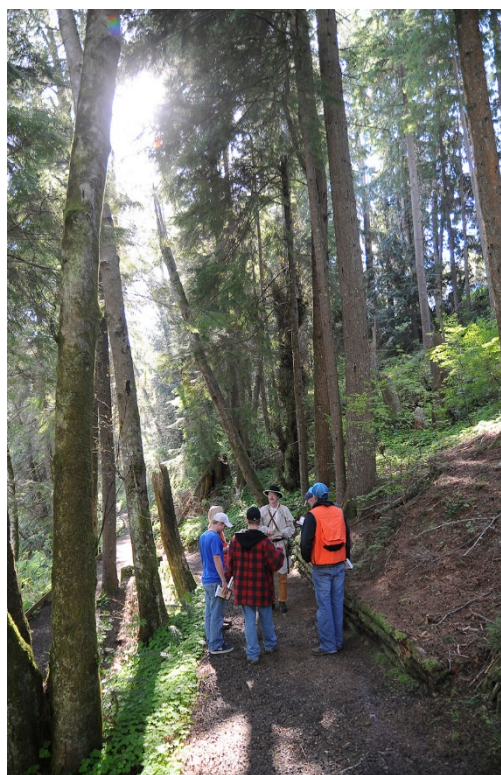




BACHELOR OF APPLIED SCIENCES
FOREST RESOURCES MANAGEMENT
STUDENT HANDBOOK



August, 2017

Grays Harbor College
1620 Edward P. Smith Drive





FOREWORD

Thank you for your interest in the Bachelor of Applied Sciences in Forest Resources Management at Grays Harbor College. Either as an accepted student or prospective candidate, we want to welcome you to our program. For years we have been designing this program in order to offer a solid foundation for forestry professionals in the Grays Harbor area.

This pathway leads to an exciting career for nature and outdoor lovers, as well as for people with passion for environmental causes. Our location couldn't be better: we are situated close to both the Olympic and Cascades mountains, having all the beauty of the Pacific Northwest within a short drive's distance.

Forestry is a very important field of work. Past are the days of unsustainable logging. Modern foresters are professionals concerned with sustaining both the environment and economy, while keeping the forests vibrant for future generations, using the latest technologies such as satellite images, GPS, computer-assisted harvesters and so much more. But we never forget the precious feeling of having our feet on the ground, our lungs full of fresh air and the amazing nature surrounding us. That is our office, under the trees and skies and we cherish it every day.

In Washington, the Evergreen State, this is an important industry that is demanding prepared and competent workers to be part of this great community of government and private professionals. We are here to help you to be part of this group of dedicated people and show you how much nature has to offer.

See you in the woods!

Sincerely,

Dr. Alex Souza Bastos
Forest Resources Management
Grays Harbor College

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INTRODUCTION

In 2008, Grays Harbor College started the Forest Technology Option of the Associated of Applied Sciences (AAS) in Natural Resources, with the objective to supply high quality workforce in Washington State. Beginning in the Fall of 2017, we are excited to introduce the **Bachelor of Applied Sciences in Forest Resources Management (BAS-FRM)**, a program to complement the AAS and deliver forestry professionals with higher education levels to the Natural Resources Management community.

Forestry is an important field of work here in the Evergreen State and the demand for field level professionals has only been growing. The rising concerns for the environment and climate change, as well as the sustainable use of natural resources has become a must-do for any company or government agency. This new paradigm demands higher level professionals, who are aware of the latest techniques, laws and trends that can improve or affect forest management.

Based on the guidelines of the Society of American Foresters and with the advice of professionals in both industry and government, we built this program to prepare students for the many outcomes on the field. Complementing that, a partnership with Green River College (GRC) will allow students to explore different tracks and have a diverse variety of courses to choose.

This handbook was designed to inform both prospective and newly-accepted students on all that Grays Harbor College and the Forest Resources Management program has to offer.

Please read carefully and keep this book with you for future reference, but do not hesitate to ask for any information, we are here to help you achieve this degree in the most professional and satisfactory way.

PROGRAM INFORMATION

Forestry is the field of science that tends to the sustainable use and management of forests and forest lands. A forester is the professional that has the training and capacity to apply the techniques that will manage a forest property and its resources, including water, soil, fauna, and also human activities in forest land. Foresters are not limited to the harvest of forest products, they are also responsible for land recovery, reforestation, application of environmental laws and protection of rare species, habitats and archeological sites.

The Bachelor of Applied Science – Forest Resources Management degree prepares students to engage professionally as foresters in public agencies and private companies, conservation managers, silviculturalists, harvest operations supervisor and other environmental professions.

It is important to know that, at this time, the BAS-FRM is only available for those who already have an [AAS degree in Natural Resources](#) or a forestry-related degree. If you are starting your higher education and want to enroll in our program, you can start on our AAS program and once you graduate start the BAS-FRM immediately. The AAS program is a two-year program that confers a Forest Technician degree and offer a solid knowledge and experience for any prospective forest worker.

Classes at Grays Harbor College are taught as a two-year track. The core course sequence is taught fall, winter and spring quarters with summers intended to be used for work in the field and to obtain hands-on experience.

In-class instruction is based on the main campus, with some field activities in and around Grays Harbor County. Some of the program core classes are shared between Green River College and Grays Harbor College via Interactive Television (ITV), with field work completed locally under the guidance of GHC instructors. Refer to Section 4 of this handbook to know more about our partnership with Green River College.

