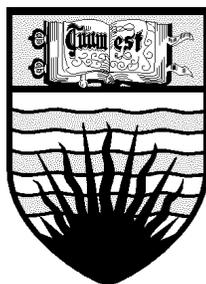


FRST 452
SPRING FIELD SCHOOL
STUDENT MANUAL

Malcolm Knapp Research Forest



2013

April 21 – April 28

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and
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TABLE OF CONTENTS

1	OBJECTIVES OF SPRING CAMP	3
1.1	Course Overview:	4
1.2	Prerequisites and Academic Preparation:	4
1.3	Important Dates:	4
2	REGISTRATION AND EQUIPMENT NEEDS	4
2.1	Registration and Payment of Fees:	4
2.2	Crew Assignment	4
2.3	Arrival at the Research Forest:	4
2.4	Equipment Supplied by Students:	4
2.5	Equipment Provided by UBC	5
3	CAMP FACILITIES AND MEALS	5
3.1	Meals	5
3.2	Accommodation:	5
3.3	Telephones:	5
3.4	Visitors:	5
4	FIRST AID, FIRE PRECAUTIONS, SAFETY AND TRAFFIC REGULATIONS	5
4.1	First Aid:	5
4.2	Fire Precautions:	6
4.3	Personal Safety	6
4.4	ety:	6
4.5	Traffic Regulations	6
4.6	Transportation Provided During Field School	6
4.7	Alcohol Policy	6
5	COURSE ORGANIZATION AND GRADING SCHEME	6
5.1	University Examinations scheduled after April 22	6
5.2	Absenteeism:	7
5.3	Course Grading:	7
6	Spring Field School 2012 SCHEDULE OF EXERCISES AND PROJECTS.....	Error! Bookmark not defined.

1 OBJECTIVES OF SPRING CAMP

Spring Camp is an important milestone in the student's formal forestry education. During the first 3-years of the BSF, students take courses in the basic sciences, ecology, mensuration, silviculture, forest health, operations, hydrology, recreation and economics. While these individual courses provide the basic knowledge of forestry, they are typically taught in isolation of one another, and collectively, they do not fully prepare the student for integrated forest management. By necessity, most courses are taught in UBC classrooms, however, to truly observe and understand forests we must move the learning environment to the forest. Spring Camp provides this learning environment and it develops the diagnostic and prescriptive skills expected of a professional forester serving a host of clients with diverse values. Spring camp is not a substitute for summer work experience, nor is summer work experience a substitute for Spring Camp. The course acts as a comprehensive examination/competency test that students must pass before entering their final year of the BSF.

The 5 primary objectives of the camp are:

1. **Learning to see** – everything about the stand, its structure, its origin, the ecosystem, how it will develop over time and how it fits into the whole forest and the social objectives.
2. **Developing the imagination.** Much of the forester's work is done in the office, and many critical discussions and debates occur away from the field. By exposing students to a large variety of forest types and stand development stages we can help them conjure up the correct images necessary to understand and contribute to these discussions. This also improves the imagination necessary to understand how a particular site relates to others the student has seen and what will it look like if they follow certain management strategies.
3. **Developing essential field skills** – With an increasing intake from urban populations, there is a need to ensure that students are comfortable and at home in the woods, and that they conduct themselves safely. There are a large number of measurement and assessment techniques, such as: basic surveying, mensurational skills, plant and animal identification, and special surveys for silviculture, wildlife and aquatic ecology. Students need to learn the efficient application of these procedures, the difficulty of adhering to the correct procedures under adverse conditions, and a sense of the variability of forests.
4. **Realize the limits of our understanding** – Students must learn to recognize when they need specialized information or expert help to reach an informed decision. They need to know how to distinguish between field situations in which they are competent to make judgments and situations where critical aspects are beyond their understanding.
5. **Professional Development** – Field school provides opportunities to further develop professional skills and conduct. Students must know their professional responsibilities, to whom they are accountable, accept full responsibility for work submitted, and conduct themselves in a safe and professional manner.

On completion of Spring Camp the student will be able to:

- Describe the stand structure, the ecosystem, and identify stand origin,
- Describe how a stand will develop over time under a variety of management options,
- Identify and knowledgeably discuss all forest values and how these may change over time,
- Identify owner/client objectives,
- Identify forest products, value stands and estimate cash flows,
- Develop and communicate management alternatives, including the relative strengths, weaknesses and risks,
- Locate access routes, layout silviculture and logging systems,
- Confidently defend management and layout decisions before an informed and critical review team,
- Identify when they are competent to make professional judgments and when they are beyond their professional competency,
- Communicate economic, social and ecological trade-offs to stakeholders,
- Identify their professional responsibilities, to whom they are accountable, accept full responsibility for work submitted, and always conduct themselves in a professional manner, and

- Perform comfortably in teams to develop integrated forest management options.

