



MT. HOOD

COMMUNITY COLLEGE

Natural Resources Technology
Forest or Wildlife Resources
Associate of Applied Science
Fall 2010

Hello!

Thank you for your interest in the Natural Resources Technology (NRT) program. This packet is designed to answer questions about the program and to assist you in the admissions process. Enclosed you will find:

- Admissions Guidelines and Criteria
- Application Checklist
- MHCC Student Admission Form
- Program Outline
- Program Curriculum
- Cost Sheet

Natural Resources Technology is a two-year, applied/technical degree program. The curriculum is interdisciplinary, introducing students to a broad spectrum of natural resources applications. It emphasizes hands-on learning, which means that fieldwork is an integral part of the coursework. Field studies are conducted in local forests, parks and natural areas as well as streams and wetlands located on campus. Students in the NRT program share a common first year before choosing either a forestry or wildlife option.

Students may elect to attend part-time, spreading the courses out over three to four years. Doing this requires additional advising as many of the courses are offered in a specific sequence.

If you have questions about the college or the program, please feel free to contact one of us.

Sincerely,

Joan De Young
Faculty Advisor
Forest Resources option
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Walter Shriner, Ph.D.
Faculty Advisor
Wildlife Resources option
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ADMISSION GUIDELINES

Admission of all students is centralized in the Admissions, Registration and Records Office. Admission to the College does not guarantee admission to the Natural Resources Technology program. The Admissions, Registration and Records Office has the final authority on what constitutes equivalency for all admission criteria and has the sole authority to inform students of their admission status. If you have questions regarding admission procedures please contact the Admissions, Registration and Records Office at 503-491-7256.

DATE OF APPLICATION: Students may submit applications beginning November 2, 2009. Once applicants have met all program criteria, they are admitted on a first-come, first-served basis until the program is full. Up to fifteen alternates may be accepted onto an alternate list once the program is full.

ADMISSION CRITERIA

- NATURAL RESOURCES TECHNOLOGY ADMISSION FORM, COMPLETED** (Please see [Application Packet Checklist](#).)
- MINIMUM SKILLS PROFICIENCY:** Success in the program requires certain skill levels in 3 areas: reading, writing and math. The minimum skill proficiencies required for admission to this program are equal to:

	Placement into		Completion of
Reading:	Reading 115	or	Reading 90
Writing:	Writing 101 or 115	or	Writing 90
Math:	Math 60	or	Math 20

You can demonstrate your skills competency through **one** of the following processes:

A. The Mt. Hood Community College Placement Test (CPT)

- The CPT is a non-timed skills assessment test given on a walk-in basis. There is no fee to take the CPT. Scores will be available upon completion of the test.
- CPT scores are valid for two years. If CPT scores are over two years old, from the time a student submits a Natural Resources Technology program application, they are not valid and applicants will need to retest for placement.
- For purposes of admission to the program, the CPT must be taken at Mt. Hood Community College. Applicants who live more than two hours away may take the test by proctor. Please call the MHCC Testing Services for more information, 503-491-7678.
- If you are only taking portions of the CPT you'll need to obtain a "waiver" form by bringing appropriate transcripts to the Academic Advising and Transfer Center.
- Students who choose to retest in reading, writing or math will need to complete a Retest Self-Referral Form, which is available in the Testing Center or Academic Advising and Transfer Center, and pay a \$10 per subject retest fee. If CPT scores indicate a student is not ready for this program, they will be advised to take a course or courses in preparation to apply to the program at a later date.
- Exceptions to the CPT requirement may be made when a program has unfilled positions.

OR

B. Prior College Coursework*

- The CPT may be waived if an applicant has completed college coursework with a "C" or higher grade in RD90, WR90 and MTH10 or higher.
- Official transcripts* must be submitted to the Admissions, Registration and Records Office. Students who have completed a bachelor's degree from an accredited school and submit authorized documentation (official transcripts or diploma) will have the CPT waived, and will be considered proficient for admission purposes for this program.

TRANSFER CREDITS: Upon acceptance to the program, students who have prior college coursework applicable to their Natural Resources Technology degree may request a transcript evaluation. Transcript evaluation request forms are available on the web at <http://www.mhcc.edu/docs/docsGraduation/Directions04.pdf>.

***Transcript Requirements:**

Recent documents: we recommend that you send recently dated official transcripts. Any transcripts received in prior years will not be guaranteed to be on file.

