# FORESTRY 232 – SILVICS AND DENDROLOGY Fall 2023 SYLLABUS

Lecture Instructor: Dr. Holly Petrillo, <a href="mailto:hpetrill@uwsp.edu">hpetrill@uwsp.edu</a>, TNR 363

**Office Hours:** Wednesdays 2-3pm, TNR 363 or by appointment; feel free to stop by any time my office door is open or email me to set up another time that works for you

**Course Meeting Time and Location:** Lecture meets in TNR 170 on Monday and Wednesday from 1:00 – 1:50 pm. Labs meet in TNR 300, see Lab syllabus for assigned lab meeting time.

**Instructor expectations:** Your lecture and lab instructors are very excited to help you learn how to identify common trees and shrubs of the Great Lakes region. This is a very important skill for anyone in the natural resources field. I will be available in and outside of class to answer questions and help you learn. I want you all to succeed and feel confident in applying the material we cover during class. My expectations of you include professionalism, respect for your instructor and classmates, willingness (and even excitement!) to learn new material, inquiry, open-mindedness and academic integrity. Active participation in class is expected and greatly increases the odds you will master a subject. Absence from an exam or quiz will result in a zero unless you make prior approval or arrangements.

**Learning Objectives:** After completion of this course you should be able to:

- 1) Identify trees and shrubs in the field by leaf, twig, fruit, bark, and other relevant attributes.
- 2) Identify woody plants with a key by twig and fruit.
- 3) Associate plant range and site conditions with covered tree and shrub species.
- 4) Predict the likelihood of plant tolerance to site conditions in urban and rural forests.
- 5) Associate important silvics and morphological characteristics with plants covered in the class and their uses in urban and rural forests.

**Grade Policy:** Grades are based on exams and laboratory quizzes as follows:

| <b>Evaluation Area</b>                  | % of Grade |
|---|------------|
| Lab – Quizzes (11<br>Lecture – Exams (5 | <b>1</b> ' |

| Mean<br><u>Score</u>                                 | Letter<br><u>Grade</u> | Mean<br><u>Score</u>                                | Letter<br><u>Grade</u>   |
|--|------------------------|---|--------------------------|
| 100 - 93<br>92 - 90<br>89 - 88<br>87 - 83<br>82 - 80 | A<br>A-<br>B+<br>B     | 79 - 78<br>77 - 73<br>72 - 70<br>69 - 68<br>67 - 60 | C+<br>C<br>C-<br>D+<br>D |
|  |                        | <60   | F                        |

**Texts:** The following text will be extremely helpful in helping identify the plants we are learning and also provides ecological and other important information:

Barnes, B.V., and W.H. Wagner, Jr. 2004. Michigan Trees, Revised and Updated. The University of Michigan Press, Ann Arbor, Michigan

Online resources: The following links are useful on-line references for silvics and woody plant ID

Silvics of North America

Flora of Wisconsin

Trees of Wisconsin

Dendrology Factsheets at Virginia Tech

Oregon State University Plants

**Gymnosperm Database** 

Course Location: Canvas Portal (<a href="https://www.uwsp.edu/canvas/Pages/default.aspx">https://www.uwsp.edu/canvas/Pages/default.aspx</a>)

**Lecture Schedule (subject to change)** 

| <u>Dates</u> | Topic  |
|--------------|--|
| Sept 6       | Course introduction and woody plant identification   |
| Sept 11      | Woody plant ID contd., dendrology & silvics overview |
| Sept 13      | No lecture, practice your plant ID!                  |
| Sept 18      | Dendrology and silvics concepts                      |
| Sept 20      | Dendrology and silvics concepts                      |
| Sept 25      | Systematics: Gymnosperms: Ginkgoaceae, Taxaceae      |
| Sept 27      | Pinaceae   |
| Oct 2        | Hour Exam (1)  |
| Oct 4        | Pinaceae   |
| Oct 9        | Pinaceae   |
| Oct 11       | Pinaceae   |
| Oct 16       | Cupressaceae   |
| Oct 18       | Cupressaceae   |
| Oct 23       | Hour Exam (2)  |
| Oct 25       | Angiosperms: Magnoliaceae                            |
| Oct 30       | Lauraceae, Platanaceae                               |
| Nov 1        | Hamamelidaceae, Ulmaceae                             |
| Nov 6        | Hour Exam (3)  |
| Nov 8        | Moraceae, Juglandaceae                               |
| Nov 13       | Juglandaceae, Fagaceae                               |
| Nov 15       | Fagaceae, Betulaceae                                 |
| Nov 20       | Virtual Hour Exam (4)                                |
| Nov 22       | No class, Happy Thanksgiving!                        |
| Nov 27       | Betulaceae   |
| Nov 29       | Tiliaceae, Salicaceae                                |
| Dec 4        | Rosaceae   |
| Dec 6        | Fabaceae   |
| Dec 11       | Hippocastanaceae, Sapindaceae (syn Aceraceae)        |
| Dec 13       | Sapindaceae (Aceraceae), Oleaceae, Bignoniaceae      |
| Dec 19       | Hour Exam (5) (Tuesday 12:30-2:30)                   |

