**Biology 104: Plants in Today’s World, Fall 2021**

Welcome!! Plants play a role in every part of our lives. From the food we eat to the clothes we wear to the medicine we rely on plants are integral to our society. In this non-major’s lecture and hands-on laboratory class you will be introduced to major plant groups and learn how plants are used and harvested for food, fuel and beyond. You will complete an individual research project that can cover anything from medicinal plants to plants represented in art and popular culture. Please note that this is a Biology class and there will be many scientific concepts discussed that will have to be mastered in order to successfully complete the course.

**Instructor**: Elizabeth Muslin, Ph.D.

Department of Biology

Office: S293 Lapham Hall Phone: 414-229-4297

Email: [muslin@uwm.edu](mailto:muslin@uwm.edu)

Office hours: By appointment. Please contact me by email to arrange a time to meet via Microsoft Teams or by phone.

**Teaching Assistants**:

Jacob Grothjan, Graduate Student Department of Biology

Email: grothjan@uwm.edu

Office hours: Please see lab syllabus for information

Shanice Piango, Graduate Student Department of Biology

Email: [SCpiango@uwm.edu](mailto:SCpiango@uwm.edu)

Office hours: Please see lab syllabus for information

**It is your responsibility to read this syllabus completely to be aware of due dates and course policies.**

COVID-19 policies:

Please read UWM’s Panther Community Health and Safety Standards, which can be found here: [https://uwm.edu/coronavirus/wp-content/uploads/sites/515/2020/06/Panther-Community-Health- and-Safety-Standards.pdf](https://uwm.edu/coronavirus/wp-content/uploads/sites/515/2020/06/Panther-Community-Health-%20and-Safety-Standards.pdf). Although this course will be conducted entirely online (see below), you are expected to abide by UWM’s policies on virus prevention while on campus. As described below, you are expected to complete work in this course (e.g., weekly quizzes and SmartBook assignments) by the assigned deadline. However, if you experience complications due to COVID-19 (e.g., you become ill or are the primary caregiver for someone who is ill), please contact Dr. Muslin to discuss potential accommodations regarding due dates.

Course format:

The lecture portion of this course will be conducted online. All course business will be conducted on UWM’s Canvas website (<https://uwm.edu/canvas/>). For questions about accessing or working Canvas, please contact me or the UWM Help Desk. The Help Desk staff can provide the best and fastest answers to your questions. The Help Desk can be reached as follows:

* 414-229-4040 or 877-381-3459 (toll free)
* <https://uwm.cherwellondemand.com/CherwellPortal/CampusTechnology#0>

The laboratory portion of this course will be conducted in person. Please consult your schedule to make sure you are attending the correct laboratory section.

Required text:

You are required to purchase McGraw-Hill Education Connect® access for Stern’s Introductory Plant Biology, 15e. We are using an electronic textbook called SmartBook exclusively for this course. SmartBook is publisher McGraw-Hill’s online adaptive textbook and is included with Connect Access purchase. Connect is McGraw-Hill’s online learning system and houses the SmartBook digital textbook and required SmartBook assignments.

**You are not required to have a print text**, and please be aware that if you purchase a new or used hardcover textbook, you will still need to purchase Connect Access to compete the required SmartBook questions that constitute 10% of your grade.

When purchasing the textbook (see two options below), please register using the name listed in Canvas. Failure to do so will result in a mismatch between SmartBook and Canvas and your SmartBook grades will not transfer to Canvas.

There are two ways to purchase Connect Access:

1. Directly from McGraw-Hill through Canvas. You may purchase Connect Access directly from McGraw-Hill using a credit card at a price of $90. To order from McGraw-Hill, log into our course’s Canvas page, and click on “McGraw-Hill Connect” or click on any one of the SmartBook assignments listed on the Home page or Assignments page. This video helps explain the process: <http://video.mhhe.com/watch/4q72PpEpzkXAd3hW4o52c8> Follow the registration steps outlined in the “Purchasing your textbook” file found in the “Textbook Information” sub-module.
2. Books by eCampus (UWM Bookstore). You may purchase Connect Access Cards through the Books by eCampus, which you can access from this link: https://uwm.edu/panthershop/books-by-ecampus/. Click on the green “Order Textbooks” button and select this semester, Biology, and then section 104. Books by eCampus charges $90.22 for the book. After purchasing your Access Card, go back to our Campus course website, click on McGraw-Hill Connect and then follow the directions to enter the Connect Access Card code you purchased when prompted to do so. When you register on the Connect site, please remember to register using YOUR name as listed in Canvas.

