

**SAULT COLLEGE OF APPLIED ARTS & TECHNOLOGY
SAULT STE MARIE, ON**



COURSE OUTLINE

Course Title: FALL CAMP - 2ND YEAR - FORESTRY

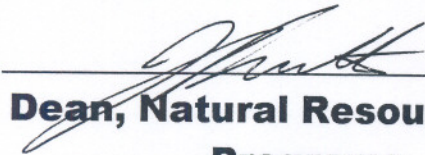
Code No.: FOR252 Semester: 3

Program: FORESTRY TECHNICIAN

Authors: ERWIN GOERTZ/MARK HARVEY

Date: SEPT. 1998 Previous Outline Date: NEW

Approved:


**Dean, Natural Resources
Programs**


Date

Total Credits: 2

Total Credit Hours: 32

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For additional information, please contact Joe Fruchter, Dean,
Natural Resources Programs, (705) 759-2554, Ext. 688.

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FALL CAMP – 2ND YR FORESTRY

COURSE CODE

COURSE NAME**I. COURSE DESCRIPTION:**

Students will carry out practical exercises and perfect outdoor skills as they relate to a forest technician. Exercises are drawn from the forest soils, photogrammetry, mapping and forest measurements, silviculture, dendrology and resource sampling courses. Students will utilize aerial photographs, NTS and OBM topographic maps as well as reaching sites through the use of various modes of transportation (walking, all terrain vehicles, canoes). Soil pits, FEC work, compassing and chaining, evaluating thinning trails, using a GPS (Global Positioning System) unit, using DAP electronic data recorder, timber cruising, aerial photo interpretation, plantation assessment and visiting a seed orchard all form part of the field camp activities.

II. STUDENTS WHILE AT FALL CAMP WILL DEMONSTRATE THE ABILITY TO SUCCESSFULLY COMPLETE THE FOLLOWING:

1. NAVIGATE ACCURATELY AND QUICKLY THROUGH A FORESTED LANDSCAPE USING MECHANICAL AND ELECTRONIC NAVIGATION AIDS USING SEVERAL MODES OF TRANSPORTATION
2. TO CARRY -OUT OPERATIONAL FOREST INVENTORIES:
 - CONDUCT A PRELIMINARY SITE ANALYSIS BY DESCRIBING A SOIL PROFILE FROM A SOIL PIT
 - SURVEY AND REPORT ON A STREAM CROSSING SITE FOR A BRIDGE OR CULVERT INSTALLATION
 - CONDUCT A CLOSED TRAVERSE USING COMPASS AND CHAIN TO NO MORE THAN 5% ERROR OF CLOSURE
 - USING CLOSED TRAVERSE DATA FROM THE FIELD AND A COMPUTER CALCULATE THE AREA OF A SPECIFIED BLOCK OF FORESTED LAND
 - USING CLOSED TRAVERSE DATA AND A SPECIFIED PLANTING DENSITY CALCULATE THE NUMBER OF TREES REQUIRED TO PLANT IN AN AREA.
 - DEMONSTRATE THE ABILITY TO WORK QUICKLY AND ACCURATELY WITH NUMERICAL DATA WITH THE UNITS EXPRESSED IN METERS , M² AND HECTARES.
 - CONDUCT A FIXED AND VARIABLE PLOT CRUISE USING MENSURATIONAL TOOLS