PROGRAM OF STUDY

The BAS-FRM is a unique degree path for Community and Technical Colleges in Washington State. As designed, the core courses for the Forest Resource Management degree will be similar between Grays Harbor College and Green River College, while each school teaches a specialization track, resulting in two separate options. These options are: ***Forest Resource Management: Operations*** specialty courses, offered by Grays Harbor College; and ***Forest Resource Management: Sampling and Assessment*** specialty courses, offered by Green River College.

The common core classes were developed jointly by GRC and GHC to best suit industry needs, ensuring that BAS students at either institution have a strong core set of skills. By having two cooperative and complementary degrees available, GRC and GHC degrees in Forest Resource Management are highly responsive to the industry needs within different and diverse sectors within the field of Forestry while reducing redundancies in programs within the State of Washington.

PROGRAM OUTCOMES

Foresters take direct action in environmental issues by using modern techniques for sustainable forest management. As a BAS-FRM student, you will be trained in a range of multidisciplinary fields. The following is a non-exhaustive list of what successful graduates will be able to do:

Written and Oral Communication and Critical Thinking

Communicate professionally in oral and written formats, produce technical reports, and use critical thinking for problem-solving and decision-making.

Plant Identification and Assessment

Have training in taxonomy and botany, being able to identify diverse plants present and assess their conditions, habitats and most common uses.

Ecology and Assessment of Natural Resources

Observe the surrounding environments and identify important characteristics that influence that habitat, such as the dynamics between the diverse elements of a forest, as well as the natural history and human action on different places.

Geographic Information Systems (GIS) and its Applications

Identify and produce maps to use in daily work planning and how to make decisions using satellite images, GPS coordinates and other spatial data.

Forest Mensuration

Correctly evaluate the timber potential in a forest, timber cruising techniques and sampling methods most commonly used by the industry.

Silviculture

Another essential part of the forester job, students will learn how to cultivate forests and how to prescribe different actions with different objectives. From thinning to burning and preventing disease spreading, Silviculture covers all the topics that yield a productive and healthy forest.

Forest Harvest Design and Execution

Plan operations to achieve maximum efficiency while causing minimum damage to the environment. Design forest roads, methods of harvest and transportation and how to reduce impacts.

Forest Laws and Policies

Apply environmental laws and policies to forest work and use the appropriate techniques following set local, state and federal guidelines to forest work.

Work Experience and Development*

Execute related technical duties such as estimating work effort, assessing technical risk, lead contract administration and overseeing personnel, develop land action plans such restoration and harvest plans through individual and team work.

**Students are required to go through Professional Development Experience, where they work with a company or institution to have real-world, hands-on experiences. A minimum of 165 hours of work experience is required to complete the course.*

PARTNERSHIP WITH GREEN RIVER COLLEGE

Green River College is our main partner in the BAS-FRM program. While we share common core courses, each College has its specialized track. Students at Grays Harbor College can follow the Forest Operations specialized track in the upper division classes, and/or they can also opt to follow the Sampling and Assessment track on Green River College, and attend classes at their campus in Auburn, WA. Please note that only the specialized track classes require attendance on its respective college.

Students that wish to follow both specialized tracks are welcome to do so, but should be aware that they can follow only one track at time due to the college's schedules.

The Sampling and Assessment track focus on the evaluation and management of forest resources, ideal for those interested in working with scientific research, water quality, wildlife biology, forest conservation and many other activities. Refer to Appendix C to see a list of courses on the specialized track at GRC.

Find more information online about the [Green River College degree and what they offer](#).

Or by visiting/calling GRC:

Green River College
12401 SE 320th Street, Auburn, WA, 98092
(253) 833-9111 ext. 4582

GETTING STARTED

Admission into the BAS-FRM program is merit based. Meeting the minimum entrance requirements does not guarantee admission, as the number of qualified applicants may exceed the number of enrollment spaces.

In order to be placed into the admissions pool, applicants must complete and submit the following:

- All [BAS-FRM application materials](#)
- Transcripts showing evidence of an earned Natural Resources associate degree, or an AAS in equivalent field, from a regionally accredited college or university with a minimum cumulative GPA of 2.0 or higher;
- Transcripts showing completion of all Natural Resources related courses with minimum grade of 2.5 in each.

Prerequisites:

Applicants must have a grade of 2.0 or higher in the following courses prior to program start

- ENGL& 101 English Composition
- ENGL& 235 Technical Writing
- SPCH 101 Fundamentals of Speech

Degree Required Courses:

Degree required courses are not a pre-requisite to the program; they are a requirement for earning your bachelor's degree. Some degree required courses may be prerequisites to upper division courses. Students are encouraged to complete these courses in their associate's degree if possible. Courses must be completed with a grade of at least 2.0.

- **Humanities (5 credits)**
- **Quantitative Skill (5 credits)**
Recommended: MATH& 146 Introduction to Statistics
- **Natural Science w/ lab (5 credits)**
Recommended: CHEM& 121 Intro. To Chemistry w/ lab or CHEM& 161 General Chemistry w/ lab I

- **Natural Science (5 credits)**
Recommended: BIOL& 211 Biological Science I: Majors Cellular or BIOL& 160 General Biology w/ lab
- **Social Science (5 credits)**
Recommended: PSYC& 100 General Psychology or SOC& 101 Introduction to Sociology
- **15 credits of General Education Coursework in Communications, Quantitative Skills, Humanities, Social Science, or Natural Science**
Recommended:
 - BUS& 101 Introduction to Business or BA 174 Small Business Management
 - GEOL& 101 Intro. To Physical Geology or EARTH 102 Earth Science
 - MATH& 107 Math in Society

NOTE: *Any Course that includes an "&" in the department/division indicator is commonly numbered in Washington State colleges.*

Students must earn a minimum 2.0 grade in each course, with a minimum 2.5 cumulative GPA in all upper division coursework.

