1. **NSM 498-01 Senior Presentation**

**School: Natural Sciences and Mathematics**

1. **Instructor:** Instructor Name: Dr. Jinnie M. Garrett

Office: Garber 224

Email: [jmgarrett@ferrum.edu](mailto:bpohlad@ferrum.edu), checked frequently during the day  
Office Hours: Mondays 9:30-11:30am, Thursdays 9:00-11:00am

1. **Class Meeting Time & Place:** F 12:20-1:15 pm, Garber 106 and   
    F 1:25-2:45 pm, Garber 106
2. **Textbooks and Materials:**

REQUIRED:

1. Internet access, a Ferrum College email account, and a BrightSpace account.

NOTE: You are expected to check your Ferrum College email account and the course BrightSpace page regularly (i.e., at least once a day). In particular, updates to the Tentative Schedule will be posted on Brightspace regularly. Due dates will be maintained on Brightspace course website as well.

2. Completion of and a certificate of completion of the Plagiarism Test at the following

URL: [**https://www.indiana.edu/~academy/firstPrinciples/tutorials/index.html**](https://www.indiana.edu/~academy/firstPrinciples/tutorials/index.html)

1. **Catalog Course Description:**

As a review of the college career and as a preparation for the life ahead, this course uses reading, writing, listening, speaking, and synthesis as means to develop student self-awareness and confidence. Exercises in this class allow students to investigate their own practical and theoretical experience and to forge new relationships with their past lives and their future expectations.

These courses are designated Writing Intensive; **a grade of “C” or higher in this course is required for this course to count toward the six credit-hour** **Writing Intensive graduation requirement for Ferrum College**. A student cannot earn a grade of “C” or higher in this course unless he or she earns a “C” or better on the writing assignments required by the course. Prerequisite: NSM 307and NSM 497. NSM 498 is designated Speaking Intensive; a grade of “C” or higher in this course is required for this course to count as one of two Speaking Intensive courses required for graduation from Ferrum College. A student cannot earn a grade of “C” or higher in this course unless he or she earns a “C” or better on the speaking assignments required by the course. *Two and one-half hours, two credits.*

1. **Purpose/Rationale for this Course:**

This course will teach you how to read, analyze, and critique the current literature in your chosen field. Scientific fields are dynamic; scientists learn more information about the world around us every day and this information may change the way we work in a given field. In order to be successful in your field you must stay up to date by staying informed of the current literature. You must be able to communicate your ideas to others in your field. This class will also teach you how to disseminate your knowledge to others through both written and oral methodologies.

The Faculty of the School of Natural Sciences and Mathematics at Ferrum College has approved the following guiding principles for the Senior Seminar sequence (497,498):

• Senior Seminar/Presentation are the capstone courses of a liberal arts education for science majors at Ferrum College. They are expected to integrate a student's total educational experience at Ferrum.

• Senior Seminar/Presentation are synthesis courses - relational courses. Students must develop and present a thesis that requires integration of concepts, data, and procedures from both their major and at least one discipline outside their major.

• Senior Seminar/Presentation must be more than a term paper. It must pose a question, assemble and analyze appropriate data, and arrive at a supportable conclusion resulting from critical analysis.

• Senior Seminar/Presentation students must demonstrate competence in presenting their thesis through both oral and written communication, using modern technology.

• Senior Seminar/Presentation are courses that in most cases spans two semesters, and for which students earn two academic credits. It is required of Agricultural Sciences, Biology, Chemistry, Environmental Science, Health Sciences, and Pre-Professional Science majors.

• It is possible to fail Senior Seminar/Presentation.

Upon successful completion of this course (i.e., NSM 498), students will have produced a quality senior paper and have presented a quality senior seminar presentation.

1. **Instructional Methodology and Use of Technology**

In this course you will learn by a series of lectures from different speakers, participation in class activities and feedback from both faculty and your peers. Assignments, lectures and course information will be found on your Brightspace course page. Students and faculty will use presentation software and tools to make oral presentations to the class.

Competent use of computers, Microsoft Office, and the internet is expected. Frequent access to and use of a computer with internet access is required for successful completion of this course.

