

FRST 242  
Integrated Resource  
Management

**Spring Course Outline**

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<b>Location &amp; Times</b>	<b>TBA</b>
<b>Instructors</b>	<b>TBA</b>

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**Description**

Forest management is much more than harvesting and growing trees. Forest resource values include: fisheries, wildlife, water quality, recreation / tourism, cultural/heritage, wilderness, biodiversity, soils, visual quality, forage, non-timber forest products, as well as timber. How we manage or use one resource value potentially affects other resources in an area; therefore, all values need to be considered in management decisions. Integrated resource management (IRM) is based on cooperation, communication, coordination and consideration of all values. IRM planning involves finding ways to involve stakeholders and reduce potential conflicts before actions are undertaken so that all uses can exist together. The course will introduce students to the full range of British Columbia's forest resource values with the aim of broadening their appreciation of natural resource issues and the challenges of IRM.

**Scope and Credit**

This course is designed for students in the second year of the Forest Resources Technology Program.

**Prerequisite:** You must have or be enrolled in the required courses to graduate this spring, or have instructor permission. **Credits:** 3

**Course Format**

Learning will be accomplished through a variety of activities, including: attending lectures, participating in class discussions, field trips, an integrated "Spring Project" and reading assignments. Extensive use is made of guest speakers and a considerable portion of each class will include questions and class discussion. As the guest speakers are specialists in their field and will present the "current state of affairs," students must **take comprehensive notes; these will comprise the primary reference for exams.** [3:1:2]

**Textbooks and Supplies**

**Recommended textbooks:**

- Watts, S.B. and L. Tolland (Eds.). 2005. *Forestry Handbook for British Columbia*, 5th Edition, The Forestry Undergraduate Society, UBC Faculty of Forestry, 773 p.
- Kimmins, J.P. 1997. *Balancing Act: Environmental Issues in Forestry*. UBC Press, Vancouver, 305 p. (On-line through the VIU Library "ebrary")

**Supplies:** You are required to have the following items:

- [Six-ring field binder and waterproof notepaper](#)
- [Compass with adjustable declination](#)
- [Biodegradable flagging tape](#)
- [Personal first aid kit](#)

**Field Labs:** Personal protective equipment (caulk boots, hard hat, hi-viz vest, safety eyewear or wire mesh face shield, safety whistle), first aid kit and appropriate clothing (raingear and gloves, as needed) are required for field labs.

### Learning Outcomes

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

1. Assess the potential hazards of working in the forest; demonstrate safe work procedures for carrying out tasks, and use appropriate personal protective equipment requirements and describe emergency procedures.
2. Define and use technical terms applicable to integrated resource management in conversation with peers and in technical reports.
3. Describe the attributes of various forest resource values (e.g. water, wilderness, wildlife, fisheries, biodiversity, aesthetics, recreation, timber, soil and special features such as karst) and their importance.
4. Create an operational plan that develops timber for harvesting and clearly prescribes management strategies for non-timber resource values.
5. Describe the role of various agencies in natural resource planning, and recognize how non-timber resource values enter into planning procedures.
6. Discuss current developments and issues in resource planning (e.g., forest certification schemes).
7. Explain the role the forest professional plays in managing non-timber resources such as fisheries and wildlife habitat in the field.
8. Discuss First Nations values, rights, cultural sites and the current treaty process. Recognize, in the field, evidence of traditional use.

9. Explain the critical role that professional ethics plays in achieving sustainable forest management, including non-timber resource values.
10. Evaluate resource management scenarios and discuss ethical resolutions.

Students will also gain skills in various non-timber resource assessments. From the field component this course, students will be able to:

1. Describe and conduct field techniques for a range of non-timber resource assessments and monitoring.
2. Identify and map features important for characterizing stream morphology and fish habitat.
3. Identify the general procedures for wildlife-danger tree assessments and wildlife habitat surveys.

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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. Think creatively and flexibly to solve problems (E.g., assess resource values and prescribe management strategies).
2. Resolve issues and conflicts when managing for multiple forest resource values.



### 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 FRST242 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.

### 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](#).

### Evaluation (sample)

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

<b>Integrated Spring Project</b>	<b>40%</b>
<b>Exams (2 x 17.5%)</b>	<b>35%</b>
<b>Field Exercises</b>	<b>10%</b>
<b>Professionalism</b>	<b>15%</b>

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

### Professionalism

Professionalism (instructor assessment) will be based on student's attendance, promptness, effort, attitude & behavior, class participation and ability to work independently. In addition, participation in class discussions and courtesy extended to guest speakers will be evaluated.

Failure to attend guest lectures will result in a 5% deduction for each missed presentation unless there is a valid reason for a student's absence. If a student is ill or has some other valid reason, a courtesy email is requested in advance.

**Integrated Spring Project**  
Students will participate in an integrated project which demonstrates an ability to synthesize across many disciplines such as ecology, silviculture, harvesting, cruising, etc. The project requires inventory field work on the VIU Woodlot as well as a technical paper describing an integrated management approach to assigned specific management goals. More details on the Spring Project will be provided.



### Field Safety

You are responsible for practicing safe work practices in the field. This includes proper check-in/check-out procedures as described by your instructors. You will not be permitted to participate in outdoor lab exercises without proper Personal Protective Equipment, field clothing and a personal first aid kit. For field trips to public locations (e.g., parks), you will be advised of the required field gear.

Outdoor labs will be cancelled only when extreme weather compromises safety or the learning objectives (e.g. excessive wind or snowfall).

Sample Course Schedule (subject to change with speaker availability)

	Week	Day 1 AM	Day 1 PM	Day 2 AM
<b>Part 1 – IRM overview; Managing a biophysical environment</b>				
	1	Course Introduction Overview of IRM	Stewardship and sustainability	IRM Planning
	2	Karst (Field Trip - Horne Lake Caves)		Woodlot Planning
	3	Spring Project IRM Plan	Spring Project Team Meetings	Spring Project Team Meetings
	4	<b>ABCFP Ethics Workshop</b>	<b>ABCFP Ethics Workshop</b>	Water (Bill Sims, City of Nanaimo)
	5	Rare plants and ecosystems	<i>Spring Project - Field</i>	Soils and slope stability (Shelly Higman)
<b>Part 2 – Organisms and resource management</b>				
	6	<b>Family Day Holiday</b>	<b>Family Day Holiday</b>	Part 1 Exam
	7	<i>Spring Project - Field</i>	<i>Spring Project - Field</i>	FN Land Claims, Prof. Reliance (ABCFP Conf.)
	8	<b>NO CLASS Study Days</b>	<b>NO CLASS Study Days</b>	<b>NO CLASS Study Days</b>
	9	Wildlife Trees (Todd Manning)	Wildlife Trees (Field - Colliery Dam Pk.)	Certification (Jilene West)
	10	Old growth (Andy MacKinnon)	Wildlife - Landscape planning (Steve Gordon)	Wildlife—Species at risk (Molly Hudson, TimberWest)
<b>Part 3 – People and resource management</b>				
	11	IRM field trip (TBA)	IRM field trip (TBA)	First Nations (Heather Pratt)
	12	Recreation (Jessica McKierahan, MFLNRO)	Visuals (Lloyd Davies, MFLNRO)	Compliance & Enforcement (TBA)
	13	FREP Monitoring (Peter Bradford & Frank Barber) - TBA	Issues Debate (Topics TBA)	<b>Easter Holiday</b>
	14	<b>Easter Holiday</b>	<b>Easter Holiday</b>	IRM Spring Project Presentations
	14	Course Review	IRM Spring Project Report due PART 2 & 3 Exam during finals.	