RECOMMENDED SKILLS (IMPORTANT!)

Foresters and natural resources professionals spend lots of time in the field, so you must be ready for the great outdoors. Our classes will take you outside often, so you must be ready to deal with:

- Uneven terrain - mountains, slopes, crossing streams and all that the Pacific Northwest has to offer;
- Inclement weather: rain, snow and temperatures drop/rise are part of your work life and as a student you should be ready for weather changes during field days;
- Light to moderate manual work: an important part of the learning process, so don't be afraid to get dirty. You will have to carry and use equipment often used in forestry work, including measurement instruments, tools, and of course, the chainsaw, amongst other things.

Another important skill that we recommend is proficiency with computers: internet research, office software and presentations, which are all part of your daily life as a student and professional.

APPLICATION PROCESS

A BAS-FRM degree admission application must be completed as instructed below. Applicants who have not been enrolled at GHC within the four quarters prior to applying must also fill out the GHC admission form. Forms are available online at the [Grays Harbor College Website](#) or in the Welcome Center at GHC. Please note, incomplete applications will not be considered.

Review all the pre-requisites

If you feel that you qualify to apply at this time continue to the next step. If you have any questions about qualifications, you can contact the BAS Completion Facilitator via email at bas@ghc.edu or call (360) 538-4030.

Apply to Grays Harbor College online

All students, even if currently attending Grays Harbor College, must apply to Grays Harbor College to receive a student ID. This application is separate from the application to the Bachelor program, but it enables Grays Harbor College to provide you with streamlined service once your Bachelor's application is received. Question #4 of the general admissions application asks "What is your intended major area of study?" Please answer BAS. The Grays Harbor College application is free of charge.

Education

Provide information about your educational background.

Professional Resume (if applicable)

GHC is looking for where you worked, when you worked there and what you did. If you do not have work experience, simply use the option "I do not have any work experience to include".

Personal Statement

Your personal statement is an essential part of your BAS-FRM admissions application. This statement provides an opportunity for you to share aspects of your life that may not be apparent from your application form, transcripts, and work experience. Your statement is limited to 1,000 words, roughly two pages of text. We recommend that you write your personal statement before starting the BAS application form.

Submit and pay your application fee

The BAS-FRM \$25 application fee can be paid in person, by check, or credit card. Please contact Stephanie Gibson, GHC's cashier, to make this payment. The cashier's window is located in the HUB Building at Grays Harbor College campus, phone number (360) 538-4040 and email stephanie.gibson@ghc.edu. This is a non-refundable processing fee. You can use the following payment options:

- **Pay by mail:** please send your check with "BAS-FRM" written in the memo of the check. The mailing address for the cashier is:

Cashier – Business Office
Grays Harbor College
1620 Edward P. Smith Dr.
Aberdeen WA 98520

- **Pay in person:** come to the cashier's window in the HUB at the College Campus, weekdays between the hours of 8:30 to 4:30.

Credit card payments may be made in person, or over the phone by calling GHC's cashier (360) 538-4040.

Application Deadline

Priority Application Dates start the first workday of the new year (January 2 for 2018 consideration), and will be due by the end of the month.

Pending space availability, a second round of general applications will open February 1 – March 15. The BAS programs are competitive entry

programs. For increased likeliness of program admittance, submit your application as soon as possible.

Feeling like these dates are in the distant future? Don't worry! There's plenty you can do prior to application dates in order to be prepared:

- Meet with the BAS Completion Facilitator or program directors to have your transcripts reviewed for prerequisite and "degree required" courses
- Review the online application for requirements
- Start writing your Personal Statement

Following application dates, the BAS administration will send letters to applicants regarding their admission status in early April. Students will then attend a meet and greet in June and a new student orientation in September.

Request Transcripts

Past Grays Harbor College students do not need to include transcripts. If you are not a Grays Harbor College student, request transcripts from each of the other colleges you have attended and have them sent to GHC to be evaluated. Students need to submit copies of their Official Transcripts to the GHC Admissions and Records Office.

NOTE: You can apply for admission before we receive your official transcripts from other institutions. Your prior credits will only be evaluated when Grays Harbor College receives official transcripts. Transcript evaluations can take 4 to 6 weeks depending on the number of applicants.

Financial Aid

Complete your Free Application for Federal Student Aid (FAFSA). It is critical that you indicate you are now pursuing your 1st bachelor's degree on the FAFSA. GHC's FAFSA code number is 003779

Selection Process

Admission into the BAS-FRM program will be granted to eligible applicants. If the number of eligible applicants exceeds the number of

openings, all applications for that year will be weighted by their date of application, applicant GPA, and number of prerequisite/degree required courses completed at time of application.

Graduation Requirements

Any student in the BAS programs who has met the following criteria may apply for graduation by meeting with the Program Director, who will verify and sign your application for graduation. You must apply for graduation at least one quarter before you graduate. In order to participate in the commencement ceremony, you must submit your graduation attendance form before the third Friday of May that year. You may obtain a graduation packet in the Registration Office.