1. **College and Course Outcomes**

Upon successful completion of this course, the student will have:

1. Developed and presented a thesis that effectively integrates both

(a) The major with the concerns of society; and

(b) Concepts, data, and procedures from within the major and from at least one discipline outside the major.

2. Demonstrated the ability to pose a question, assemble and analyze data appropriate to the question, and arrive at a supportable conclusion through critical analysis of the data.

The following tabulates the instructional experiences intended to provide learning opportunities for each of the course SLO’s as well as the assignments I will use to assess your attainment of each goal. For the details on how you will be evaluated on each assignment (i.e., how each contributes to your course grade), see the section “Course Requirements/Assignments” below.

**Instructional experience Course SLO’s addressed Course SLO’s assessed**

Paper and paper revisions 1, 2 1, 2

Presentation and presentation revisions 1, 2 1, 2

Course assignments 1, 2 —

**Program Student Learning Outcomes**

This course addresses the following program specific SLO’s:

* ESC-01 Environmental Science graduates will demonstrate a broad knowledge of basic environmental parameters dealing with physical, chemical, organism, and microbiological phenomena and entities.
* AGS-01 Agricultural Sciences graduates will demonstrate a knowledge of fundamental principles in Agriculture and understanding of the evidence and reasoning that support them.
* AGS-02 Agricultural Sciences graduates will demonstrate an ability to work in the field of agriculture through practical experiences in the field and workplace.
* AGS-03 Agricultural Sciences graduates will demonstrate an ability to effectively integrate agriculture with the concerns of society.
* BIO-01 Biology graduates will demonstrate knowledge and understanding of fundamental biological principles and the evidence and reasoning that support them.
* BIO-02 Biology graduates will integrate and apply knowledge and skills independently and cooperatively in a professional setting.
* BIO-03 Biology graduates will understand the relevance of biology to concerns of society.
* CHM-01 Chemistry graduates will demonstrate knowledge and understanding of fundamental chemical principles and the evidence and reasoning that support them.
* CHM-02 Chemistry graduates will use and understand relevant methods, tools, and techniques in chemistry.
* CHM-03 Chemistry graduates will understand the relevance of chemistry to concerns of society.
* HSC-01 Health sciences graduates will demonstrate knowledge and understanding of fundamental scientific principles and the evidence and reasoning that support them.
* HSC-02 Health sciences graduates will integrate and apply knowledge and skills independently and cooperatively in a professional setting.
* HSC-03 Health sciences graduates will understand the relevance of health sciences to concerns of society.
* PSC-01 Pre-Professional Science graduates will demonstrate knowledge and understanding of fundamental scientific principles and the evidence and reasoning that support them
* PSC-02 Pre-Professional Science graduates will use and understand relevant methods, tools, and techniques in health sciences.
* PSC-03 Pre-Professional Science graduates will understand the relevance of science to concerns of society.

Each Course SLO contributes to one or more Program SLO as tabulated below:

**Course SLO Program SLO contributed to**

1a AGS-03, BIO-03, CHM-03, HSC-03, PSC-03

1b ESC-01, AGS-01, BIO-01, CHM-01, HSC-01, PSC-01

2 AGR-02, BIO-02, CHM-02, HOR-02, PSC-02

To see which assignments will be used to address and/or assess each Program SLO, use the above table in conjunction with the one in the section “Course Student Learning Outcomes.”

**College-wide student learning outcomes**

Finally, by successfully completing this course you will meet the following college-wide student learning outcomes:

* 1a Students will demonstrate an integrated knowledge in the liberal arts
* 1b Students will demonstrate information literacy, using available technology when appropriate
* 1c Students will demonstrate competency in quantitative skills and reading
* 2 Students will think critically and solve problems through analysis, evaluation, inference, induction, and deduction
* 3 Students will communicate with unity of purpose and coherent organization consistent with standard rules and recognized conventions using appropriate methodologies
* 5a Students will demonstrate awareness of local, national and global issues
* 5b Students will demonstrate personal responsibility
* 5c Students will collaborate with people of diverse cultural attitudes, beliefs and values

1. **Course Requirements/Assignments**

All assignments must be completed in order to receive credit for the course. Specifics of each assignment will be discussed during class. Submissions will often be completed using drop boxes in Brightspace. Due dates are subject to change at the discretion of the instructor. Late assignments will be graded down 10 percent of the total value of the assignment for each day past the due date.

