

BIOL 1114 Exam #2 (PREVIEW), March 22, 2017

This exam number is **1712**. Review the [directions](#) for filling out your answer sheet. Failure to perform this correctly will incur a -10pt handling fee. Review [when/where](#) you take your exam.

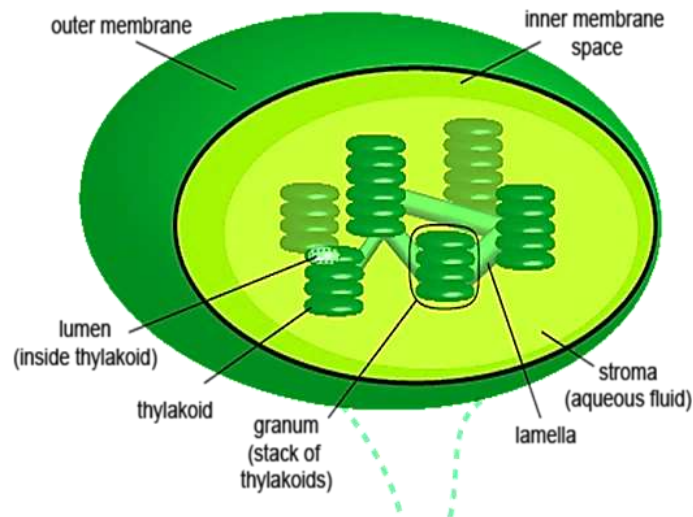
The following material will appear on the upcoming exam. Use this preview to familiarize yourself with the material, and guide you in studying. Be sure to look up the definitions of any words you do not know. **You are free to discuss this material or ask questions about it.**

During the exam, read all questions and answers **carefully** before choosing the **single BEST response** for each question. Feel free to ask the instructor for clarification.

Use a #2 pencil to fill in the information on your NCS answer sheet.

1. Put your **O-Key Account Username** in the spaces indicated for **LAST NAME** and darken the corresponding circles.
2. **Write your Name** (Last, First) and the word **"Star" or "NoStar"** above the words "Last Name"
3. Put your **CWID** in the spaces indicated for **"Student ID"** and darken the corresponding circles.
4. Enter **1712** in the spaces indicated for **"Course number"** and darken the corresponding circles
5. Enter **001 for Star or 002 for NoStar** in the spaces indicated for **"SEC"** and darken the corresponding circles.

Failure to perform this correctly will incur a -10pt handling fee. Read all questions and answers **carefully** before choosing the **single BEST response** for each question. Feel free to ask the instructor for clarification.



A physician in a poison control center keeps a chart on the wall to educate patients :

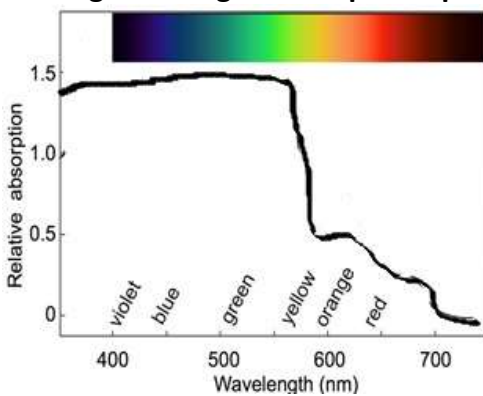
Source	Toxin	Effect
foxglove plant	digoxin	blocks action of Na ⁺ /K ⁺ pump
many South American plants	curare	blocks acetylcholine receptors
<i>Clostridium</i> bacteria	botulinum	reduces acetylcholine release
black widow spider	latrotoxin	enhances acetylcholine release
pufferfish	tetrodotoxin	blocks Na ⁺ gates
tobacco plants	nicotine	mimics acetylcholine
green mamba (snake)	fasciculin-I	blocks action of acetylcholinesterase
fermentation	ethanol	makes axon membrane permeable to K ⁺

Three populations of birds, named P1, P2, and P3, have lived on an island for multiple generations. All descended from a pair of birds from a distant continent. Most birds in the large population descended from the original pair could not eat any seed types found on this island. The original pair that gave rise to all three populations, could eat one type of seed found on the island. Today, birds in P1 eat only one type of seed, birds in P2 eat that type of seed and two others, and birds in P3 those three types of seeds and many others.

Sea snakes are one of the venomous groups of snakes in the world. They have paddle-like tails and are found in salty, tropical waters.

Imagine that a mass extinction of all the species of plants and algae has occurred in one of the Hawaiian Islands due to a sudden increase in the water and air temperature. After this mass extinction the island goes back to the usual temperature and it is slowly colonized by different species of plants.

Orange-Red Algae Absorption Spectrum



A group of freshwater algae has been transported to a pond on the legs of birds and survives. The individuals look **orange-red on the water surface**