### Lab Schedule

# **Lab Instructors**

Holly Petrillo, 363 TNR, <a href="mailto:hpetrill@uwsp.edu">hpetrill@uwsp.edu</a> Melinda Vokoun, 376 TNR, mvokoun@uwsp.edu Sophie Demchik, 375 TNR, sdemchik@uwsp.edu Jessica Tomaszewski, 192 TNR, jtomasze@uwsp.edu

# Date (week starting) Topic

| Sept. 5, 6, 7, 11      | Campus and Schmeeckle Reserve               |
|------------------------|---|
| Sept. 12, 13, 14, 18   | Quiz 1 (5%) Campus                          |
| Sept 19, 20, 21, 25    | Quiz 2 (5%) Jordan Park                     |
| Sept 26, 27, 28, Oct 2 | Quiz 3 (5%) Wisconsin River Flowage         |
| Oct 3, 4, 5, 9         | Quiz 4 (5%) Iverson Park                    |
| Oct 10, 11, 12, 16     | Quiz 5 (5%) Richard Hemp State Fishery Area |
| Oct 17, 18, 19, 23     | Quiz 6 (5%) West River Park                 |
| Oct 24, 25, 26, 30     | Quiz 7 (5%) Galecke Park                    |
| Oct 31, Nov 1, 2, 6    | Quiz 8 (5%) Campus (Twig lab 1)             |
| Nov 7, 8, 9, 13        | Quiz 9 (5%) Campus (Twig lab 2)             |
| Nov 14, 15, 16, 20     | Quiz (10%) Twig Quiz                        |

No Lab (Thanksgiving Break)

Quiz (10%) Cones and Fruit Quiz

Cones and Fruit

# **Lab sections (Instructor)**

1 – M 8:00 – 10:50 (Vokoun)

2 - W 8:00 - 10:50 (Petrillo)

3 – TH 9:00 – 11:50 (Demchik)

4-M 2:00-4:50 (Vokoun)

5 – T 2:00 – 4:50 (Petrillo)

6 – T 11:00-1:50 (Tomaszewski)

7 – W 2:00-4:50 (Tomaszewski)

The lowest two
quiz scores will
be dropped,
with 7 quizzes
worth 35% of
your course

grade.

**Lab grades**: Lab quizzes make up 55% of your course grade. Each field lab quiz is weighted 5% equally (35% total), twig (10% total), and cone/fruit (10% total) labs will be combined to determine your lab grade. All quizzes are closed book and you will need to know common name, genus, species, and family for species seen in previous labs.

# **Text for lab (same as lecture text):**

Nov 21, 22, 23, 27

Dec 5, 6, 7, 11

Nov 28, 29, 30, Dec 4

Barnes, B.V., and W.H. Wagner, Jr. 2004. Michigan Trees, Revised and Updated. The University of Michigan Press, Ann Arbor, Michigan

# The content and learned outcomes associated with FOR 232 are aligned with the following SAF accreditation competencies:

Ecology and Biology

- 1. Knowledge of: the taxonomic structure of woody plant species; how to identify tree species; the distribution of woody plant species; the associated biotic components of forest communities.
- 2. An ability to identify the family, genus, and species of regionally important trees by leaves, twigs, bark, and fruit characteristics.