[More information regarding graduation preparation.](#)

Graduation Criteria:

- Completion of 90 upper-division quarter credits in the BAS-FRM program with a 2.0 grade or better in each course, including specified lower division "degree required" coursework;
- A minimum total of 180 college-level credits earned from transfer and BAS degree programs;
- A minimum GHC cumulative GPA of 2.5.

COURSES DESCRIPTIONS

Here we have the main outlines of the courses you must attend during your Bachelor's. Most of these classes are offered each quarter ***once every two years***, so be aware of that availability. Prerequisites for the classes are listed and are required to have a grade of "C" or better. The order listed below is appropriate for a student enrolled full-time.

COURSES OFFERED PER QUARTER IN SCHOOL YEARS STARTING WITH ODD NUMBERS (2017, 2019, ETC.)

FALL QUARTER

BASF 311 Environmental Decision Making and Conflict Resolution – 5 Credits

Prerequisites: NR 110 – Introduction to Natural Resources; ENGL& 235 – Technical Writing

This course introduces students to conflict theory as applied in complex natural resources disputes, including case studies in the Pacific Northwest. During this course we will focus on skill development in planning culturally appropriate and inclusive public participation processes, meeting facilitation and conflict mediation, including option comparison for nonviolent conflict management.

BASF 312 Hydrology and Soils – 5 Credits

Prerequisite: Admission to the BAS-FRM program

This course introduces students to the basic concepts of soils and hydrology and the relationships between forest-soil-water, as well as the implications of forest operations in these elements. Students will learn how to use topographic and hydrologic analog and digital data and/or software to assess environmental conditions, and use those tools to help in the decision-making process. Field practices will be held to show in-situ conditions and how to identify soils and watershed elements in forests.

ENGR 104 Introduction to Engineering and Design – 5 Credits

Prerequisites: ENGL& 095 Writing Fundamentals; MATH& 095 Elementary Algebra

ENGR& 104 is an introduction to the engineering profession and design process. Topics include: disciplines and opportunities in engineering, engineering fundamentals (e.g. basic dimensional analysis), creativity in problem solving, building group skills, investigation of professionalism, ethical issues, and the historical impact of engineering on human societies. Course activities include writing assignments, individual and team design projects, oral presentations, and a portfolio project.

WINTER QUARTER

BASF 321 GIS Applications in Natural Resources – 5 Credits

Prerequisites: NR110 – Introduction to GIS; NR250 – GIS and Remote Sensing in Natural Resources Management

Geographic information systems provide broad working horizons in any field that requires spatial information. This course will focus on the advanced usage of GIS tools in natural resources management, exploring these tools to create, evaluate and analyze GIS data and using real-world problems to establish decision making. Advanced tasks utilizing different GIS tools will be assigned and in-situ data will be collected to create projects involving natural resources in the

NATRS 385 Forest Protection and Disease Management (with Green River College) – 5 Credits

Prerequisite: ENGL& 235 Technical Writing

Teaches students about the various biotic and abiotic disturbance agents that affect forest ecosystems. Students identify important forest insects and diseases of North America, especially the Pacific Northwest, as well as their effects on forest ecology. Students learn predisposing factors that increase susceptibility as well as propose effective management strategies to reduce impacts.

NATRS 461 Wildlife Ecology (with Green River College) – 5 Credits

Prerequisites: None

Students examine, identify and determine important wildlife habitats and their characteristic plants and animals within an ecological and management context through outdoor application of concepts. Discusses identification of species and habitats as well as life histories and ecology of important species. Examines and critiques scientific principles and management implications. Students organize and carry out a scientific sampling and assessment in the field.

SPRING QUARTER

BASF 331 Land Management in the 21st Century – 5 Credits

Prerequisite: Admission to the BAS-FRM program

This course exposes the students to the different professional outcomes that can be achieved with a Forest Resources Management degree. Students will explore some of the most common contemporary issues in land management in the state of Washington and how professionals in the field deal with those issues. Some topics to be discussed and analyzed are: controlled burn/wildfire management, parks and recreation, forest legislation and its applications, non-timber forest products and wildlife management, new technologies for natural resources management, amongst other potential subjects.

BASF 332 Transportation Systems Design – 5 Credits

Prerequisites: ENGL& 235 Technical Writing; MATH& 146 Introduction to Statistics

This is an intermediate level class for foresters and resource managers in issues and responsibilities relating to transportation systems. Students will study road types, standards and design procedures. These include understanding of basic soil engineering, route surveying, reconnaissance and office design programs. Specialized topics will include drainage structures design and installation, erosion control techniques and methods, and material stockpiles. Administrative activities covered in the class include road costing, rules, regulations, permits and road maintenance plans. Field labs will involve

practical applications of the topics covered along with the understanding and practice of associated permitting processes. This class is not intended to replace the need for engineered design or structures when appropriate.

BASF 333 International Forestry – 5 Credits

Prerequisite: NR 101 – Introduction to Forest Management

This course introduces students to the biological and sociological factors that shape the forests around the world and how different nations manage forest resources. Students will analyze forest policies, operations, and cultural practices around the world as a comparative tool for critical thinking and policy-making, as well as basis for the international trade of forest products. The history of forestry in society will also be used to observe the events that led to the current state of forestry in the world.

