and mastering some general search skills can make your search more successful. However, most of us are aware to use caution when searching the web. Anyone with access to the Internet can post web sites about topics that interest them. These sites are not always accurate, and, therefore, it is important to learn how to evaluate web content.

Evaluating Information Sources:

Critical evaluation of the information you find is essential to conducting quality research. With so much information available, in different formats, from so many different sources, each piece of information that you select must be carefully reviewed to ensure the quality, authority, perspective, and balance that best support your research. Here are some general criteria to consider as you sort through your sources:

1. **Authority** – Who is the author? Is he/she the original author? Is the person qualified? What are his/her credentials? What is his/her occupation? Is the source sponsored by an organization?
2. **Accuracy** – Is the information accurate? How does it compare with other sources on the subject? Is the information complete? Does it provide evidence to support its claims?
3. **Objectivity** – Does the source present a balanced view on the topic? Does the author have an obvious bias? Is the source trying to convince you of a certain point of view?
4. **Level of Information** – Who is the intended audience? Is it written at a level that makes sense? Does it build on what you already know? Does it include links to additional sources?
5. **Date of Publication** – How important is the currency to your topic? Is it retrospective, providing analysis? Does it report facts from the time of issue? Is it new research replacing older studies?
6. **Scope, Depth, Breadth** – Is the source comprehensive for the field of study? Does it present multiple viewpoints and issues?

Some preliminary review or filtering is often integral to the production and publication process of individual sources. However, different publishers or creators exercise different levels of “quality control” over the information they publish. These varying levels of review make your own assessment critically important. Some of the information for determining a source’s quality and authority may be apparent in the source itself; however, some of it may require you to look at other sources.

Lambton’s Library Resource Centre

The Library Resource Centre subscribes to several online Research Databases which provide access to citations, abstracts, and selected full text articles published in newspapers, magazines, scholarly journals, and books. Some of these Databases also provide links to quality websites, audio and video files, as well as images.

Guide to Searching Research Databases

Searching Research Databases will be more effective and productive if you know how to “talk” to these search tools. Communicating with these tools requires knowing certain basic search techniques. These techniques are very important for getting good search results. Therefore, you should take the time to understand and use them.

The search techniques introduced in this guide are: keyword searching, phrase searching, Boolean operators, truncation, and wildcards.

Whenever you begin to use a new Research Database, look for "help" ("search tips" or "instructions") to determine which of these search techniques is available and how to apply them to the specific tool you are using.

Search Techniques Summary		
Symbol	**Explanation**	**Example**
" "	Phrase searching	"elementary school"
AND	Boolean operator retrieves **all** search terms	teenagers **AND** diet
OR	Boolean operator finds **either** search term	diet **OR** nutrition
NOT	Boolean operator **excludes** specified term	diet **NOT** nutrition
*	Truncation finds root word and various endings	teen*
?	Wildcard searches for a character(s) within a word	wom?n

Search Tips

- Become familiar with the Research Database you are using by reading the descriptions available. Make sure you are using the database(s) which are appropriate for the information you require.
- Always check the Help Screens of the database you are using to see how it works.
- Keep your search simple in the beginning; you can always build on it later
- Omit unnecessary words.
- Be flexible with your search terms. If your search fails to find enough relevant information, try a related term, a variant spelling, or a different search tool. Also, consider narrowing or widening your search.
- Check your spelling and/or typing for errors.
- Consider different meanings. Remember that words often have many meanings (e.g. Cherokee can mean a Native tribe or a type of jeep.)
- Remember to ask the Library Resource Centre staff for assistance. We can help you choose an appropriate database, formulate your search statement, help you understand your search results and provide tips for searching more effectively

