



FRST 201 – Research and Communications

Fall Course Outline

Location & Times: TBA

Instructor: TBA

Description

This course is an introduction to the basic principles and methods of research with an emphasis on forest resources. Topics include: the scientific method, experimental design, literature review, field methods, reporting and presentation skills. Students undertake a simple research project and summarize results in an oral presentation and written report.

The format of this course also provides an introduction to public speaking and assumes no previous experience. The aim is to improve a student's ability to speak clearly and persuasively, and listen critically.

FRST 201 was formerly called FRST 201 and FRST 202; credit will not be granted for both courses. *Prerequisites:* ENGL 115, ENGL 204

Scope and Credit

Forest management is based on scientific principles. Our knowledge of the biological and technical foundations of forestry continues to expand as a result of research and experience. Some forest technologists are directly involved in research studies; others may be required to read research reports, conduct a review or compare potential treatment alternatives using field trials. In any case, an understanding of sound scientific methods is useful for critical evaluation of data or information.

Effective communications is an important aspect of any forestry job today. Whether it is a simple talk or report to work mates or a more formal presentation at a meeting or conference, knowing some basic principles and using simple tools can help anyone feel more confident with public speaking. This course uses a simple research project as a means for developing both practical research and communications skills.

This course is designed for students in the second year of the **Forest Resources Technology** program. The VIU FRT program is accredited by the Canadian Technology Accreditation Board. **Credits: 2**

Course Format

There are three hours of class per week in two blocks. Workload consists of roughly equal time for lectures, student presentations and research (1:1:1).

Lectures in the early part of the course will cover the scientific method and fundamental approaches for conducting both field-based and literature-based research. Lectures will also cover public speaking techniques and scientific writing. A short presentation will be made to gain experience speaking in front of a group.

You will choose a topic for a simple research project, gather data and supporting published references, and present findings in an oral presentation with an accompanying technical report. Media such as PowerPoint or Prezi will be used, but the emphasis is on oral presentation skills. You will also gain experience evaluating your own and your classmates' talks.

Research Topic Proposal and Presentation: you will complete a proposal for approval before you start your project. You will also deliver a short presentation to introduce your research topic, get feedback from classmates and gain experience in public speaking. No media is required.
Research Presentation and Report: you will prepare and deliver a presentation on data or information you have gathered to answer a question using the scientific method. Your research can be done using field observations or measurements (strongly encouraged), or by carrying out a literature review. A written technical report on your project is due at the end of the term.

Evaluation of Classmates: you will conduct critical and constructive evaluations on your classmate's presentations.

Self-Evaluation: you will conduct critical and constructive evaluations on your own talks.



Textbook

The recommended text is available from the VIU Bookstore:

Northey, M., D.B. Knight and D. Draper. 2012. *Making Sense: A student's guide to research and writing, Geography and Environmental Sciences*, 5th Edition, Oxford Univ. Press, 327 pp.

This book is an excellent guide to research and writing that you will find helpful as a reference for many courses.

Useful Websites

Here are some useful sites covering several of the course topics:

1. Science & Technology Library Research Guides:
<http://libguides.viu.ca/cat.php?cid=9935>
2. Forestry Library Research Guide:
<http://libguides.viu.ca/content.php?id=155198>
3. Toastmasters International
<http://www.toastmasters.org/MainMenuCategories/FreeResources.aspx>

Field Equipment and Safety

For field research that involves walking off of roads or established trails, you are required to wear a hard hat, caulk boots and hi-visibility vest; have safety eyewear or have a wire mesh face shield on your hardhat; and carry an emergency whistle and personal first aid kit. Loan of field equipment and supplies for your project can be arranged.

Learning Outcomes

Upon successful completion of the course, students will be able to:

1. Define and use technical terms applicable to research and communications in conversation with peers and in technical reports.
3. Apply the scientific method and selected fundamental approaches to experimental design.
4. Use a scientific approach to answer a question and present findings.
5. Summarize and interpret data.
6. Prepare a written technical report from field data or literature review.
7. Develop a presentation that has a clear central theme and a logical flow of information.
8. Utilize media effectively to support a presentation.
9. Demonstrate verbal and non-verbal delivery skills.
10. Demonstrate critical thinking and listening skills.
11. Evaluate presentations given by yourself and others in an objective manner.
12. Demonstrate improved self-confidence in making public presentations.

In addition to the **subject-specific** learning outcomes listed above, specific **program** objectives will be covered.

Upon successful completion of this course students will have furthered their ability to:

1. Analyze and interpret information and think critically.
2. Speak effectively.
3. Write clearly and concisely.



Course Communications

All information regarding the course will be distributed through the course "D2L" website through VIU Learn at: <http://learn.viu.ca>

You will be automatically enrolled in the FRST201 website with your course registration. You are responsible for checking the website at least weekly for notices and assignments. If your email has changed since registration, make sure that you provide an up-to-date version.

Evaluation (sample)

There are no quizzes or exams in this course! As described below, your grade will be based entirely upon your participation, presentations and final report.

Here is the breakdown of how your grade in the course will be determined (subject to minor adjustments):

Research topic presentation	5%
Research proposal	10%
Evaluation of Classmates	10%
Self-Evaluation	10%
Research Presentation	25%
Research Report	30%
Professionalism	10%

Presentations

Students who do not present on their assigned date will receive a zero for that presentation (unless there is an emergency and you notify the instructor before your scheduled talk). *When speakers accept a speaking engagement, they must be prepared to deliver on the given date and time.*

Evaluating the work of others is an integral part of this course. Students who miss presentations without valid and documented reasons will receive a zero for that evaluation assignment.

Professionalism

This mark is based on your attendance, promptness, effort, attitude and behavior, class participation and ability to work independently. Courtesy extended to speakers will also be considered.

Grades will be calculated using the VIU standard grade scale (see D2L [Forestry Portal](#)).

Academic Policies

For further information on exam policies, missing tests, assignment format standards, late assignments, instructor assessment and academic misconduct (e.g., plagiarism), please refer to the D2L [Forestry Portal](#).



Sample Course Schedule

Week		
1	No class (FRST234 - For. Eco. Assessment & Mapping)	Course intro, scientific method
2	Scientific method, critical thinking, intro to research project	Experimental designs and statistics
3	Literature research - Library (305-Rm508), Faith Takishita (11:30-1:00, after F351 field trip)	Experimental designs and statistics Research topics due
4	No class (FRST291 - Fall Field Trip)	
5	Literature research on your topic, Citing sources (305-Rm508), Faith Takishita	Field notes, forms and systematic observations Research proposals due
6	Structure and delivery of a presentation, use of media	Note extra class (in FRST231 time slot, Mon 8:30-11:30am)
6	<i>Short presentations on research topics (4-5 min, with Q/A)</i>	
7	Field trip to MASS study (8:30am - 4:30pm)	Writing about your work
8	Open (work on research)	Open (work on research)
9	Open (work on research)	Open (work on research)
10	Illustrating your work	Individual help with projects
11	Holiday - Remembrance Day	<i>Final research presentations (15 min + 5 min Q/A) (8:30-10:30, into 1st Hour of F351)</i>
12	<i>Final research presentations (15 min + 5 min Q/A)</i>	
13	<i>Final research presentations (15 min + 5 min Q/A)</i>	
	Last day of classes (Mon Dec 1) Study days Dec 2-3, Exams 4-15	No Final Exam in FRST201; Papers due Dec 8th, 11:59 p.m.

Italics = Student presentations in class.