1.1 Course Overview:

Camp starts with 3 days of instruction and field exercises, followed by 4 days of project work and field examinations. For exercises, students are split into small groups. A brief introduction will be made at each site, followed by the exercise, and finally a discussion of the site and management options. The exercises stress integration, diagnostic and prescriptive skills. The camp is a key checkpoint in the student's professional education. It's an opportunity to apply their knowledge from course work on integrated problems, and an opportunity for the faculty to test this comprehensive knowledge in the field.

1.2 Prerequisites and Academic Preparation:

To be competent and productive, students are expected to have completed all courses up to and including 3rd year forestry. This means that students must have a good working knowledge of forest mensuration (FRST 239/339), silviculture (FRST 305), forest operations (FOPR 262) and have the necessary field skills acquired from the interior field school (FRST 351).

1.3 Important Dates:

The Field School commences with an organizational meeting at 7 p.m. on April 21 in the Loon Lake Camp at the U.B.C. Malcolm Knapp Research Forest. It concludes April 28, at 1:00 p.m.

2 REGISTRATION AND EQUIPMENT NEEDS

2.1 Registration and Payment of Fees:

You must register by March 25 at the Forest Resources Management office (FSC 2045)–otherwise you will not be attending camp this year. Fees (\$540 payable to UBC) are due by April 15. We accept money orders, certified cheques or bank drafts (no cash or personal cheques please).

2.2 Crew Assignment

Based on information received at Registration, students will be assigned to crews of 4-5.

2.3 Arrival at the Research Forest:

The main gate to the Research Forest is computer controlled. For the duration of the Field School, the code for opening the gate will be 2013#. The computer will not accept this code before midday on April 21, and will be de-activated at 5 p.m. on April 28.

2.4 Equipment Supplied by Students:

All students will be required to provide their own:

- sleeping bag.
- pillow.
- towels, soap etc.
- writing and graph paper, pencils, pens and drafting equipment.
- field clothes - work boots, hard hats are mandatory during field work.
- waterproof field books (e.g. Rite-in-the-Rain), plant identification books, course notes, reference manuals (e.g. Forestry Handbook), Slope Tables, and mensuration text.
- Students will find their Ecology, Harvesting, Silviculture and Mensuration course notes useful.

- Personal computer – if desired. There will be no computers supplied at the field school because we want to avoid students working on computers rather than concentrating on field work. You should bring power surge protection for your computer.

2.5 Equipment Provided by UBC

- Each crew will be provided with a pack sack containing engineering and mensuration equipment.
- Field equipment can be picked up from the Teaching Assistant at the Staff House at Loon Lake Camp on the first evening of camp. Field equipment is issued per crew: NOT to each student. One representative from each crew should be designated to pick up and sign for his/her crew's equipment.

3 CAMP FACILITIES AND MEALS

(Please notify the cook at Loon Lake of any special dietary requirements):

Breakfast: 6:30-7:45 a.m.
Lunch Students pack lunches at breakfast
Dinner: 5.30-6:45 p.m.
Hot drinks: 8.00 p.m. (or as scheduled for special events)
 The first meal served will be supper on April 22, at 5.30 p.m.

3.2 Accommodation:

Accommodation in Loon Lake Camp will be allocated on a first-come, first-served basis. Domestic pets are not allowed.

- There is a public pay telephone at Loon Lake adjacent to the Dining Hall.
- Messages can be left at the Forest Headquarters (604-463-8148) on weekdays between 8.00 a.m. and 4.00 p.m.
- A public phone is also available at the main gate (604-463-9020).
- Cell phones work on the higher ground surrounding camp.

Students should arrange to pick up and deposit visitors at the main gate. Other visitors will be granted access by prior arrangement only with the Forest Headquarters.

4 FIRST AID, FIRE PRECAUTIONS, SAFETY AND TRAFFIC REGULATIONS

- First Aid Kits are located at the Staff House, kitchen, headquarters and in Forest vehicles. Stretchers are available at the Staff House and the Forest Headquarters
- Industrial First Aid attendants are available during working hours. Maple Ridge Hospital is approximately 30 minutes away. Arrangements for evening first aid will be announced at camp.
- Students are asked to complete a medical information form (allergies alert, emergency contacts, etc.).

4.2 Fire Precautions:

- Park only in the assigned spaces so that in the event of a fire in Camp, fire-fighting equipment can be efficiently deployed.
- Fire extinguishers and fire hoses are to be used for fire-fighting ONLY.

4.3 Personal Safety

A short safety workshop will be held on the first evening of Field School during which a number of safety precautions will be outlined.

A "Crew Check-in Sheet" is posted each day in the Cook house. Ensure that your crew is checked in each day after returning from the field. This is a safety precaution designed to ensure no students are left in the field or lost.

- Students should make sure that they know the location of other crew members at all times during work.
- Students who get lost or injured should stay put and NOT wander away from the exercise area.
- Notify an instructor immediately if a crew member is lost or injured.
- Whistles should be carried in the field to be used in the event of an emergency.
- Hard hats and caulk boots should be worn in the field.
- Injuries, no matter how minor, must be reported to an instructor.

