Botany and Greenhouse Management

**Mr. Barnum, Room 80**

1. **Contact Information:**
* E-mail (preferred): pbarnum@mason.k12.mi.us
* Telephone: (517) 676-9055, ext. 280
* Office Hour: Tuesday 2:40 to 3:30 pm
* Remind 101: Text @botanyg to 517-969-7673 or

 Email botanyg@mail.remind101.com for class reminders and updates

1. **Course Description:**

This course provides students awesome hands on experiential learning opportunities. This course fulfills the “Biology” graduation requirement. Students will learn plant anatomy, physiology, soils and plant nutrition, tree and wildflower identification, maple syrup production, forestry and greenhouse management. Hands on experience in our greenhouse, woodlot and maple syrup production operation will take learning out of the classroom into real life scenarios. This course is appropriate for advanced students and students of all ability levels. Students in this class will have opportunities to improve leadership, personal growth and practical skills through participation in the Mason FFA Chapter.

1. **Program Enhancements**:

Agriscience Pole Barn Raynor Park Woodlot Aquaculture System

Sugar Shack Field Trips

Mason FFA Mason FFA Alumni Greenhouse 30 x 96

1. **Required Work:**

The following are the types of work which will be required of you throughout this course.

* Weekly assessments
* Projects
* Labs
* Journaling
* Daily Reading
* Daily practice assignments
* Comprehensive final exam
1. **Course Materials and Resources:**
* Classroom Textbooks: Delmar Cengage: **Introduction to Horticulture** and Interstate: **Introduction to Plant and Soil Science Technology** Replacement cost for these textbooks is approximately $85, so please take care of it while using in the classroom.
* MYCAERT online resources: **www.mycaert.com** Individual login information will be provided to students. Username will be the students first and last name with no spaces. Password will be student birth date. Powerpoints and E-Units are available to print off to assist the students in taking notes and preparing for assessments.
* Students will need a folder or binder for holding papers, a spiral bound notebook, something to write with and a highlighter.
* Appropriate work apparel (gloves, boots etc to work in the greenhouse)
1. **Behavior Expectations and Consequences:**
	1. **BE READY - Come to class prepared!** Bring your unit packet, notebook, writing utensils and any assignments.
	2. **No Food and Drinks allowed!** You may bring **bottled water.** Please be sure to put your water bottles in the recycle box.
	3. Personal grooming should be done in the restrooms, between classes, not at your desks during class.
	4. **Purses and Book bags:** Book bags, backpacks and purses should be left in student lockers.
	5. **BE RESPECTFUL of your fellow classmates and the teacher!**  Be involved and courteous in class discussion. Allow others the opportunity to express their opinions.
	6. **Please write on paper only**—not on the desks, on the walls, on posters or in the textbooks.
	7. The teacher’s desk area, the cabinets and book shelves are off limits to students.
	8. **End of Class Routine:** At the end of class, students are expected to remain in their seats until the bell rings. Students will NOT be allowed to line up at the door.
	9. **BE RESPONSIBLE - I-Pods/MP3 Players, Cell Phones, Digital Cameras, etc.:** Cell phones are permitted in the classroom and can be used with teacher approval. Electronic devices are ONLY allowed to be used for educational purposes. Cell phones will need to left on and on your desk.
	10. **Fire and Tornado Procedures:** A school map at the front of the room is labeled with the fire drill route and the tornado shelter areas.
* **Fire procedure**- turn right out of the classroom and exit out the doors at the East side of the building near the trainer's room. Walk quietly and calmly to section 8 of the bleachers at the football field. We are to be seated 8 - 10 rows up the bleachers in section 8.
* **Tornado procedure**- turn right out of the classroom and proceed to the appropriate gym locker room.
1. **Absences and Tardies:**
	1. When a student is absent, it is his/her responsibility to find out what was missed. Students may pick up his/her missing work from the missing work folder in the classroom. It is the student’s responsibility to check the missing work folder when he/she returns to school.
	2. If a test is given when you are absent, it must be made up either before school or after school. Occasionally, make-up tests will be given during class time; however, this is not ideal.
	3. Students will be marked tardy if they are not in the classroom when the bell rings. So long as students are inside the door and are proceeding towards their assigned seat, a tardy will not be given. Students standing at or outside the door will be marked tardy!
2. **Assignments and Grading Policy**

**Assignments:** All assignments are due at the BEGINNING of class, unless otherwise directed.

All points will be averaged together to calculate final grade. Minimal points will be awarded to daily work emphasizing student work during labs and knowledge demonstrated on tests and quizzes.

**Late Assignment Policy:** Late work is not accepted. If an excused absence does occur, previously assigned work is due upon return to school. Work assigned during an excused absence will be given the appropriate time to be made up per the student handbook. If you miss a review you are still expected to take the test as scheduled. If you are absent the day of a test you are expected to make it up during science lab hours within one school day. It is the responsibility of the student to get make up work upon return to school.