**If you want to buy a hard copy of the book: This is NOT REQUIRED.** Note when purchased directly through McGraw-Hill, Connect Access will cost $ 93. If you would like a print version of the text to accompany your digital SmartBook, you may purchase at any point during the semester. The print-upgrade option costs an additional $25 and the copy will be shipped to your preferred address. Information on REQUIRED course material:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Title | Edition | Author | Publisher | Where to Buy | Price |
| Connect access for Introductory Plant Biology | 15e | Stern | McGraw- Hill Education | McGraw-Hill’s website (access through Canvas) or Books by eCampus | $ 93.00 |

Student expectations and responsibilities:

Students are expected to do the assigned weekly chapter readings, and to complete chapter Canvas quizzes and SmartBook assignments by the due date each Sunday.

**\*\*\*It is your responsibility to read this syllabus completely to be aware of due dates and course policies. Although the instructor may remind you of some important deadlines, it is your responsibility to complete all work in this course on time.**

This course contains as much content as the face-to-face version, so do not assume that this course will be less work because it is online.

Course schedule:

One chapter is assigned each week.

By 11:59 pm each Sunday (unless otherwise stated), you must take the chapter quiz in Canvas and complete the SmartBook assignment for that week’s chapter.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Course week | Week of | Topic | Reading | Due date for chapter Canvas Quiz and SmartBook Assignment  (by 11:59 pm on each date listed below) \*Sunday unless otherwise listed. |
| 1 | August 30 | What is Plant Biology? | Chapter 1 | September 5 |
| 2 | September 6 | Cells | Chapter 3 | September 12 |
| 3 | September 13 | Tissues | Chapter 4 | September 19 |
| 4 | September 20 | Roots and Soils | Chapter 5 | September 26 |
| 5 | September 27 | Stems | Chapter 6 | October 3 |
| 6 | October 4 | Leaves | Chapter 7 | October 10 |
| 7 | October 11 | Flowers and Seeds | Chapter 8 | October 17 |
| 8 | October 18 | Plant Breeding, Propagation and Biotechnology | Chapter 14 | October 24 |
| 9 | October 25 | Bryophytes | Chapter 20 | October 31 |
| 10 | November 1 | Ferns /Gymnosperm | Chapter 21, 22 | November 7 |
| 11 | November 8 | Angiosperms | Chapter 22 | November 22 |
| 12 | November 15 | Flowering Plants and Civilization Part I | Chapter 23 | \*\*\* No Quiz or Homework this week |
| 13 | November 22 | THANKSGIVING | xxxx | xxxx |
| 14 | November 29 | Flowering Plants and Civilization Part II | Chapter 23 | December 6 |
| 15 | December 6 | Ecology | Chapter 24 | December 13 |

Introductory Assignment

The introductory assignment is worth 10 points and constitutes 5% of your final grade. Please seen separate assignment sheet for more information.

Due Date: **September 20**

Power Point Presentation

A Power Point presentation worth 50 points will be due on April 26th and will constitute 10% of your grade. Please see separate assignment sheet for more information.

**Due Dates:**

* Typed Presentation proposal due **October 17**
* Final Presentation due **November 21**

Lab scores (40%) is based on attendance, written lab reports, lab reports and quizzes. See "Laboratory Schedule" and your TA's lab syllabus for further grading details.