COURSES OFFERED PER QUARTER IN SCHOOL YEARS STARTING WITH EVEN NUMBERS (2018, 2020, ETC.):

FALL QUARTER

BASF 412 Natural Resources Seminar (with Green River College) – 1 Credit

Prerequisites: NR 101 – Introduction to Natural Resources; ENGL& 235 Technical Writing

This course focuses on presentations by professionals and other agents in natural resources management. Students will be guided through a review of current topics in forestry, fire, wildlife, watershed, or soils. Presentations by guest speakers and professionals in the field will complement students' development of writing and oral presentation skills.

NATRS 471 Restoration (with Green River College) – 5 Credits

Prerequisite: ENGL& 235 Technical Writing

Examines forest restoration at multiple spatial scales from stand to watershed to landscape levels. Students demonstrate outdoor skills and

conduct restoration assessments. Compares goals for biological conservation, invasive species management, carbon sequestration, and economic viability through field trips and applied experience with restoration techniques and case studies. NATRS 493 Advanced Silviculture (with Green River College) – 4 Credits

WINTER QUARTER

BASF 421 Advanced Harvest Systems: Cable and Aerial Based – 5 Credits

Prerequisites: ENGL& 235 Technical Writing; MATH& 146 Introduction to Statistics (or higher); NR 280 Harvest System and Products (or equivalent)

This class will focus on more in-depth understanding for the applied forester or land manager of harvest systems associated with steep slopes and remote locations. Topics will include: yarder types and specifications, skyline configurations and appropriate operations, safety rules, basic rigging requirements, payload analysis, harvest unit planning and layout. Specialized areas will include helicopter logging, specific rules associated with cable and aerial systems and unstable slopes. Labs will consist of timber sale preparation techniques, software utilization for harvest system analysis and onsite visits to active timber sales.

BASF 422 Natural Resources Economics – 5 Credits

Prerequisite: NR 101 – Introduction to Forest Management

This course emphasizes the practical understanding of distribution of limited resources be it financial or physical. Financial topics in this class include forest resources valuation and financial analysis concepts, inflation, risk and uncertainty, taxes related to both property ownership, and business and financial decision making. The student will become familiar with parts of a contract, including boilerplate clauses and specialized terms related to logging, road building and timber sales. Timber sales and unit appraisal are additional topics covered. Labs will focus on computational problems and associated computer software used in the forest management industry.

NATRS 400 Forest Practices Law and Policy (with Green River College) – 5 Credits

Prerequisites: ENGL 235& Technical Writing; BASF 412 Natural Resources Seminar.

A core forest resource management course. Students examine and analyze natural resource policy including environmental impact statements, environmental assessments, and habitat conservation plans. Students appraise and critique administrative behavior, as well as legislative, regulatory, legal, ethical, and personal considerations as applied to forestry operations in Washington State and nationally. Students discuss and demonstrate applications of Washington Forest Practices, Habitat Conservation Plans, Clean Air, Clean Water, and Endangered Species Acts.

SPRING QUARTER

BASF 432 Advanced Harvest Systems: Ground Based – 5 Credits

Prerequisites: ENGL& 235 Technical Writing; MATH& 146 Introduction to Statistics; NR 280 Harvest System and Products (or equivalent)

This class will focus on a more in-depth understanding for the applied forester or land manager of harvest systems associated with ground based operations. Topics will include: conventional and mechanized operations for ground based systems, safety rules, harvest unit planning and unit layout. Specialized areas will include recognition of sensitive sites, Riparian Management Zone (RMZ) rules, Wetland Management Zones (WMZ) rules, and Channel Migration Zone (CMZ) rules. Labs will consist of timber sale preparation techniques, software utilization for harvest system analysis and onsite visits to active timber sales.

BASM 309 Project Management – Time, Goals and Budget Management – 5 Credits

Prerequisites: ENGL& 101 English Composition I; MATH& 146 Introduction to Statistics

Students will develop the basic tools, knowledge and skills necessary for successful project management. All phases of the project management process,

including: initiating planning, executing, controlling and closing will be assessed. Areas of leadership, communication and budgeting in relation to project management will also be critiqued.

BASF 431 Capstone in Natural Resources – 5 Credits

Prerequisites: ENGL& 235 Technical Writing; must have completed all but the final quarter of the BAS-FRM degree program

In this course, students will participate within natural resources field in a hands-on application where they will synthesize knowledge and skills to create or construct a desired project outcome for a project. Projects will be either produced by a team or by an individual, culminating in a presentation and report. This course will be offered as a variable credit course between 1 and 5 credits based on student projects and can be taken more than once to complete a total of 5 capstone credits.

CLASSES OFFERED EVERY QUARTER

NOTE: Students will work with their BAS-FRM advisor to determine the best time to take the following courses:

BASF 322 Professional Development I & BASF 411 Professional Development II – 2-5 Credits

Prerequisite: Admission to the BAS-FRM program

One of the most important for professional development, this course is the pathway to integrate the students in the professional life with hands-on experience in companies and/or institutions that accept interns for training. Engaging in real-world work, the students will have the chance to exercise their knowledge in the field and contribute to the operation of an agency or company. These courses can be taken in more than one occasion to achieve the number of hours required to completion and will have credits given proportional to the number of hours worked.