# **COVID-19 AND OTHER PRECAUTIONS**

We will follow university guidance (which includes CDC guidance) regarding COVID-19, Monkey Pox, and other health-related issues. Please reference the UWSP's website related to COVID. The CDC website provides guidance on isolation and precautions related to COVID. As needed, I will announce policy changes that affect you in this class. It is expected that everyone will respect the needs and preferences of classmates and instructors.

# **UWSP COMMUNITY RIGHTS AND RESPONSIBILITIES**

UWSP values a safe, honest, and respectful learning environment. To ensure that each student has the opportunity to succeed, the University has developed a set of expectations for all students and instructors called the *Rights and Responsibilities* document, which can be found at <a href="http://www.uwsp.edu/stuaffairs/Pages/rightsandresponsibilities.aspx">http://www.uwsp.edu/stuaffairs/Pages/rightsandresponsibilities.aspx</a>

Academic integrity is essential to the University mission and success in life. Academic dishonesty (cheating, plagiarism, etc.) will not be tolerated. Do not do it! The minimum penalty for a violation of academic integrity is a failure (zero) for the assignment. See "Student Academic Standards and Disciplinary Procedures" section of the *Rights and Responsibilities* document (http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/SRR-2010/rightsChap14.pdf).

Trust between students and instructors is of paramount importance in academic settings. Academic dishonesty will not be tolerated in the classroom (e.g., cheating on exams) or in research efforts (e.g., online assignments). Students found cheating will be punished to the fullest extent that University policy permits.

# AMERICANS WITH DISABILITIES ACT

The Americans with Disabilities Act (ADA) is a federal law requiring educational institutions to provide reasonable accommodations to students with disabilities. More information about UWSP's policies can be found at

http://www.uwsp.edu/stuaffairs/Documents/RightsRespons/ADA/rightsADAPolicyInfo.pdf

Students with disabilities requiring accommodations should contact the Disability and Assistive Technology Center (Rm. 609, Learning Resource Center; (715)346-3365) during the first three weeks of the semester. If an accommodation is granted by the Disability and Assistive Technology Center, an accommodations request form should be provided to and discussed with the instructor. I ask that any accommodations request be brought to my attention at least one week prior to the need

for accommodation, or as soon as it is practical to do so. I will be happy to assist in any way that I can.

# CELL PHONE AND OTHER ELECTRONICS POLICY

The use of cell phones or other related and similar devices is not permitted during class. Cell phones and other electronic devices should be turned off before class begins. It is disruptive to students and instructors to have students using phones or to hear phones ringing (including ringers on vibrate mode). Students found using such devices may be asked to turn them off, and/or leave class. If you are expecting a call that cannot wait until after class, please make sure to sit close to the door and let the instructor know before class that you may have to leave during class time. If you would like to use a laptop, tablet or similar device for taking notes, please ask the instructor before class begins. You will be asked to turn off your device if found to be distracting others or if using the device for something other than taking notes.

#### **EMERGENCY PROCEDURES**

- -In the event of a medical emergency call 911 or use a Red Emergency Phone outside of TNR 356. Offer assistance if trained and willing to do so. Guide Emergency Responders to victim.
- -In the event of a tornado warning, the rest rooms across the hall from TNR 120 serve as the closest tornado shelter during indoor labs; the first floor North hallway and rooms 159, 157 and 153 serve as the closest tornado shelters for our lecture room
- -In the event of a fire alarm, evacuate the building in a calm manner. Meet on the West side of the TNR building, in parking lot E. Notify instructor or emergency command personnel of any missing individuals.
- -Active Shooter Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of Emergency Responders.
- -See UW-Stevens Point Emergency Management Plan at www.uwsp.edu/rmgt for details on all emergency response at UW-Stevens Point.

# INDIGENOUS PEOPLES LANDS RECOGNITION

The UW-Stevens Point community recognizes that the University of Wisconsin-Stevens Point occupies the lands of the Ho Chunk and Menomonee people. Please take moments throughout this course to acknowledge and honor this ancestral Ho Chunk and Menomonee land, and the sacred lands of all 14 indigenous peoples.

#### INCLUSIVE ENVIRONMENT

I strive to make all spaces in this course, both in-person and online, inclusive environments. Students are respected, by the instructor and by other students, and should feel comfortable sharing ideas and opinions. Included below are the UWSP CNR Principles of Professionalism, the forestry discipline's anti-harassment statement, and the SAF Code of Ethics, all of which are applicable in this course. Please help the instructor create an inclusive learning environment for all.