Non-accredited college transcripts: They will not be considered in the initial evaluation of your application nor can they be considered toward any degree requirements.

Transfer coursework from foreign Institutions: Such coursework must be evaluated by the application deadline by an outside credential evaluation service. The evaluation company must be either AACRAO Foreign Education Credential Service (www.aacrao.org) or a member of the National Association of Credential Evaluation Services (NACES). For a list of NACES memberships, please refer to their web site at www.naces.org. The evaluation must be a course-by-course evaluation with an official copy submitted to the Admissions, Registration and Records Office. The coursework must be considered to be at a post-secondary level, have comparable MHCC accreditation status and be parallel in content to MHCC coursework. The outside evaluation must also be completed for secondary level education for any evaluation of that coursework toward MHCC admission requirements.

3. Required Documents

A checklist of required documents is provided as part of this application packet. The documents that must be submitted include:

- **Completed and signed Natural Resources Technology Admission form** (Please see Application Packet Checklist).
- **Completed Natural Resources Technology Checklist** (you can find the Application Packet Checklist on page 5).
- Other official documents as described on the application checklist.

APPLICATION PACKET CHECKLIST

Name: _____

Email Address: _____

Your completed packet must include the following items:

- This Natural Resources Technology application checklist
 - MHCC Natural Resources Technology Admission Form – **This form is required as part of the limited/restricted entry application process** even if you were or are a student at MHCC. You are not required to pay the \$25.00 admission fee as part of the Natural Resources Technology application process. If you have not paid the fee in the past, it will automatically be added to your bill for tuition the first time you register for classes. If you have taken credit courses at MHCC prior to Summer 2003, you will not be required to pay this fee.
 - Select Tentative Option
 - Forest Resources
 - Wildlife Resources
 - Skills Competency Documentation. Submit one of the following:
 - College Placement Test scores from Mt. Hood Community College, indicating placement into: RD115, WR115 or WR101 and MTH60.
 - Included
 - On file at MHCC
- or
- Official college transcripts showing completion of RD90, WR90 and MTH20 with a “C” grade or higher or completion of college level writing and math with a “C” grade or higher.
 - Included
 - Being mailed. They were requested on _____
 - On file at MHCC

This program is filled on a space available basis. Once applicants have met minimum criteria they are accepted on a first-come, first-served basis. Applications may be submitted beginning November 2, 2009.

Return your completed application materials to:

Mt. Hood Community College
Admissions, Registration, and Records
Natural Resources Technology Program
26000 SE Stark Street
Gresham, OR 97030



Natural Resources Technology Student Admission Form

Admissions, Registration and Records Office, 26000 S.E. Stark Street, Gresham, OR 97030

This form is required as part of the limited / restricted entry application process even if you were or are a student at Mt. Hood Community College (MHCC). You are not required to pay the \$25.00 admission fee as part of the Natural Resources application process. If you have not paid the fee in the past, it will automatically be added to your bill for tuition the first time you register for classes. If you have taken credit courses at MHCC prior to Summer 2003, you will not be required to pay this fee.

*Providing your social security number (SSN) is voluntary. If you provide it, Mt. Hood Community College (MHCC) will use your SSN for keeping records, doing research, reporting, extending credit, and collecting debts. MHCC will not use your number to make any decision directly affecting you or any other person. Your SSN will not be given to the general public. If you choose not to provide your SSN, you will not be denied any rights as a student. Please refer to the Disclosure Statement listed on the MHCC Web site at www.mhcc.edu/ssn, which describes how your number will be used. Providing your SSN means that you consent to the use of your number in the manner described.

Returning Students: MHCC ID Number _____

Term Summer Fall Winter Spring
Year _____

Do you plan to earn a degree, certificate or diploma at MHCC?

- (A)-Yes, a 1-year certificate or 2-year degree
- (B)-Yes, High School diploma or GED
- (C)-No, here to take classes
- (D)-Undecided

* Social Security Number _____

Previous college(s) attended _____

Name _____
LAST FIRST M.I.

Previous name(s) _____

What is your attendance history at MHCC?

- New Student
- Attended MHCC more than four terms ago

Select the one main reason for attending MHCC this term.