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| --- | --- |
| **Percentage of Grade** | **Assignment** |
| 30% | Thesis Paper   * 5% first draft, due 9/1 * 45% second draft, due 10/20 * 50% final version, due 12/1 |
| 30% | Oral Presentation   * 20% practice presentations * 80% Symposium presentation 12/4 |
| 20% | Assignments   * 2 page paper summary, due 9/8 * Abstract, photograph and biographical sketch, 11/17 |
| 20% | Attendance and Participation   * Attendance * Participation |

1. **Evaluation and Grading Evaluation Scale**

Because this course is designated Writing Intensive, you cannot earn a grade of C or higher in this course unless you earn an average of C or better on the writing assignments. In addition, the Speaking Intensive designation dictates that you cannot earn a grade of C or higher in this course unless you earn an average of C or better on the speaking assignments. With that provision, if you do not earn a grade of C or higher on **both your papers and presentations** you will not receive credit for this course.

**A = 90-100%**

**B = 80-89%**

**C = 70-79%**

**D = 60-69%**

**F = 0-59%**

1. **Attendance Policy:**

You are expected to attend all classes and be on time for each class. If you arrive after roll has been taken, you will be considered absent. ***You are always responsible for any and all missed work.*** If you are absent due to illness or an emergency, see or communicate with the instructor as soon as physically possible. If you know you will be absent from class, inform the instructor ***in advance*** so that accommodations can be made. While in class, you are expected to contribute constructively to all classes. If your behavior is disruptive or distracting to the classroom environment, you will be told to leave and counted absent for the day.

In accordance with Ferrum College policy, missing 25% or more of this class will result in a grade of "F" for the course except under extremely unusual circumstances.

If you are absent or late to class and miss a quiz or in class assignment, you will receive zero points for that assignment. No make-up assignments or examinations will be administered for this course.. I understand that surprises do come up that may require you to miss a class session. If this happens, you should *call or e-mail me at the earliest possible moment*. Athletic events and performance commitments can only be excused ***in advance***--you should give me a note from your coach or faculty advisor *at least one week in advance* so that I can accommodate you. Leaving early or returning late from breaks or vacations will not constitute an excused absence *under any circumstances*.

**Academic Integrity:**

In all instances, policies identified in the Ferrum College Catalog and the Ferrum College Student and Faculty Handbooks regarding the Honor System shall be followed. Students are expected to display academic integrity at all times and in all circumstances.

According to page 21 of the current Catalog, “Ferrum College’s honor system is based on the philosophy that academic endeavor is undermined by cheating, plagiarism, or lying for academic advantage.” All students are required to have been certified by the “Plagiarism test” mentioned earlier in these policies.

Academic violations will be dealt with severely according to the guidelines in the Student Handbook (see “Academic Violations: The Honor Board,” pp. 32-35). Although collaborative learning is encouraged in this course, all work handed in must be your own. Intentionally or knowingly representing the words or ideas of another as your own is plagiarism and unacceptable.

• Direct Quotation: Every direct quotation must be identified by quotation marks or appropriate indentation and must be promptly cited.

• Paraphrase: Prompt acknowledgement and citation is required when material from another source is paraphrased or summarized, in whole or in part, in your own words.

• Borrowed Facts or Information: Information obtained in one’s reading or research that is not common knowledge among students in the course must be acknowledged by citation.

Cheating or dishonesty of any kind will result in a minimum penalty of zero for the assignment and a query to the Honor Board regarding any past offenses. Repeat offenders will receive as minimum penalty a grade of F in the course and a report being filed with the Honor Board.