SERVICES FOR BAS-FRM STUDENTS

Grays Harbor College has found that making a strong connection with students early in their academic process makes a significant improvement in retention and success. For those students who find “their person” on campus, progression has significantly increased. Because of this, the College has chosen to use an “embedded services” model for the BAS-FRM students.

As a student at GHC you are eligible for all services offered by the college. The fees you pay entitle you access to student computer labs, the library, disability support services, student clubs and programs, the writing center, the career center, and all other GHC services.

Please refer to the GHC website for [a complete list of services and activities](#).

Student Advising and Success

A key component of the embedded services model is a solid connection between BAS-FRM students, staff, and faculty. The BAS-FRM Faculty will make initial contact with the students and act as a resource to get them started in the program (entry advising).

The BAS-FRM Faculty will remain in this role throughout the program. The College believes it is the close-knit nature of a small program that will allow GHC students to receive the time and attention they need to be successful.

Periodic team meetings will allow faculty and staff to compare notes and develop plans for students who may be struggling. If students have questions regarding how adding, dropping, or failing a class will impact their academic plan, they are encouraged to set up a meeting with their advisors soon as possible.

Students are welcome to meet with the BAS Completion Facilitator at any time throughout the year to check in on their academic plan and progress throughout the program.

Library integration

Following the “embedded services model,” the BAS-FRM program has a designated faculty librarian to provide assistance to BAS students. The designated librarian will provide a library research overview at the beginning of the program, and meet with the group periodically during their time at the College.

Registration

Admissions and Records will evaluate incoming students for compliance with admission requirements and student records for all degree requirements. Registration will schedule appointments whenever possible to assist BAS-FRM students. BAS-FRM students will be able to register online, 24 hours a day during the open registration periods.

Financial aid

Financial aid is available to all eligible students, including Federal, State, and institutional grant funds, such as the Pell Grant, Washington State Need Grant, or Work Study. You will need to complete the Free Application for Federal Student Aid (FAFSA) to determine whether you are eligible for financial aid. Financial Aid personnel can explain the difference between lower division and upper division aid.

FAFSA Facilitator

The facilitator helps student complete their FAFSA and all related follow-up materials, and works with students to find scholarship opportunities and develop scholarship applications.

Financial Aid Portal

The financial aid process for the BAS-FRM student is somewhat different from that of the other students on campus. The financial aid staff will schedule appointments whenever possible that will work for BAS-FRM students, as well as participate in GHC’s workshop series. Students may track their financial aid information 24 hours a day, using the student Financial Aid Portal.

To find out more information about financial aid, please visit the GHC financial aid website at <http://www.ghc.edu/content/financial-aid-getting-started> and check with the Financial Aid office at (360) 538-4081.

Scholarships

Grays Harbor College offers a variety of scholarships generously donated by various organizations and individuals in the community through the Grays Harbor College Foundation (Room 2401, 538-4243). More information is available at both the Foundation Office and the Financial Aid Office.

Applications for scholarships are generally available during winter quarter for the following academic year. Recipients are chosen by the Committee on Scholarships. The Committee on Scholarships will award scholarships to the best qualified candidates according to the criteria listed. Students should therefore not apply for specific scholarships but to the program as a whole. Any scholarships that are renewable require certain criteria be met such as grade-point average in order to receive the second year installment.

Below are some links for scholarships available at GHC:

- [The Grays Harbor Community Foundation](#)
- [The Kelsey Foundation](#)
- [The Scottish Rite](#)

Learning Center

GHC offers a well-supported academic assistance program with tutoring services available for mathematics, English, and accounting. Additionally, there is online tutoring available 24 hours a day, seven days a week, through participation with online partners (updated contact information is available at the GHC website).

Writing Center

Need help getting started on a writing assignment? Need someone to review your almost-finished writing assignment? Struggling with material from English class? Need help with MLA, APA, or Chicago style? See our Writing Consultant,

a professional writer who will help you with any type of writing - papers, letters, reports, applications, resumes, etc.

Computer Labs & Wi-Fi

The Information Technology Department provides appropriate computing, networking infrastructure, telecommunications and support services to faculty, students, and staff in order to facilitate both academic and administrative computing. Currently the following Labs are available for all GHC students:

- Room 2314 - Open Lab
- The John Spellman Library

Computer lab hours are generally 8:00 to 8:00 Monday through Friday, with extended access in the Library. Please see the following pages for updated information on dates and times when the labs are available:

- [Computer Lab Hours](#)
- [Library Hours](#)

Disability Support Services (DSS)

DSS provides accommodations for those students with documented disabilities. It assists faculty in providing appropriate accommodations, and can provide course materials in alternate formats. Adaptive technology aids as well as quiet testing areas may be provided. The GHC DSS office will provide documented students with adaptive services as required

Veterans Services

These services are provided through GHC's financial aid office and a campus VetCorps worker. Please contact the Veterans representative (360-538-4273) on campus with any questions related to funding.

e-Learning Support

Regular, online and hybrid (online and face-to-face) classes use the Canvas learning system at GHC. An e-Learning orientation will be included in BAS-FRM for first-year students, and ongoing technical support will be provided. This orientation will address skill-building in using online course materials and

technology. Technical assistance will be made available to students via online access, email, telephone, and in-person. You can also find [more information about Canvas](#) on the GHC website.

The John Spellman Library

The library provides multiple services for students, faculty and staff. GHC's library staff foster an environment in which students acquire the information literacy skills that support independent inquiry and lifelong learning.