- (A)-Take classes to transfer to a 4-year college
- (B)-Learn skills to get a job
- (C)-Improve existing job skills
- (D)-Explore career or educational options
- (E)-Take classes to finish High School or GED
- (F)-Improve reading, writing or math skills
- (G)-Learn English
- (H)-Personal interest / enrichment
- (I)-Other

Address _____ Apt# _____

What is your current high school education?

- (D)-Adult High School Diploma, Yr _____
- (G)-GED, Yr _____
- (H)-High School Graduate, Yr _____
- (N)-Did not complete
- (S)-Still in High School

Will you be employed while attending classes this term?

- (F)-Yes, full-time (35+ hours per week)
- (P)-Yes, part-time (Less than 35 hours per week)
- (N)-No, not employed

CITY _____ STATE _____ ZIP _____

COUNTY (i.e. Multnomah) _____

Name of last high school attended _____

E-mail _____

MHCC Major _____ **Natural Resources Technology**

Phone _____ Gender: M F

State _____

Racial / Ethnic Information:

(Your response is voluntary)

Do you consider yourself to be Hispanic or Latino:
 Yes No

Check here if Home Schooled _____

In addition, select one or more of the following racial categories to describe yourself:

- American Indian or Alaskan Native -Asian
- African American or Black -White
- Native Hawaiian or Other Pacific Islander

What is the highest level of education / training you have received beyond high school?

- (0)-None
- (1)-Some college, short-term training, private vocational school
- (2)-1-year certificate from a community college
- (3)-2-year degree from a community college
- (4)-Bachelor's degree
- (5)-Master's degree
- (6)-Ph.D. / Professional degree

Check here if you are a U.S. Veteran:
 Yes

Date of Birth ____ / ____ / ____

Mother's Maiden Name _____

Residency Status – required for assessing tuition charges.
Will you have lived in Oregon 90 days prior to the 1st day of the term?
 -yes -no **AND, check one below:**

- Permanent resident of Oregon, CA, ID, WA or NV
- Permanent resident outside of Oregon, CA, ID, WA or NV
- International Student (requires an I-20)
- International Visitor (B, J, H or other non-student Visa)
please tell us your Visa type: _____

“Student Right to Know” information is available at
<http://www.mhcc.edu/pages/1451.asp>

If you need assistance due to a disability, please contact the Disability Services Office at (503)-491-6923 or at (503)-491-7670 (TDD)

Student Signature _____ Date: _____

Read before submitting: I acknowledge I am legally obligated to pay all charges incurred by registering. Charges may include late fees, reasonable collection costs, attorney fees, and Oregon Department of Revenue charges to the collection of all delinquent debts owed to the college. To have course tuition/fee charges removed, I must process a drop or withdrawal on MyMHCC or through the Admissions, Registration and Records Office within the refund period. (Form Updated: 6/25/2009)

PROGRAM OVERVIEW

PROGRAM MISSION: The mission of the Natural Resources Technology program is to provide a comprehensive, field-oriented education in the technical applications of sustainable natural resources management.

PROGRAM OBJECTIVES: The objectives of the Natural Resources Technology program are to provide students with the knowledge and skills to do the following:

1. Perform relevant field tasks required of natural resource technicians.
 - Conduct stand exams, reforestation surveys, and other forest inventories.
 - Perform fieldwork necessary to implement silvicultural prescriptions (e.g. for thinning, prescribed burning, tree planting, stream restoration, etc.).
 - Delineate and mark forest types, forest stands, roads, and riparian areas.
 - Conduct surveys of natural resources (e.g. plant associations, hazard trees, wildlife habitat, streams, large woody debris, soils, etc.).
 - Perform trail maintenance and fire suppression activities.
 - Identify native forest trees, plants, insects and diseases.
2. Use a broad range of technological tools to document, map, measure, record and analyze data relevant to natural resources.
 - Utilize a variety of instruments to determine tree height, diameter, age, and other forest stand conditions.
 - Utilize a variety of instruments to describe habitat and watershed features.
 - Use a variety of techniques to assess diversity and abundance of mammals, birds, amphibians, and fish.
 - Navigate and identify landforms using maps, aerial photos, compasses, and GPS units.
 - Survey/traverse boundaries and roads using total stations, GPS and hand compasses.
 - Use computer software for data analysis, mapping and problem solving (GIS).
 - Use software to analyze forest growth and development over time.
 - Enter field data onto field data recorders; download to a PC.
3. Demonstrate a practical understanding of Pacific Northwest forest and wetland ecosystems.
 - Relate the influences of climate, topography, and soils to ecological community composition and structure.
 - Apply concepts of basic ecosystem functions such as photosynthesis and nutrient cycling to natural resources management.
 - Assess forest management practices and natural disturbances as they relate to forest resources (soils, water, and wildlife) and succession.
 - Relate the influences of land management over time to landscape conditions.
4. Demonstrate knowledge of social influences on ecosystem management.
 - Relate social and economic benefits of forests and other ecosystems to society.
 - Connect social concerns about the environment to natural resources management legislation.
 - Prescribe environmentally sound management activities for a given set of landowner objectives and ecosystem conditions.
5. Demonstrate professional skills needed for successful job performance.
 - Prepare written field reports.
 - Fill out field data sheets accurately and completely.
 - Communicate verbally with crew, supervisor and public about fieldwork.
 - Prepare and present oral environmental information.