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- PROCESS AND ANALYSES DATA FROM A FOREST TIMBER INVENTORY CRUISE..
 - CONDUCT A YOUNG PLANTATION ASSESSMENT
 - PROCESS AND ANALYSE DATA FROM A PLANTATION ASSESSMENT
 - DEMONSTRATE ABILITY TO COLLECT DATA AND RECORD ON DATA SHEETS NEATLY AND ACCURATELY
3. TO CARRY-OUT OPERATIONAL SILVICULTURAL ACTIVITIES:
- PLANT FOREST TREE SEEDLINGS ACCORDING TO SPECIFIED STANDARDS
 - ASSESS TREE PLANTING ACCORDING TO A SPECIFIED FORMAT AND STANDARD.
 - COLLECT AND PROCESS DATA FROM A TREE PLANT OPERATION CALCULATING QUALITY AND PAYMENT
 - ASSESS A WHITE PINE SHELTER WOOD SEED CUT FOR SPACING, DENSITY SPECIES COMPOSITION , AGE AND HEIGHT.
 - TRAVEL TO AND COLLECT DATA FROM A RED PINE THINNING TRIAL IN THE KIRKWOOD FOREST
 - USING COLLECTED DATA CALCULATE STOCKING, DIAMETER, HEIGHT AND VOLUME IN SPECIFIED THINNED RED PINE STANDS.
 - PRUNE CONIFERS USING HAND HELD PRUNING SAWS AND POLES
 - CALCULATE THE SPACING OF PRUNED TREES
 - COLLECT AND THEN CALCULATE THE COST TO HAVE A FORESTED AREA PRUNED BY CONTRACTORS.
 - UNDERSTAND THE ROLE FOREST TREE NURSERIES PLAY IN THE FOREST REGENERATION PROCESS AND VISIT A FOREST TREE NURSERY
 - UNDERSTAND THE BASIC PRINCIPLES OF A TREE IMPROVEMENT PROGRAM AND VISIT A SEED ORCHARD
4. TO COMPILE AND PROCESS FOREST INVENTORY AND SILVICULTURAL DATA:
- DEMONSTRATE ABILITY TO COLLECT DATA IN THE FOREST USING A WIDE RANGE OF MEASUREMENT TOOLS
 - DEMENOSTRATE ABILITY TO BE ORGANIZED AND EFFICIENT WHEN COLLECTING FOREST INVENTORY DATA

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HAND HELD CALCULATORS AND COMPUTERS

- DEMONSTRATE ABILITY TO SUBMIT NEATLY RECORDED WRITTEN WORK WITH-IN A REASONABLE SPECIFIED TIME FRAME
5. TO COLLECT AND PROCESS INFORMATION FROM THE FOREST AND TO USE THIS INFORMATION TO ASSIST IN MAKING OPERATIONALLY AND ECOLOGICALLY SOUND FOREST MANAGEMENT DECISIONS:
 - RELATE FOREST SITE CONDITIONS TO SPECIES SUITABILITY
 - RELATE FOREST SITE CONDITIONS AND GROWTH DATA TO DETERMINE SITE INDEX
 - TO RECOGNIZE AND APPRECIATE AREAS OF CONCERN AND SPECIAL INTEREST
 - TO USE FOREST INVENTORY AND FOREST SITE DATA TO HELP PLAN FOREST OPERATIONS
 - TO RECOGNIZE WHEN AND HOW INDUSTRIAL FOREST OPERATIONS MAY IMPACT ON OTHER VALUES IN THE FOREST
 1. TO BE ABLE TO FOLLOW INSTRUCTIONS AND CARRY-OUT FORESTRY WORK EFFICIENTLY AS PART OF A COOPERATIVE , PRODUCTIVE AND FUNCTIONAL TEAM:
 - DEMONSTRATE ABILITY TO WORK HARMONIOUSLY WITH FELLOW WORKERS IN THE FOREST
 - DEMONSTRATE THE ABILITY TO WORK WELL AS A PART OF A TEAM
 - DEMONSTRATE THE ABILITY TO ACT IN A LEADERSHIP ROLE WHILE WORKING WITH OTHERS IN THE FOREST
 - THE ABILITY TO ORGANIZE CREWS INTO EFFICIENT WORK TEAMS
 - DEMONSTRATE ABILITY TO PRACTICE RESPECT TOWARDS FELLOW WORKERS
 - CONDUCT ALL FOREST OPERATIONS IN A MANNER THAT RESPECTS THE SAFETY OF WORKERS IN THE FOREST
 7. PRACTICE SAFETY IN THE FOREST AND PROCEDURES RECOMMENDED TO ENSURE BUSH SURVIVAL IN AN EMERGENCY SITUATION IN THE FOREST

