Introduction to Botany. Lecture 1

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August 24, 2016

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   - Multiple choice questions

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Course in general

Description

Course

This course is based on seven central concepts:

A. Photosynthesis
B. Symbiogenesis
C. Life cycle
D. Tissues
E. Living skyscrapers: plant organs
F. Trees and seeds
G. Flowering plants (gymnosperms version 2.0)

Remember: plants are not animals!

Note:

- Introduction to Botany is a **topic class** intended to Biology and Science majors.
- Chemistry is not a formal prerequisite but will be required, as well as a basic knowledge of math and physics.
- For non-science majors, I highly recommend Biol 111 instead.

Instructor

- Dr. Alexey Shipunov
- Office: Moore 229
- Office Hours: Mondays, Wednesdays and Fridays, 11 am to 12 am
- Phone: 858-3116
- E-mail: alexey.shipunov@minotstateu.edu

Lectures Mondays, Wednesdays and Fridays, 10:00 am to 10:50 am, Moore 16

Laboratories Wednesdays, Moore 210, 3 pm to 4:50 pm

Laboratories will start next week!

Web site

Shipunov, A. Introduction to Botany [Electronic resource]. 2010—onwards.
Mode of access: http://herba.msu.ru/shipunov/school/biol_154/index.htm

BIOL 154: Introduction to Botany

Class materials:

- Syllabus (PDF, 0.2 Mb)
- ~~Lecture 1 (PDF, 0.2 Mb)~~
- **Introduction to Botany: textbook** (PDF, 10 Mb)

Folders:

- Old lectures (2010)
- Old lectures (2011)
- Old lectures (2012)
- Old lectures (2013)
- Old lectures (2014)

Back

http://ashipunov.info/shipunov/school/biol_154

Please check it regularly. There will be much more material due course. As a rule, slides of every lecture will be available after this lecture.

Textbook

Shipunov, Alexey. Introduction to Botany.
URL:
`http://ashipunov.info/shipunov/school/biol_154/`

Textbook is updating constantly! Download it frequently!

Course in general

Grading

Exams

- **Four equal exams** are given
- There is a possibility for **one make-up** exam
- Two failed exams mean the failed class

Preparation to exams

- Download go through all lecture slides / study guide
- Clarify remaining questions with textbook
- Use external sources (like Wikipedia) to explore the rest
- Try not only memorize this stuff, but also understand how things work

Labs

- This is a **laboratory course**, meaning that **receiving zero points for more than one laboratory results in a failed course**.
- Grading of laboratories is based on reports and/or drawings.
- Written reports and/or drawings are prepared and finished during laboratory sessions and passed to me right after the particular laboratory session.
- While some plants are still available, we will study outdoor. As a result, **labs will not exactly correspond with lectures**: our lab sequence is independent.

Absence

There are five legitimate reasons for absence from exams or labs:

A. emergency situations,
B. attested medical conditions
C. military duty,
D. participation in MSU sports events,
E. dependent sick leave.

Absence from exams or laboratories must be announced to the instructor in advance.

Lectures and final questions (quizes)

- I strongly recommend attending lectures regularly. Lecture contents will supersede the textbook.
- Make notes based on my explanations and board drawings, do not copy slides!
- At the end of every lecture I will give one short test question to answer. Typically, that question will give you from 1 to 3 points.

Points

A total of 640 points can be earned and are distributed as follows:

Lecture tests : 60 points (1–3 points per question)

Exams : 400 points

Laboratories : 180 points (15 points per lab)

Grading points may vary between exams, tests, and labs.

Letter grades

- $A \geq 90\%$
- $B \geq 80\%$
- $C \geq 70\%$
- $D \geq 60\%$
- $F < 60\%$

A minimum of one letter grade will be deducted from the grade for academic dishonesty / plagiarism.

Intro test
Multiple choice questions

Question 1

1 Why deciduous plants take off their leaves?

- A To prevent freezing
- B To prevent drying
- C To get rid of poisonous chemicals

Question 2

2 Where does human digestion process start?

- A In the mouth
- B In the intestines
- C In the stomach

Question 3

3 Which birds do NOT live in Minot on winter?

- A Crows
- B Hummingbirds
- C Sparrows

Question 4

4 Home country of watermelon:

A. Central America
B. Canada
C. South Africa

Question 5

5 Why do insectivorous plants eat insects?

A. To obtain the lacking mineral resources
B. To get an addition to their common “menu”
C. To get rid of herbivores

Question 6

6 Which insects have no queen?

A. Bumblebees
B. Ants
C. Cockroaches

Question 7

7 Oak tree is pollinated by:

A. Wind
B. Bees
C. Flies

Question 8

8 Spider has:

- A 6 legs
- B 8 legs
- C 4 legs

Question 9

9 Apple flower has:

- A 5 petals
- B 4 petals
- C 3 petals

Question 10

10 Frightened man has:

- A Bigger pupils
- B Smaller pupils
- C Normal pupils

Question 11

11 Polar bears are not eating penguins because:

- A Penguins run very fast
- B They cannot meet
- C Penguins are poisonous for bears

Question 12

12 How many toes are on each of cat's hind legs?

- A 5
- B 4
- C 3

Question 13

13 Pineapple is a:

- A Tree
- B Shrub
- C Herb

Question 14

14 If somebody has an artery cut on the arm or leg, it is recommended:

- A Put a tight bandage below the cut
- B Put a tight bandage above the cut
- C Do nothing

Question 15

15 Which of the following is the most precise statement?

- A We are breathing to support our life
- B We are breathing to obtain the energy from food
- C We are breathing to have enough strength for food consuming

Question 16

16 Which tree is better to plant in Minot house backyard:

A. Sycamore
B. Ash
C. Yew

Question 17

17 Moles eat:

- A Worms
- B Roots
- C Frogs

Question 18

18 Which fish gives birth to the fully developed offspring?

A. Sturgeon
B. Shark
C. Flounder

Question 19

19 Which human organ lives longer?

A. Heart
B. Lungs
C. Brains

Question 20

20 Which plant normally has a longer root?

- A Spruce
- B Chokecherry
- C Blueberry

The key

1B; 2A; 3B; 4C; 5A; 6C; 7A; 8B; 9A; 10A; 11B; 12B; 13C; 14B; 15B; 16B; 17A; 18B; 19A; 20B

Please calculate a sum (every right answer = 1 virtual point)

Final question (1 point)

Label your answer with your second name and also your **class ID**: any four digits in any combination, from 0000 to 9999.

Final question (1 point)

Why are plants important?

Label your answer with your second name and also your **class ID**: any four digits in any combination, from 0000 to 9999.

Summary

- BIOL 154: download the syllabus from the Web site (`http://ashipunov.info/shipunov/school/biol_154/`)
- Plant is not an animal!
- Plants are extremely important, highly diverse and deserve a scientific study

For Further Reading

A. Shipunov.
Introduction to Botany [Electronic resource].
2016.
Mode of access:
http://ashipunov.info/shipunov/school/biol_154