Assessment:

Grades in this course will be determined as follows:

**Formal grade evaluation:**

|  |  |  |  |
| --- | --- | --- | --- |
| Learning objective | Evaluation tool | Points | % of grade |
| Demonstrate mastery of course concepts in Lecture: Quizzes | 13-chapter quizzes in Canvas  (10 points each, the  lowest grade will be dropped) | 120 | 35 |
| Demonstrate mastery of course concepts in Lecture: Homework | 13-chapter SmartBook  assignments (5 points  each), the lowest grade will be dropped) | 60 | 10 |
| Intro Assignment | 1 page with google image search of plant of choice | 10 | 5 |
| Demonstrate mastery of course concepts in Lab | Quizzes, Lab reports, Discussions. | 175 | 40 |
| Power Point Presentation on Plants in Today’s World | PowerPoint Presentation | 50 | 10 |
|  | Total | 475 | 100 |

Grades in this course will NOT be curved. Grades will be earned according to the following scale:

A 93-100% A- 90-92%

B+ 87-89% B 83-86% B- 80-82%

C+ 77-79% C 73-76% C- 70-72%

D+ 67-69% D 63-66% D- 60-62% F 0 - 59%

Quizzes:

40% of your grade will be based on grades you earn on Canvas quizzes for each chapter.

You will take 13 Canvas chapter quizzes during the course as indicated above.

All quizzes are taken in Canvas via the Home or Quizzes pages.

Quizzes consist of 10 multiple choice questions drawn randomly from a test bank. Quizzes will be graded automatically by Canvas. You will receive immediate feedback.

Quizzes should be taken closed notebook, so please do not cheat and use your notes.

You can take the quiz at any point during the week it is assigned but must submit the quiz by 11:59 pm Sunday of this week or you will receive a 0 for the quiz. Given this flexibility, no make-up quizzes will be allowed.

Once you start a quiz, you will have 15 minutes to submit it. Late submits will be penalized 1 point for each 5 minutes the quiz is submitted late.

You can take each quiz only once, so please be sure you are ready to take a quiz before you start it. Save your answers after each question to ensure that all answers are recorded.

Your lowest scoring chapter quiz grade will be dropped so that only 13 of the 14 quizzes count towards your final grade.

There is NO FINAL EXAM in this course.

SmartBook:

SmartBook is an adaptive learning environment that highlights information in the textbook according to your own mastery of the material. For SmartBook to adequately guide you through the material, it needs to know which content you have mastered and which you have not. Therefore, you will be required to answer questions about the material upon which you will be graded.

**Lab:**

**BIOSCI – 104 (Plants in Today’s World) Lab Fall 2021**

READ THE SYLLABUS. Frequently check for announcements on the Canvas course website

Lab: In Canvas Online

Note: There will be 10 quizzes. The lowest score quiz score will be dropped. There will be 10 lab reports and 1 online Discussion for a total of 175 points.

Lab Schedule

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Week | Lab title | | | Assignments Due Monday  Following Lab at 11:59 (unless otherwise noted) |
|
| **August 30** | **No Lab** | | | |
| September 6 | Tree ID | | | Lab Report 1 due September 13 |
| September 13 | Cell Structure | | | Quiz 1/ Lab Report 2 due Sept 20 |
| September 20 | Mitosis, Meiosis | | | Quiz 2/ Lab Report 3 due Sept 27 |
| September 27 | DNA | | | Quiz 3 /Lab Report 4 due Oct 4 |
| October 4 | Photosynthesis | | | Quiz 4 /Lab Report 5 due Oct 11 |
| October 11 | Transpiration | | | Quiz 5 /Lab Report 6 due Oct 18 |
| October 18 | Osmosis | | | Quiz 6 /Lab Report 7 due Oct 25 |
|  |
|  |  | | |  |
| October 25 | Flowers | | | Quiz 7/ Lab Report 8 due Nov 1 |
| November 1 | Fruits and Seeds | | | Quiz 8/ Lab Report 9 due Nov 8 |
| November 8 | Human Nutrition | | | Quiz 9 /Lab Report 10 due Nov 15 |
| November 15 | Plant Technology Discussion | | | Quiz 10/ Discussion due November 29 |
|  |  | | |  |
| November 22 | Thanksgiving No lab | | | xxxxxx |
| November 29 | Plant Evolution | | | Lab Report 11 due December 6 |
|  |  | | |  |
|  | |  |