4.5 Traffic Regulations

- **MAXIMUM SPEED ON THE FOREST IS 30 KM/HOUR (20 m.p.h.)**
- Mountain bikes are not permitted on the Research Forest.
- The Forest roads are heavily used by contractors, logging trucks, students, researchers, hikers and school children. Extreme care should be exercised when driving.
- Beware of loose gravel, soft shoulders and other vehicles.
- When passing hikers, please drive slowly to reduce dust and flying gravel.

4.6 Transportation Provided During Field School

- Bus transportation will be provided for the first 3 days. During the last week, students are expected to provide their own transportation to and from the project sites. For those without transportation, a van will be available to provide shuttle service to and from the sites (by reservation only).
- Consumption of alcohol after work is allowed provided it is done in a civilized and reasonable manner. Destructive, abusive, or threatening behavior will not be tolerated and will result in immediate discharge from the field school.

5 COURSE ORGANIZATION AND GRADING SCHEME

5.1 University Examinations scheduled after April 21

Students with examinations to write after April 21 should contact Dr. John Nelson as soon as possible john.nelson@ubc.ca. He can arrange for your final examinations to be written at camp. Time will be made available from the camp schedule to accommodate these exams.

Students must attend all presentations, exercises and fully contribute to group projects. Discipline for absenteeism is at the discretion of the head instructor, Dr. John Nelson, and may include discharge from the course.

5.3 Course Grading:

The course grade is based on participation/attitude (15%) and the field examination/defense of the management options project (85%)

6 Spring Field School 2013 SCHEDULE OF EXERCISES AND PROJECTS

Table 1. Summary of exercises and staffing. DRAFT #1 –Feb 18, 2013

Day		Activity	Location	Faculty
0 Sunday	Apr 21	Introduction to course – bear /cougar and safety talk	Loon Lake gym	Nelson, Lyons, staff, TA
1 Monday	Apr 22	1. Cable logging 2. Bucking for value 3. <i>Blasting demo (mid-day)</i> 4. call grading standing timber (second growth) 5. old-growth Farmer's eye competition	1. R3? 2. R3? 3. ??? 4. <i>Blaney Lake</i> 5. <i>Knapp Reserve</i> Loon Lake	<i>Lyons, Southview crew</i> <i>Boldt, Rob Clark</i> <i>Likely OK</i> <i>Lawson, Lyons</i> <i>Power, ???</i> <i>Nelson, Lyons, Bendickson</i>
Evening				
2 Tuesday	Apr 23	6. log grading and valuation 7. Sawmill 8. Practice Field Exam Tree Climbing Demonstration/Training	6. Northview 7. Millsite 8. TBA Loon Lake Camp	<i>Boldt</i> <i>Woods, Lawson</i> <i>All</i> <i>Buscombe</i>
Evening				
3 Wednesday	Apr 24	9. Stream Morphology/Riparian Mgmt 10. Pruning 11. Road location stream crossing 12. Thinning project post-assessment Ferry pull competition & visit to group selection sites	9. A40 10. <i>M Rd Gate</i> 11. E&F 12. M Road Loon Lake	<i>Lawson, Moore</i> <i>Power</i> <i>Nelson, Bendickson</i> <i>Lawson, Power</i> <i>Lawson, Nelson</i>
Evening				
4 Thursday	Apr 25	Introduction to project areas Crews working on layout/mgmt options Alumni Tour 1PM BBQ 5:30 PM	Loon Lake Gym Throughout forest Dinner: Dining Hall	<i>Faculty, staff, TA</i> <i>Faculty Development Staff</i>
Evening				
5 Friday	Apr 26	Crews working on layout/management options Fire Fighting training: Crews 1 & 2 @ 8:30 AM Crews 3&4 @ 1:30 PM None	Throughout forest Road A10	<i>Faculty, staff, TA</i> <i>Lyons, Lawson, Aron, Power</i>
Evening				
6 Saturday	Apr 27	Crews working on layout/management options Fire Fighting training:, Crews 5 & 6 @ 8:30AM None	Throughout forest Road A10	<i>Faculty, staff, TA</i> <i>Lyons, Lawson, Aron, Power</i>
Evening				
7 Sunday	Apr 28	Field exams/defense – tear down ribbon - return field equipment 8:00AM -1:00PM	Throughout forest	<i>Faculty, staff, TA</i>

1st exercise 8:30-10:00; 2nd exercise 10:30-12:00; 3rd exercise 1:00-2:30; 4th exercise 3:00-4:30; 30 minutes travel time between exercises (**Tentative)

1st exercise 8:30-10:00; 2nd exercise 10:30-12:00; 3rd exercise 1:00-2:30; 4th exercise 3:00-4:30; 30 minutes travel time between exercises