Identify the information sources that you will use

- **Reference Sources** - e.g. encyclopedias (provide an overview of your topic and sometimes references to other sources of information), dictionaries (contain definitions of terms), statistical sources.
- **Books** (Use books for in-depth coverage of topics. A bibliography of additional sources to consult is sometimes included.)
- **Newspapers** (Local, national and global information on current events is provided. Articles are written by reporters for a general audience.)
- **Popular Magazines** (These periodicals provide information on current events and issues. Articles are written by journalists, staff writers or freelance writers for a general audience.)
- **Trade Publications** (These periodicals provide information on the current trends, news, products and professional issues in a specific trade. Articles are written by industry experts for practitioners in the same area of interest.)
- **Scholarly Journals** (Articles report on original research or provide an in-depth analysis of specific topics. Articles are written by subject experts, researchers, professor or scholars.)
- **Government Documents** (These publications are produced by local, provincial or federal government departments or agencies. Included are official papers that record the actions or deliberations of government, informational publications or reports of research completed under government contract.)
- **Web Documents** (These sources can provide the most current news and information about government departments and agencies, companies, educational institutions and non-profit organizations. However, since anyone can publish on the Web it is critically important that you evaluate the quality and reliability of the material that you find.)

Choose the appropriate search tools to gather your information

After you have determined which types of sources you require and/or plan to use, you need to select the appropriate search tools to find relevant information for your topic.

- The search features and options of the Library Resource Centre's online catalogue, Research Databases and Web search tools vary.

TO SEARCH FOR	USE
Books owned by the Library Resource Centre	LRC's online catalogue (our computerized library catalogue) which is available on the web
Electronic Books	NetLibrary, eLibrary Canada, MasterFILE Elite, MAS Ultra-School Edition
Newspaper Articles	eLibrary Canada, Canadian Newsstand -- access from the Research Databases web page
Magazine and Journal Articles	databases from the Research Databases web page
Government Documents	LRC's online catalogue (our computerized library catalogue) which is available on the web
TV & Radio Transcripts	eLibrary Canada -- access from the Research Databases web page
Pictures, Images and Maps	eLibrary Canada, MasterFile Elite, MAS Ultra-School Edition -- access from the Research Databases web page Google Images Picsearch Yahoo! Image Search -
Internet or Web Documents	Web Directories, Web search engines, Web meta-search tools -- choose from a comprehensive list

The Art of Keeping a Logbook

One of the most important skills to learn for future success in research is mastering the “art” of maintaining a proper logbook. You should always keep a detailed log of all the activities you’ve done regarding a research project. Here are some tips...

1. Use a bound notebook, not loose sheets of paper. Extra material, such as photographs or printouts can be taped into the book.
2. Make sure your logbook has numbered pages.
3. Skip the first page or two to use for a Table of Contents.
4. Start a new page for each project, but otherwise, do not use blank pages. If you have work to add from a previous project, just indicate with a brief note (i.e. Continued from page 57).
5. Date every page and record the time of the day for each important entry.
6. Always write directly into your log; never work with loose scraps of paper, and then copy them into the book. Even “mistakes” often turn out to be important.
7. For the same reason, do not use pencil. If you discover something is wrong, cross it out, so that it is clearly marked as being in error, but is still legible. Never use white-out, paste over or (worst of all) remove pages.
8. When you start a project, write a brief statement of your goal – just a few key phrases to remind yourself exactly what you are trying to do.
9. As you perform your tasks, record enough information to indicate what you are doing at that moment. Remember to note the time for important items.
10. Provide diagrams (sketches, electronic schematics) of any apparatus, with complete information on the settings of controls and other relevant instrumental data.
11. All measurements should be recorded immediately and directly. Any necessary mathematics (to convert your numbers to other units or to average two numbers) should be done in a second step, and also recorded.
12. As soon as you finish collecting the data, present some preliminary findings, i.e. what worked what didn’t, and what else will need to be done to complete the work.

Your Lead Researcher may require have additional requirements for the documentation and recording of data and/or specific procedures.

Upon completion of your research, your Logbook will become the property of Lambton College as a reference material for the project.