Lab Assignments Points

Quizzes (9 x 10) 90

Lab Reports (11 x 5) 55

Discussion 30

Total Points = 175

UNIVERSITY AND DEPARTMENTAL POLICIES:

Students with disabilities. The Accessibility Resource Center at the University of Wisconsin Milwaukee is dedicated to providing equal access to students with disabilities in all academic, social, cultural and recreational programs.  Please notify the Professors, and see this link: <http://uwm.edu/arc/>

Religious observances. Students who will miss class due to religious observances should make arrangements with the Professors or Lab TAs to make up missed work.

<https://www4.uwm.edu/secu/docs/other/S_1.5_ACCOMMODA_OUS_BELIEFS.pdf>

Students called to active military duty. If you are called to active military duty, please contact the Professors to make arrangements for accommodations for absences. Students: <http://uwm.edu/active-duty-military/>

Employees: <https://www.wisconsin.edu/ohrwd/download/policies/ops/bn9.pdf>

Incompletes. A notation of "incomplete" may be given in lieu of a final grade to a student who has carried a subject successfully until the end of a semester but who, because of illness or other unusual and substantiated cause beyond the student's control, has been unable to take or complete the final examination or to complete some limited amount of term work. <https://www4.uwm.edu/secu/docs/other/S_31_INCOMPLETE_GRADES.pdf>

Discriminatory conduct. Discriminatory conduct will not be tolerated by the University. It poisons the work and learning environment of the University and threatens the careers, educational experience, and well-being of students, faculty, and staff. <https://www4.uwm.edu/secu/docs/other/S_47_Discrimina_duct_Policy.pdf>

Title IX/Sexual Violence. Title IX is a federal law that prohibits sex discrimination in education program or activities, and UWM policy prohibits such conduct (see Discriminatory Conduct, above). This includes sexual violence, which may include sexual harassment, sexual assault, relationship violence, and/or stalking in all educational programs and education-related areas. UWM strongly encourages its students to report any instance of sex discrimination to UWM’s Title IX Coordinator (titleix@uwm.edu). Whether or not a student wishes to report an incident of sexual violence, the Title IX Coordinator can connect students to resources at UWM and/or in the community including, but not limited to, victim advocacy, medical and counseling services, and/or law enforcement. For more information, please visit: [https://uwm.edu/sexual-assault/.](https://uwm.edu/sexual-assault/)

Academic misconduct. Cheating on exams or plagiarism are violations of the academic honor code and carry severe sanctions, including failing a course or even suspension or dismissal from the University. <http://uwm.edu/academicaffairs/facultystaff/policies/academic-misconduct/>

Complaint procedures. Students may direct complaints to the head of the academic unit or department in which the complaint occurs. If the complaint allegedly violates a specific university policy, it may be directed to the head of the department or academic unit in which the complaint occurred or to the appropriate university office responsible for enforcing the policy. <https://www4.uwm.edu/secu/docs/other/S_47_Discrimina_duct_Policy.pdf>

Grade appeal procedures. A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow the established procedures adopted by the department, college, or school in which the course resides or in the case of graduate students, the Graduate School. These procedures are available in writing from the respective department chairperson or the Academic Dean of the College/School. <https://www4.uwm.edu/secu/docs/other/S_28_Grade_Appe_by_Students.pdf>

LGBT+ resources. Faculty and staff can find resources to support inclusivity of students who identify as LGBT+ in the learning environment. <http://uwm.edu/lgbtrc/>

Smoke and Tobacco-Free campus. UWM prohibits smoking and the use of tobacco on all campus property.

<https://www4.uwm.edu/secu/docs/other/S_49_Smoke_Toba_Free_Policy.pdf>

Official university policies for all UWM courses may be found at the Secretary of the University website: <http://uwm.edu/secu/syllabus-links/>. The department lists important policies at the top of the Biological Sciences section of the Schedule of Classes (e.g., for Fall 2021)