The library team develops and maintains collections in support of college curriculum, information literacy instruction, reference service, circulation services, course reserves, inter-library loan, instructional equipment, student technology support, college archives, and copyright guidance. Library instruction and collection development is conducted by professional librarians, each with a specific liaison area in the College's academic and technical programs.

The library's collections consist of both print and online resources. The monograph collection alone includes over 180,000 titles, almost 3/4 of which are in e-book collections, selected to meet the needs of lower division and technical curricula.

Bookstore

The bookstore carries required and recommended textbooks and supplies for courses. In addition, the bookstore sells basic school and art supplies, greeting cards, stationery, a wide variety of course books, reference books, GHC clothing, backpacks, candy, magazines, beauty products, and educational-priced software.

POLICIES

Student Handbook

Your success is important to us. We have developed this handbook to guide you by providing specific information on curriculum, policies, and expectations of the program. Each student is responsible for studying this handbook and understanding its contents. In general, the BAS programs follow policies and rules established by GHC. As this is a unique program offered by the College, please note that some BAS policies may differ from standard College policies. You are responsible for complying with the instructor syllabi and this handbook.

Tuition Waivers

Students in the BAS-FRM program are not eligible to receive a Washington State Employee Tuition Waiver.

Leave of Absence

Our goal is to have you complete your bachelor degree in a timely and efficient manner. Every admitted student is required to progress through BAS-FRM classes following the sequence shown on the courses descriptions enrolled full-time.

If there is an extenuating circumstance that prohibits you from meeting this obligation, you must submit a written request to the Program Director to apply for a one quarter leave. Please contact the BAS Completion Facilitator at least one month before you plan to return in order to maintain priority registration status.

If you are unable to resume your studies after one quarter, you will lose your status as a matriculated student. If you are in danger of being dropped from the program, it is recommended that you meet with the Program Director immediately. On a space available basis, it may be possible to gain readmission to the program by petitioning for re-enrollment.

Satisfactory Progress and Grading

As mentioned earlier, students must earn a minimum 2.0 in each BAS-FRM course including prerequisite and degree-required lower division coursework. In addition, students must maintain a minimum cumulative GPA of 2.5 in all BAS-FRM coursework to remain in the program.

Probation and Dismissal

Students who are noncompliant with academic and student conduct related expectations may be placed on probation, dismissed from the BAS-FRM program, or dismissed from the College.

In the event a student does not earn a minimum 2.0, the student will be required to retake the course, as available, in order to successfully complete the BAS-FRM degree requirements.

In the event a student does not maintain a minimum cumulative GPA of 2.5, the student will be placed on academic probation for one quarter. The student will be required to earn a 2.5 cumulative quarterly GPA in order to remain in the program. Academic probation will cease when the student maintains a minimum cumulative GPA of 2.5 for all BAS-FRM coursework.

If the student fails to earn the quarterly cumulative GPA of 2.5 while on academic probation, the student will be removed from the program. The student will not be eligible to reapply for program admission for one full calendar year.

For a full description of student misconduct, refer to the [Washington Administrative Code, WAC 132F-121-110](#).

Grievances

The following departments at GHC are available to support students with grievances:

- **Vice President for Instruction** – Available to talk about concerns or issues related to the program. Office of Instruction is located in the 2000 building, room 2418.
- **Vice President for Student Services** - Available to talk about concerns or issues related student services. Student Services is located in the HUB building, room 110.

- **Counseling & Advising Services** – Provides academic, career and personal counseling. This office is located in the HUB building, room 140.

Equal Opportunity Statement

GHC is committed to the concept and practice of equal opportunity for all its students, employees, and applicants in education, employment, services and contracts. GHC does not discriminate on the basis of race or ethnicity, color, age, national origin, religion, marital status, sex, gender, sexual orientation, disabled veteran status, or presence of any physical, sensory, or mental disability, except where a disability may impede performance at an acceptable level. Reasonable accommodations will be made for known physical or mental limitations for all otherwise qualified persons with disabilities.

CONTACT INFORMATION

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Dean of Workforce Education - TBA

Dean of Workforce Education

[Academic Advising, Pre-BAS](#)

360-538-4099

[Bookstore](#)

360-538-4105

[Cashier](#)

360-538-4040

[Disability Support Services](#)

360-538-4068

[eLearning](#)

360-538-4085

[Financial Aid](#)

360-538-4081

[Foundation](#)

360-538-4243

[Human Resources](#)

360-538-4218

[John Spellman Library](#)

360-538-4050

[Registration](#)

360-538-4121

[Transcripts](#)

360-538-4026

[Veterans](#)

360-538-4273

[Writing Center](#)

360-538-4129

APPENDIX A

List of Courses of the **Associated of Applied Sciences in Natural Resources - Forest Technology Option** at Grays Harbor College