University of Wisconsin Stevens Point College of Natural Resources-Principles of Professionalism

The College of Natural Resources at the University of Wisconsin – Stevens Point prepares students for success as professionals in many fields. As a professional, there are expectations of attainment of several personal characteristics. These include:

# Integrity

Integrity refers to adherence to consistent moral and ethical principles. A person with integrity is honest and treats others fairly.

# Collegiality

Collegiality is a cooperative relationship. By being collegial you are respecting our shared commitment to student education through cooperative interaction. This applies to all involved in the process: students, staff, faculty, administration and involved community members. You take collective responsibility for the work performed together, helping the group attain its goals.

# Civility

Civility refers to politeness and courtesy in your interactions with others. Being civil requires that you consider the thoughts and conclusions of others and engage in thoughtful, constructive discussion to express your own thoughts and opinions.

# Inclusivity

Inclusivity requires you to be aware that perspective and culture will control how communication is understood by others. While many values are shared, some are quite different. These differences in values should be both considered and respected.

#### **Timeliness**

Timeliness is the habit of performance of tasks and activities, planned in a way that allows you to meet deadlines. This increases workplace efficiency and demonstrates respect for others' time.

# Respect for Property

Respect for property is the appreciation of the economic or personal value an item maintains. Maintaining this respect can both reduce costs (increase the operable life of supplies and equipment) as well as demonstrate respect for others rights.

# Communication

Professional norms in communication require that you demonstrate the value of your colleagues, students, professors or others. The use of appropriate tone and vocabulary is expected across all forms of communication, whether that communication takes place face to face, in writing or electronically.

#### Commitment to Quality

Quality is the ability to meet or exceed expectations. By having a commitment to quality, we intend to provide a learning environment that is conducive to learning. Intrinsic to this commitment to quality is defining expectation (committed to in a syllabus through learning outcomes), implementation (with quality control in place) and assessment (where meeting of learning outcomes is determined).

# Commitment to Learning

Learning is a lifelong process. By being committed to learning you are providing a model for all to follow. This model is not only professor to student but involves all combinations of people within our university and broader community

Adherence to this compact is required of the faculty and staff of the College of Natural Resources and of all students enrolled in College of Natural Resources courses.

# UWSP FORESTRY ANTI-HARASSMENT STATEMENT Introduction

The forestry discipline within the College of Natural Resources (CNR), at the University of Wisconsin-Stevens Point (UWSP) has expectations for professional behavior of its students, staff, faculty, and other associated parties. Anyone who has a reasonable belief that they, or another student, staff, faculty or guest, have been the victim of harassment, bullying, or discrimination, or any other violation in the statement herein, are encouraged and expected to report the conduct. See reporting options and guidelines at the end of this document.

The forestry discipline within the College of Natural Resources is committed to creating a safe, inclusive, and professional environment. The forestry discipline operates under the UWSP harassment, discrimination, and retaliation prevention guidelines, copied here:

"The University of Wisconsin-Stevens Point (UWSP) is committed to fostering an environment that is safe, respectful, and inclusive to all and to educate all employees on these important issues. In addition, we are obligated, under Regent policy and federal regulations, to ensure our employees are informed on the issues of unlawful discrimination, harassment, and sexual violence."

#### Statement

The forestry discipline, following the lead of the Society of American Foresters which accredits the B.S. forestry degree, believes we all have a responsibility in creating a safe, inclusive, professional environment in all forestry-related activities and events. All forms of discrimination, harassment, and bullying are prohibited. This applies to all participants in all settings (online and in-person) and locations (on- and off-campus) where forestry classes and associated activities are conducted, including student organization events and activities, committee meetings, workshops, conferences, and other work and social functions where employees, volunteers, sponsors, vendors, or guests are present.

Discrimination is prejudicial treatment of individuals or groups of people based on their race, color, creed, religion, age, sex, sexual orientation, gender identity or expression, national origin, ethnicity, ancestry, disability, pregnancy, marital or parental status, veteran status, or any other category protected by law.

Sexual harassment is unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature that creates an intimidating, hostile, or offensive environment. Sexual harassment constitutes discrimination and is illegal under federal, state, and local laws.