With thanks to the University of Indiana – Physics Research Department

Working Professionally with Clients

"Professionalism" is an ambiguous term used to describe a wide range of attitudes, skills, values, and behaviours. In business, if a client refers to someone as being "professional", we know that he/she is pleased with that person, but what exactly so they mean? Basically, we can agree that the term goes far beyond technical qualifications and analytical skills. In addition to these basic attributes, the right attitudes and behaviours must also be in place, and in fact, are largely the main dimension that distinguishes ordinary client relationships from "special" ones. If you ask first year business students, they would tell you that "special" client relationships can create long-term results for both the client and the organization (in this case, Lambton College). So what are these attitudes and behaviours? In a survey conducted among various consulting firms in the U.S. and Canada in 2004, the results showed a so-called "Top 10 Must Do List" that suggests the following:

1. Become involved and do more than is required in your assigned role.
2. Accept responsibility.
3. Do whatever it takes (legally, of course) to get the job done.
4. Become an integral part of your team.
5. Be attentive and observant.
6. Always be honest and sincere.
7. Be loyal to your clients.
8. Listen closely to the client's wishes and needs.
9. Take pride in your work, and show a commitment to quality.
10. Always show initiative.

"You've got to earn it" might be a good way to summarize what professionalism is all about. It means deserving the rewards you wish to gain from others by being dedicated to serving their interests as part of an implied bargain. "Professionalism" implies that you do not focus only on the present transaction, but also care about the relationship. It means you can be trusted to put your client's interests first, can be depended upon to do what you say you will do, and not consistently act for short-term personal gain. "Professionals" try to help as opposed to needing to be right.

The list on the previous page outlines all the things we should do when dealing with a client, but what are some of the pitfalls we need to avoid? In another survey, more than 500 company representatives were asked, "What type of behaviour or attitude turns you off, or would cause you to do business with another organization or firm"? Based on what the survey respondents said, when dealing with clients you should always remember to:

1. Give the client your respect. Treat clients like people, not like a job.
2. Take the time to explain what you're doing and why.
3. Answer all questions and handle challenges with civility.
4. Don't leave the client out of the loop and "take over" the project.
5. Give the client options, instead of telling them what they must do.
6. Try to produce creative, original solutions, as opposed to stock, standard ones.
7. Don't treat the issues as purely "technical", without consideration for the client's feelings.
8. Don't assume or pretend to know more than you do.

What should be obvious from this list is the fact that none of the suggestions listed are technical in nature, but deal directly with the provider's attitude toward dealing with the client. In short, treat clients the way you, yourself, would like to be treated. "Integrity" is the central theme when discussing professionalism and cannot be judged by what you advocate, but only by what you do.

Here at LCARI, we invest a significant amount of time and effort in things that will pay off in the future. Among those things are you, our Student Researchers. Through research activities, you will learn and develop new skills. But, not all of the skills you acquire will be technical in nature. As a representative of LCARI (and Lambton College), you will learn to work professionally and treat clients with courtesy and respect. Our clients expect and deserve your attentiveness, honesty and loyalty and require your initiative, creativity, and commitment to quality. When all is said and done, client satisfaction is our number one priority and the reason we are all here.

Conclusion

The opportunity to acquire and develop these skills is here, and it involves hard work and practice.

Some of the skills we hope you'll leave LCARI with include, but are not limited to:

- The ability to conduct applied research with skill and integrity.
- The ability to manage client relationships.
- The ability to work through others and make them more productive.
- The ability to manage time horizons and deadlines.
- The ability to earn other people's trust and confidence.
- The ability to give advice without being assertive or patronizing.
- The ability to deal with conflict (among your own team or a client's).
- The ability to manage meetings.
- The ability to supervise others, so they will want to work for you again.
- The ability to get someone in a more senior role to want to help you.
- The ability to say "no" with skill.

These are just a few of the skills that we at LCARI hope you can develop in your time spent with us. Don't use this opportunity just to achieve an immediate goal, but use it as a means to improve your prospects for achieving a long-term, more significant goal. The opportunity is yours and is right in front of you.