STUDENT ENROLLMENT LIMIT PER YEAR: 40

DEGREE AWARDED WITH COMPLETION OF REQUIRED COURSEWORK: Associate of Applied Science (AAS) Natural Resources Technology, with Forest Resources or Wildlife Resources Option.

PROGRAM START: Fall term each year. Mid-year entrance into a class or classes is by faculty permission only. Faculty permission does not guarantee admission into the program. Students must apply and be accepted into the program to have their major changed to Natural Resources Technology.

PROGRAM LENGTH: Six terms (excluding summers); part time attendance may take three to four years

NUMBER OF GRADUATES EACH YEAR: 15 - 20

PROGRAM CURRICULUM

FOREST RESOURCES

First Quarter (Fall)		
Course Number	Course Name	Credits
F111	Introduction to Natural Resources	3
F141	Tree and Shrub Identification	3
MTH60	Beginning Algebra I	4
HPE285OL	Wilderness Survival	3
NR160	Wildland Fire	3
		16

Fourth Quarter (Fall)		
Course Number	Course Name	Credits
F240	Natural Resources Ecology	4
FT221	Aerial Photos and Resource Mapping	3
FT222	Forest Measurements II	4
WR227	Technical Report Writing	4
		15

Second Quarter (Winter)		
Course Number	Course Name	Credits
FT122	Forest Measurements I	4
FT128	Global Positioning Systems	2
NR180	Career Devt in Natural Resources	1
FW251	Principles of Wildlife Conservation	3
MTH65	Technical Mathematics II	4
MTH84	Applied Trigonometry	1
		15

Fifth Quarter (Winter)		
Course Number	Course Name	Credits
FT228	Intro to Geographic Info Sys	3
NR212	Current Issues	1
NR244	Applied Silviculture I: Reforestation	3
PSY101	Psychology of Human Relations	3
NR242	Watershed Processes	3
	Related Elective	3
		16

Third Quarter (Spring)		
Course Number	Course Name	Credits
F200	Introduction to Forest Surveying	4
NR144	Forest Insects and Diseases	3
NR230	Forest Botany	4
MTH95	Technical Mathematics II	4
WR121	English Composition	4
		15

Sixth Quarter (Spring)		
Course Number	Course Name	Credits
FT235	Outdoor Recreation	3
NR238	Timber Harvesting and Products	5
NR246	App Silviculture II: Forest Stand Dynamics	3
WE280NR*	Cooperative Education Internship	3
		14

The course requirements for this program are subject to change each academic year. For MHCC certificate/degree requirements, a student must follow the program requirements the year the student is officially admitted to the program or the year the student is completing the program.

*Cooperative Education—Students are encouraged to satisfy WE280NR during the summer between their first and second years.

Related Electives: In selecting a related elective, students consult with their advisor to determine which course will best meet their academic and professional goals.

For more information on options see the College catalog.

PROGRAM CURRICULUM

WILDLIFE RESOURCES

First Quarter (Fall)		
Course Number	Course Name	Credits
F111	Introduction to Natural Resources	3
F141	Tree and Shrub Identification	3
MTH60	Beginning Algebra I	4
HPE285OL	Wilderness Survival	3
NR160	Wildland Fire	3
		16

Fourth Quarter (Fall)		
Course Number	Course Name	Credits
F240	Natural Resources Ecology	4
FT221	Aerial Photos and Resource Mapping	3
FW252	Mammals: Biology and Techniques	4
WR122	English Composition: Critical Thinking	4
		15