**Grading scale: The following is the grading scale used at Mason High School. Please remember that all grades will be rounded up.**

A 93-100 C+ 77-79 D- 60-62

A- 90-92 C 73-76 E 0-59

B+ 87-89 C- 70-72

B 83-86 D+ 67-69

B- 80-82 D 63-66

1. **Homework and Assessments**
	1. **Assessments**: A minimum of two assessments will be given over the course of each unit- one at the midpoint and one at the end. The midpoint assessment will only cover the standards taught up until that point. The final assessment will cover all standards of the unit.
2. **Botany and Greenhouse Management Units of Study**

|  |  |  |  |
| --- | --- | --- | --- |
| **Week** | **Days** | **Notes** | **Unit(s) of Study** |
| **September** |
| 1 | 4 |  | Bed Preparation and Planting |
| 2 | 5 |  | Bed Preparation and Planting |
| 3 | 5 |  | Introduction to Plants, Soils Horticulture and Binomial Nomenclature |
| 4 | 5 |  | FFA Opportunities |
| **October** |
| 5 | 5 |  | Botany - Leaves and Photosynthesis |
| 6 | 5 | Conferences/Fall Leadership Conf | Botany - Stems and Roots |
| 7 | 5 |  | Botany - Seeds |
| 8 | 5 |  | Botany - Flowers and Fruits |
| 9 | 4 | Halloween/PDNational Conv | Tree ID |
| **November** |
| 10 | 5 |  | Plant Nutrition |
| 11 | 5 |  | Plant Nutrition |
| 12 | 4 | Exams/End of Tri |  |
| 13 | 2 | Thanksgiving | Composting |
| **December** |
| 14 | 5 |  | Water Management and Irrigation Practices |
| 15 | 5 |  | Soils |
| 16 | 5 |  | Soils |
| **Christmas Break** |
| **January** |
| 17 | 5 |  | Vegetable Production - Harvesting |
| 18 | 5 | Conferences | Grain and Soybean Production |
| 19 | 4 | MLK | IPM - Insects, Weeds, Disease |
| 20 | 5 |  | IPM - Insects, Weeds, Disease |
| **February** |
| 21 | 5 |  | Greenhouse Scheduling |
| 22 | 4 | Winter Break | Maple Syrup Production |
| 23 | 3 | Winter Break | Maple Syrup Production |
| 24 | 5 |  | Bed Preparation and Planting |
| **March** |
| 25 | 4 | Release DayState Conv | Nursery and Landscape Management |
| 26 | 4 | Exams/End of Tri |  |
| 27 | 5 |  | Plant Propagation |
| 28 | 5 |  | Forestry |
| **April** |
| 29 | 5 |  | Forestry |
| **Spring Break** |
| 30 | 4 | Good FridaySkills Contest | Wildflower Unit |
| 31 | 5 | Conferences | Landscape Design |
| 32 | 5 |  | Greenhouse Design |
| **May** |
| 33 | 5 |  | Lawncare and Turfgrass Management |
| 34 | 5 |  | Lawncare and Turfgrass Management |
| 35 | 5 |  | Landscape Project |
| 36 | 4 | Memorial Day | Landscape Project |
| **June** |
| 37 | 5 |  | Greenhouse Harvesting and Summer Preparation |
| 38 | 4 | Exams/End of Tri |  |

**Plant identification will be on ongoing project throughout the course.**

**Managing the greenhouse and crops will be ongoing throughout the coure.**

**SAE – Supervised Agriculture Experience**: A SAE is a hands-on activity where the student applies concepts learned in the classroom to a project away from school to enhance learning. Projects may also be geared to explore new areas of the agriculture and natural resources industry. Key characteristics include personal responsibility and record keeping. Examples of activities may include raising chickens at home, raising pigs for the fair, dog obedience training, managing a family pond, maintaining family flower beds, restoring wildlife habitat, volunteering at a river clean-up, part time job in the agriculture and natural resources field, etc.

Record Keeping Resource... **www.theaet.com** is a tool available to all students for use to keep track of their "experiences" and participation in FFA, school and community activities. Ultimately the program allows members to print applications to receive awards at the state and national level and assists them in the completion of scholarship applications during their senior year. Login information will be provided to all students.

**FFA**: The National FFA Organization is the largest youth development organization in the world. Formerly a “Future Farmer” based club focusing only on production agriculture the organization has changed dramatically providing opportunities in all area of agriculture and natural resources, our nation’s number one employer. A few examples of careers in the different areas of agriculture are geneticist, veterinarian, forester, wildlife biologist, golf course manager, park manager, botanist, landscape architect, mechanic or engineer.

We will spend some time in class learning about the history of the organization as it relates to the advancements in agriculture and the opportunities currently available to you.

Chapter Dues are $15.00 and are due Oct. 15th.

Disclaimer: As the teacher, I reserve the right to modify any of the above guidelines, expectation, units and/or assignments to better meet the needs of the students and the class.

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# Student/Parent Acknowledgement of Course Syllabus & Expectations

Dear Student and Parent:

I am asking that you review the guidelines for my class with each other. After reviewing these guidelines, please sign and return this page. By signing this document, both the student and the parent acknowledge that they have read through the classroom guidelines and procedures for Botany and Greenhouse Management and understand them completely. The student is also acknowledging that he/she will agree to abide by these guidelines. If there are any questions or concerns for either the parent or the student, please feel free to contact me.

Student Name (please print name):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Name (please print name):\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent Signature:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent email: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Questions or comments?