Skills/Courses	Credits
Core Courses (53 credits)	
NR 101 Introduction to Forest Management	5
NR 110 Principles of GIS	5
NR 131 Forest Ecology-Plant Taxonomy	5
NR 150 Forest Ecology – Disturbances	5
NR 158 Work Experience Seminar	2
NR 160 Forest Ecology-Habitats	5
NR 250 GIS & Remote Sensing	5
NR 258/259 Cooperative Work Experience	5
NR 260 Forest Mensuration	5
NR 270 Silviculture	5
NR 280 Harvest Systems and Products	5
NR 285 Forest Resource Planning	2
General Education Courses (25 Credits)	
ENGL& 101 English Composition I	5
ENGL& 235 Technical Writing	5
MATH& 107 Math in Society (or higher)	5
PSYC& 100 General Psychology or SOC& 101 Introduction to Sociology	5
SPCH 101 Fundamentals of Speech	5
Support Courses (27 Credits)	
ENVS& 100 Survey of Environmental Science or NR 120 Society and Natural Resources	5
BA 174 Small Business Management or BUS& 101 Introduction to Business	5
BIOL& 160 General Biology I with lab or BIOL& 222 Biological Science II: Molecular and Cell Biology	5
CHEM& 121 Introduction to Chemistry or CHEM& 161 General Chemistry I with lab	5
GEOL& 101 Introduction to Physical Geology or EARTH 102 Earth Science	5

Total credits required for the AAS Degree: 104

APPENDIX B

List of **General Education** and **Elective** Courses at Grays Harbor College

BAS Degree in Forest Resources Management: Operations		
Area of Study	Course	Credits
Communications (10 Credits)	ENGL& 101 English Composition I	5
	ENGL& 235 Technical Writing	5
Quantitative/Symbolic Reasoning Skills (5 Credits)	MATH& 107 Math in Society	5
Humanities (10 Credits)	SPCH 101 Fundamentals of Speech	5
	Student's choice of a Humanities course	5
Social Sciences (5 Credits)	PSYC& 100 General Psychology or SOC& 101 Introduction to Sociology	5
Natural Sciences (10 Credits)	CHEM& 121 Introduction to Chemistry (with Lab) or CHEM& 161 General Chemistry (with Lab)	5
	BIOL& 211 Biological Science I: Majors Cellular or BIOL&160 General Biology (with Lab)	5
Remaining General Education Courses (15 Credits)	GEOL& 101 Introduction to Physical Geology or EARTH 102 Earth Science	5
	BUS& 101 Introduction to Business or BA 174 Small Business Management	5
	MATH& 146 Introduction to Statistics or ENVS& 100 Introduction to Survey of Environmental Science if MATH& 146 was completed previously	5
	Total Credits	55

Elective Courses at GHC:

Course	Credits
BASF 312 Forest Hydrology and Soils	5
BASF 322/411 Professional Development I & II	5
BASF 331 Land Management in the 21st Century	5
BASF 333 International Forestry	5
Total Credits	20

APPENDIX C

List of **General Education** and **Elective** Courses at Green River College

BAS Degree in Forest Resources Management: Sampling and Assessment		
Area of Study	Course	Credits
Communications (10 Credits)	ENGL& 101 English Composition I	5
	ENGL 335 Advanced Technical Writing	5
Quantitative/Symbolic Reasoning Skills (5 Credits)	MATH 356 Statistics for Lab and Field Sciences	5
Humanities (10 Credits)	CMST& 230 Small Group Communication	5
	CMST& Public Speaking	5
Social Sciences (10 Credits)	PHIL 115 Critical Thinking <u>or</u> BUS 202 Introduction to Project Management	5
	ANTH 302 Native American Approaches to the Environment	5
Natural Sciences (10 Credits)	BIO 110 Northwest Ecology (Lab science)	5
	GEOL& 101 Introduction to Physical Geology (Lab science)	5
Remaining General Education Courses (15 Credits)	ENGL 128 Research Writing	5
	PHIL 243 Environmental Ethics	5
	GEOL 208 Geology of the Pacific Northwest	5
Total Credits		60

[View the complete list of Elective courses at GRC](#)

APPENDIX D

List of Core and Specialized Courses for the **Bachelor of Applied Sciences – Forest Resources Management** at Grays Harbor College and Green River College

	GRAYS HARBOR COLLEGE		GREEN RIVER COLLEGE	
	BAS Degree in Forest Resources Management: Operations		BAS Degree in Forest Resources Management: Sampling and Assessment	
Area of Study	Course	Credits	Course	Credits
Core Requirements at both GHC and GRC for both tracks of study	BASF 321 GIS Applications in Natural Resources	5	NATRS 417.1 GIS Applications of Forest Resources Management of Silviculture	1
	NATRS 385 Forest Protection and Disease Management	5	NATRS 385 Forest Protection and Disease Management	5
	NATRS Forest Practices Law and Policy	5	NATRS Forest Practices Law and Policy	5
	BASF 412 Natural Resources Seminar	1	NATRS 399 Natural Resources Seminar	1
	BASF 311 Environmental Decision Making and Conflict Resolution	5	NATRS 390 Environmental Decision Making and Conflict Resolution	5
	BASF 431 Capstone in Natural Resources	5	NATRS 494 Capstone in Natural Resources	5
	NATRS 471 Restoration	5	NATRS 471 Restoration	5
Specialized Tracks	NATRS 493 Advanced Silviculture	5	NATRS 493 Advanced Silviculture	5
	BASF 422 Natural Resources Economics	5	NATRS 300 Forest Ecology	6
	BASF 332 Transportation System Design	5	NATRS 386 Bioinvasions: Approaches to Invasive Species Management	4
	BASF 421 Advanced Harvest Systems: Cable and Aerial Based	5	NATRS 361 Wildlife Ecology	5
	BASF 432 Advanced Harvest Systems: Ground Based	5	NATRS 417.2, 417.3 GIS Applications of Forest Resources Management	2
	Total Credits at Junior and Senior Level	56	Total Credits at Junior and Senior Level	49