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- GIVEN A SERIES OF EMERGENCY SITUATIONS IN THE FOREST PLAN A SURVIVAL STRATEGY.
- WEAR ALL SAFETY EQUIPMENT AS REQUIRED AT ALL TIMES
- RECOGNIZE POTENTIAL HAZARDS IN THE FOREST
- UNDERSTANDS STEPS THAT CAN BE TAKEN TO MINIMIZE THE RISK FROM POTENTIAL HAZARDS IN THE FOREST SUCH AS GETTING LOST, HYPOTHERMIA , BEAR ATTACKS, PANIC, STARVING , DRINKING CONTAMINATED WATER , DROWNING , FALLING THROUGH THE ICE , LIGHTNING AND FALLING TREES.

III. TOPICS:

- NAVIGATE ACCURATELY AND QUICKLY THROUGH A FORESTED LANDSCAPE USING MECHANICAL AND ELECTRONIC NAVIGATIONAL AIDS AND SEVERAL MODES OF TRANSPORTATION.
- USE AERIAL PHOTOGRAPHS TO LOCATE SPECIFIC POINTS AND FEATURES , IDENTIFY FEATURES , DELINEATE AREAS AND NAVIGATE TO A SPECIFIC FEATURE OR A WORK SITE IN THE FOREST
- USE FOREST INVENTORY MAPS, AND TOPOGRAPHIC MAPS TO LOCATE AND NAVIGATE TO WORK SITES IN THE FOREST
- USE A HAND HELD COMPASS AND 50M CHAIN TO LOCATE POINTS IN THE FOREST
- USE ELECTRONIC GPS UNITS TO NAVIGATE THROUGH THE FOREST
- USE ATV 4 WHEELERS ON BUSH ROADS TO TRAVEL SAFELY , QUICKLY AND ACCURATELY TO FOREST JOB SITES
- DEMONSTRATE THE PROPER SAFE HANDLING AND MAINTENANCE OF ATV 4 WHEELERS
- USE CANOES TO TRAVEL ALONG WATERWAYS TO REACH FOREST JOB SITES WHILE ENSURING ALL SAFETY REGULATIONS ARE MET.
- DEMONSTRATE THE MATURITY AND GOOD JUDGEMENT NEEDED TO TRAVEL AND NAVIGATE SAFELY AND EFFICIENTLY THROUGH THE FOREST.
- GROUND TRUTH AERIAL PHOTO INTERPRETATIONS

IV. EVALUATION PROCESS:

SOILS EXERCISE	5
PW TREE PLANTING	S OR U
PW SHELTERWOOD	10

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PRUNING	5
STREAM CROSSING	10
PR SPACING	10
CUTOVER AND TRAVERSE	10
PR THINNING	10
GPS	10
SEED ORCHARD AND NURSERY	S OR U
DAP	S OR U
SURVIVAL TRAINING	S OR U
HARDWOOD CRUISE	10
PHOTO INTERP. AND GROUND TRUTHING	10
TEAM WORK	S OR U
SAFETY	S OR U
TOTAL	100% and 6 SATISFACTORIES

STUDENTS MUST ACHIEVE 70 % OR GREATER AND MUST COMPLETE ALL EXERCISES EVALUATED WITH A S OR U SATISFACTORILY (S) TO EARN A "C" GRADE OR BETTER IN THIS COURSE.