Second Quarter (Winter)		
Course Number	Course Name	Credits
FT122	Forest Measurements I	4
FT128	Global Position Systems	2
NR180	Career Devt in Natural Resources	1
FW251	Principles of Wildlife Conservation	3
MTH65	Beginning Algebra II	4
MTH84	Applied Trigonometry	1
		15

Fifth Quarter (Winter)		
Course Number	Course Name	Credits
FT228	Intro to Geographic Info Sys	3
NR212	Current Issues	1
NR244	Applied Silviculture I: Reforestation	3
BI103B	Animal Behavior	4
NR242	Watershed Processes	3
		14

Third Quarter (Spring)		
Course Number	Course Name	Credits
F200	Introduction to Forest Surveying	4
NR230	Forest Botany	4
FW253	Birds: Biology and Techniques	4
WR121	English Composition*	4
		16

Sixth Quarter (Spring)		
Course Number	Course Name	Credits
FT235	Outdoor Recreation	3
NR260	Field Projects	3
NR254	Fish Biology and Techniques	4
WE280NR*	Cooperative Education Internship	3
	Human Relations requirement	3
		19

The course requirements for this program are subject to change each academic year. For MHCC certificate/degree requirements, a student must follow the program requirements the year the student is officially admitted to the program or the year the student is completing the program.

*Cooperative Education—Students are encouraged to satisfy WE280NR during the summer between their first and second years.

For more information on options see the College catalog.

ESTIMATED PROGRAM COSTS

	Estimated Costs
First Quarter (Fall)	
Textbooks	140.00
Calculator (TI82 or equivalent)	90.00
Clothing	150.00
• Rain Gear	
• Boots	
• Field Gear	
• Cruiser Vest (optional)	40.00
• Hard Hat	8.00
• Silva Ranger Compass	45.00
Total	473.00
Second Quarter (Winter)	
Textbooks	95.00
Field Books	6.00
Total	101.00
Third Quarter (Spring)	
Textbooks	150.00
Total	150.00
Fourth Quarter (Fall)	
Textbooks	95.00
Total	95.00
Fifth Quarter (Winter)	
Textbooks	160.00
Total	160.00
Sixth Quarter (Spring)	
Textbooks	65.00
Total	65.00
GRAND TOTAL	\$1,044.00

These costs are estimates and are subject to change without notice. They are listed to give you an idea of costs, **in addition** to tuition, so that you can plan for your financial needs.

The costs listed are for your Natural Resources Technology core classes and do not include costs for general or related electives required for the Associate in Applied Science Degree in Natural Resources Technology.

WHAT OUR STUDENTS TELL US:

What attracts students to Natural Resources Technology (NRT)?

- Getting paid to spend your day outside!
- Cost effective education – reasonable tuition and short preparation time for the job market.

What do students like after they start the NRT program at MHCC?

- Field classes that practice actual job activities.
- A focus on practical applications and skills.
- Small class sizes.
- A broad-based forestry/natural resources education.
- A challenge to produce professional results.
- Knowledgeable and accessible instructors with real-life experiences.
- Service learning--class projects that are often done for a client.
- Flexibility to attend part-time.
- Camaraderie with your “cohort.”
- Flexibility in transferring to a university program.

EMPLOYABILITY

1. Excellent employment opportunities in recent years! In the last three years, the employment rate of our graduates has ranged between 70% and 100%.
2. Many entry-level jobs are seasonal in nature. This means that a person may have to work a couple of “field seasons” (approximately March through November) before obtaining a permanent job.
3. Entry-level pay ranges from \$11.00 – \$15.00/hr.
4. In general, the private sector hires more permanent employees; the public sector hires more seasonal employees.
5. Completing the Work Experience Co-op during the first summer greatly improves chances of obtaining employment upon graduation.

TRANSFER OPTIONS

1. Some students choose to transfer to a four-year university for a Bachelor’s degree, after completing the two-year program.
 - a. The degree of transferability will depend upon which school you attend and which degree you pursue.
 - b. Typically about 60% of the Natural Resources Technology credits will transfer.
 - c. It may take up to five years to complete both the Associate and Bachelor degrees.
2. Students also have the option of enrolling in a transfer track that may not lead to an Associate degree.
 - a. This would require taking primarily general education courses, with selected transfer classes from the Natural Resources Technology program.
 - b. If you have an interest in transferring, we strongly recommend that you visit with one of the program advisors about it before enrolling in any courses.