1. **Office of Academic Accessibility (OAA):**

As directed by Ferrum College’s policy, any student with a disability who qualifies for and seeks academic accommodations (such as testing or other services) must work through the Office for Academic Accessibility for accommodations. The office is located Lower Stanley Library, Office 110 and the director may be reached by phone at 365-4262 or by email at [nbeach@ferrum.edu](mailto:nbeach@ferrum.edu). Please remember that accommodations cannot be granted retroactively; they must be requested in a timely manner prior to when the accommodation is needed. Students who wish to use accommodations through OAA are encouraged to meet with the director during the first weeks of the semester to discuss the process, and are also invited to read the policy manual on [www.ferrum.edu/disability](http://www.ferrum.edu/disability) for specific information.

1. **Civility in the Classroom Policy:**

Civil behavior and mutual respect between faculty and students are critical in the college classroom environment if teaching, learning, critical thinking, and sharing of ideas are to occur. Respectful and civil behavior at a very basic level includes the following: turning off cell phones; arriving to class on time; engaging appropriately in classroom activities, lecture, or discussion through attentive listening without interruption or side chats; and demonstrating the ability to discuss topics without inappropriate language or attacking others (physically or verbally). Students who do not comply with the Civility in the Classroom policy described in the Faculty Handbook and the Student Handbook may be removed from the academic setting and may risk serious consequences as outlined in the Civility policy.

1. **Classroom Management**

You must respect the instructor and your peers at all times in this course.

There will be no wearing of hats or bandanas in the classroom at any time.

No tobacco products, food, or drink will be used in the classroom at any time except as

permitted by instructor under special circumstances.

Cellular telephones and other mobile computing devices are prohibited in the classroom

except under special circumstances previously agreed to by the instructor.

In accordance with Ferrum College policy, the instructor may remove anyone from the

classroom if that person is disrupting the learning environment. If you are asked

to leave the class for any reason, you will receive an absence for that day

1. **Tentative Course Schedule**

| **Class** | **NSM Seminar** |
| --- | --- |
| 09/1 – Course Introduction. | 09/1 – Overview of Friday Seminars  “Water Quality of Smith Mountain Lake” – summer research students.  **Initial version. First draft = 497 paper due** |
| 09/08 – Discussion of 2 page paper summaries. Schedule individual meetings. | 09/08 – Ms Alice Ahlfield  “What educational programs are available to Ferrum College students in the National Park Service?”  **Two page paper summary due** |
| 09/15 – Peer review of 2 page paper summaries | 09/15 – Dr. Phil Sheridan  “Meadowview and Restoring the Longleaf Pine Ecosystem in Virginia”. |
| 09/22 – Individual Meetings | 09/22 –Dr Ashleigh Smythe  “Small worms, big teeth: Evolution of marine nematode feeding structures” |
| 09/29 – Individual Meetings | 09/29 –Dr Vivian Thompson  “Climate of Capitulation: An Insider’s Account of State Power in a Coal Nation.” |
| 10/6 – Presentation highlights development | 10/6 – Seminar: Dr Karl Castillo |
| 10/13 – Progress reporting | 10/13 **–** FALL BREAK |
| 10/20 – Individual Meetings | 10/20 –Mr Aaron Conover,  Ferrum Outdoors-A Resource for Adventure, Learning and Leadership  **Paper 2nd draft due** |
| 10/27 – Individual Meetings | 10/27– Seminar: Ms Sarah Shinault |
| 11/03 – Individual Meetings | 11/03 – Dr Dave Reynolds  *“The Rewards and Benefits of Public Service*, My career dedicated to environmental protection.”  **Draft presentation due** |
| 11/10 - Practice Presentations | 11/10 – Dr Brian Brown  “Using a freshwater cleaning symbiosis to understand the biodiversity of symbionts.” |
| 11/17 – Practice Presentations | 11/17 – No seminar  **Abstract, photo and biographical sketch due.** |
| 11/24 – Thanksgiving | 11/24 – Thanksgiving |
| 12/01– Practice Presentations | **12/01–** Independent Research and Practicum  Presentations  **Final Paper due** |
| **12/4 - NSM Symposium** |  |

Attendance will be taken at Friday Seminars. After one unexcused seminar absence, points will be deducted from your final grade.