Bullying is unwelcome, aggressive behavior involving the use of influence, threat, intimidation, ridicule, hazing or coercion to dominate others in the professional environment. Bullying behavior may go beyond characteristics protected by applicable laws, including but not limited to, political views, dress, or other outward physical appearances.

Other types of harassment include any verbal or physical conduct directed at individuals or groups

of people because of their race, ethnicity, color, national origin, sex, sexual orientation, gender identity, age, religion, disability, veteran status, or any other characteristic protected by applicable laws, that creates an intimidating, hostile, or offensive environment.

The following list, while not exhaustive, includes examples of unacceptable behavior: slurs, jokes, threats, or derogatory comments relating to the characteristics noted above. Examples of inappropriate physical harassment that violate this statement include, but are not limited to: assault, unwanted touching, or impeding or blocking movement. In addition, no individual may be denied admission to, or participation in or the benefits of, any UWSP-associated events. Similarly, the display or circulation of derogatory or demeaning posters, cards, cartoons, emails, texts, videos, and graffiti which relate to characteristics noted above violate this statement.

# **Reporting**

Students, staff, faculty, or guests associated with Forestry-related programming who experience or witness incidents of harassment are strongly encouraged to report the incident. The Forestry discipline strongly urges the prompt reporting of complaints or concerns so that rapid and constructive action can be taken.

Reporting can be done online or in person, to a faculty or staff member, and/or the UWSP Dean of Students. Anonymous reporting is available.

The UWSP Title IX Website is the home for all information related to harassment and discrimination, including reporting options, student and employee resources, and information about what happens after a report is submitted:

https://www.uwsp.edu/titleix/Pages/default.aspx

# SOCIETY OF AMERICAN FORESTERS CODE OF ETHICS Preamble

Service to society is the cornerstone of any profession. The profession of forestry serves society by fostering stewardship of the world's forests. Because forests provide valuable resources and perform critical ecological functions, they are vital to the wellbeing of both society and the biosphere. Members of SAF have a deep and enduring love for the land, and are inspired by the profession's historic traditions, such as Gifford Pinchot's utilitarianism and Aldo Leopold's ecological conscience. In their various roles as practitioners, teachers, researchers, advisers, and administrators, foresters seek to sustain and protect a variety of forest uses and attributes, such as aesthetic values, air and water quality, biodiversity, recreation, timber production, and wildlife habitat.

The purpose of this Code of Ethics is to protect and serve society by inspiring, guiding, and governing members in the conduct of their professional lives. Compliance with the code demonstrates members' respect for the land and their commitment to the long-term management of ecosystems, and ensures just and honorable professional and human relationships, mutual confidence and respect, and competent service to society.

On joining the SAF, members assume a special responsibility to the profession and to society by promising to uphold and abide by the following:

# Principles and Pledges

- 1. Foresters have a responsibility to manage land for both current and future generations. We pledge to practice and advocate management that will maintain the long-term capacity of the land to provide the variety of materials, uses, and values desired by landowners and society.

  2. Society must respect forest landowners' rights and correspondingly, landowners have a land stewardship responsibility to society. We pledge to practice and advocate forest management in accordance with landowner objectives and professional standards, and to advise landowners of the consequences of deviating from such standards.
- 3. Sound science is the foundation of the forestry profession. We pledge to strive for continuous improvement of our methods and our personal knowledge and skills; to perform only those services for which we are qualified; and in the biological, physical, and social sciences to use the most appropriate data, methods, and technology.
- 4. Public policy related to forests must be based on both scientific principles and societal values. We pledge to use our knowledge and skills to help formulate sound forest policies and laws; to challenge and correct untrue statements about forestry; and to foster dialogue among foresters, other professionals, landowners, and the public regarding forest policies.
- 5. Honest and open communication, coupled with respect for information given in confidence, is essential to good service. We pledge to always present, to the best of our ability, accurate and complete information; to indicate on whose behalf any public statements are made; to fully disclose and resolve any existing or potential conflicts of interest; and to keep proprietary information confidential unless the appropriate person authorizes its disclosure.
- 6. Professional and civic behavior must be based on honesty, fairness, good will, and respect for the law. We pledge to conduct ourselves in a civil and dignified manner; to respect the needs, contributions, and viewpoints of others; and to give due credit to others for their methods, ideas, or assistance.