REQUIRED EQUIPMENT

- COMPASS
- HARD HAT
- SAFETY BOOTS
- SLEEPING BAG
- RAINCOAT
- PERSONAL GEAR FOR 5 DAYS IE CLOTHING
- CALCULATOR
- BATHING SUIT (OPTIONAL)
- PENCILS
- GREASE PENCILS
- POCKET STEREOSCOPE
- NAVIGATIONAL PROTRACTOR
- FOR 252 FOREST TECHNICIAN FIELD CAMP LAB MANUAL IN BOOK STORE
- A FIELD MANUAL FOR DESCRIBING SOILS (TEXT FROM SOILS COURSE)

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- FOR 217 STUDY GUIDE IN BOOK STORE
- CLIP BOARD
- SMALL DAY KNAPSACK AND WATER BOTTLE 1 LITRE
- FOREST PLANTS IN CENTRAL ONTARIO
- METRIC/ IMPERIAL SCALES
- DOT GRID
- POCKET KNIFE
- PRESCRIPTION MEDICINE IF REQUIRED
- CUP OR COFFEE MUG

V. SPECIAL NOTES

- NO ALCOHOL, ILLEGAL DRUGS, OR FIREARMS ALLOWED IN CAMP. FAILURE TO COMPLY WILL RESULT IN EXPULSION FROM CAMP AND AN R GRADE IN FOR252. ZERO TOLERANCE RULE APPLIES
- EMERGENCY PHONE NUMBER FOR THIS FIELD CAMP LOCATED AT MCCREIGHT'S JUNIOR RANGER CAMP. (705) 842- 5733.

MCCREIGHT'S J.R. CAMP –

NOTE: Year to year, the water level in the well that supplies the camp's water gets extremely low. Conserve water whenever possible i.e. don't shower, go for a sauna and a swim. The instructors will keep you posted on the status of the water supply.

General Camp Rules

- The water from all taps at the camp is safe for drinking
- Students will be held responsible for any damage to O.M.N.R. property (this is an O.M.N.R. owned camp) e.g. writing on walls etc.
- NO SMOKING in any camp building – put all butts in the fire pit
- Use the wood from the pile around the fire pit for starting the fire. Collect the rest of the firewood from the fallen, dead material from the bush around the camp.

Kitchen Rules

- Breakfast at 7:00 a.m. supper at 5:30 pm, you will pack your own lunch for the day's activities after breakfast (2 sandwiches, fruit, dessert, drink). Be ready to eat when the bell rings, don't walk in halfway through the meal time. During meals, take a modest amount, let everyone in line have a serving, you can always go back for seconds. Place all used dishes, cups, and refuse in the proper place when finished and leave the kitchen. NO dishes or cutlery is to leave the kitchen. *Bring your own cup/mug to each meal.*

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- Keep the place tidy during the week. If you see something that has to be cleaned or garbage removed – please do it. Sweep out the bunk house when it gets too gritty.
- Before we leave the camp, after the week, the whole place has to be cleaned.
 - floors in all buildings swept and mopped
 - sinks and toilets cleaned
 - garbage from camp and yard (butt patrol) picked up and put in bags
 - heaters shut off and windows shut and locked

Special Needs

If you are a student with special needs (eg. Physical limitations, visual impairments, hearing impairments, learning disabilities), you are encouraged to discuss required accommodations with the instructor and/or contact the Special Needs Office, Room E1204, Ext. 493, 717 or 491 so that support services can be arranged for you.

Plagiarism

Students should refer to the definition of “academic dishonesty” in the “Statement of Students Rights and Responsibilities.”

Students who engage in “academic dishonesty” will receive an automatic failure for that submission and/or such other penalty, up to and including expulsion from the course, as may be decided by the professor.

In order to protect students from inadvertent plagiarism, to protect the copyright of the material referenced and to credit the author of the material, it is the policy of the department to employ a documentation format for referencing source material.

Advanced Standing

Students who have completed an equivalent post-secondary course should bring relevant documents to the Coordinator, Natural Resources Programs.

Retention of Course Outlines

It is the responsibility of the student to retain all course outlines for possible future use in gaining advanced standing at other post-secondary institutions.

Substitute course information is available at the Registrar’s Office.

VI. PRIOR LEARNING ASSESSMENT:

Please contact the Prior Learning Assessment Office (E2203) for further information.