BMS 2004 Lab Syllabus

Text:
General Zoology Laboratory Guide; Charles Lytle and John Meyer. ISBN: 978-0073369457

YOU MUST READ THE FOLLOWING BEFORE THE FIRST DAY OF CLASS:

A. Assigned Reading – pp xvii-xxiv and pp1-12
B. DOWNLOAD THE LAB SAFETY RELEASE FORM from Black Board, sign the released form and have it ready to hand in on the first day of class.

**YOU WILL BE TESTED ON YOUR KNOWLEDGE OF ASSIGNED READINGS DURING THE FIRST WEEK OF CLASS.**

GRADING:
Lecture: 55%
Lab: 35%
Quizzes – 35%
Pre/Post Labs – 35%
Practical – 20%
Technical – 10%
Recitation: 10%

ATTENDANCE:
Attendance to the lab are mandatory, any missed labs may be made up during the same week of the lab missed. Make up labs are at the discretion of the Professor and the Course Coordinator. This is a PRIVILEGE and not a right. If permission is granted you must make an appointment with the Course Coordinator to reserve a seat in the make-up lab. 2 missed labs will constitute a failing grade. 2 lateness will constitute an absence.

MAKE UP EXAMS:
There are no make up exams offered for this course. Any missed exam will be counted as a “0” unless it is excused by the Director of the Program.

HOW TO PREPARE FOR CLASS:
1. Read ahead and prepare a Pre-lab to be handed in before you start class. The Pre-labs will be graded.
2. You must wear a lab coat in class.
3. You may NOT wear open toed or meshed shoes at any time.
4. You must have your lab manual or a copy of the lab exercise (appropriate assignment) in class at all times.
5. DO NOT enter the Lab without your Teaching Assistant or your Professor being present.
6. DO NOT apply lip gloss, lip stick or any other lip protectors in lab. If medically required, apply only areas outside of the lab area
7. DO NOT wear jewelry in class.
8. DO NOT use your cell phones or any other electronic media unless you have the consent of the Professor.
9. Adhere to the safety protocol found in your preface of your lab manual.
10. Unlike BMS 1004, BMS 2004 lab reports will mainly focus on detailed background research of the topic under study. Students will write detailed lab reports according to the APS format. A minimum of six references are required for pre-labs and the post-labs.
11. Understand the APS reference format, see NYU Classes for details.
12. Email your TA immediately if you have any questions!

EACH GROUP MUST HAVE
1. 2 Dissection Kits
   a. Scissors, Forceps, 2 Blunt probes, 1 attached Scalpel.
2. Nitrile Gloves will be supplied to proven latex sensitive students, please speak with your Lab Professor.
Schedule of Exercises
(Chapters # Corresponds with the 16th Edition of the Lab Manual):

1. Development I and Diversity of Life
   Chapter 4: Development: Slides of Starfish, Frog, and Chick Development; Embryogenesis of Protostome; Neuralation
   Part II Assessment Exam, Part I will be taken during Recitation

2. Development II: Differentiation of Tissue; Diversity from Protista to Cnidaria (Guide to Lesser Organisms)
   Chapter 5: Systematics and Morphology: Taxonomy and Body Structures
   Chapter 6: Unicellular: Amoeba, Paramecium, Euglena, Volvox, Plasmodium
   Chapters 7 and 8: Porifera and Cnidarians: Sea Sponges, Obelia, Hydra, and Scypha

3. Development of Coeloms and Symmetry
   Chapters 9, 11 and 12: Planaria, Flatworms, Flukes, Round worms and Earthworms (intro)

4. Development of Coeloms and Symmetry II
   Chapters 10 and 11: Earthworms, Leeches, Lugworms, Bivalves, Cephalopods

5. Upper Invertebrates
   Chapter 13: Arthropoda: Crayfish, Spiders, Black Widow, Scorpions, Horseshoe Crab, and Grasshopper

6. Practical I

7. Deuterostomes and Lesser Chordates
   Chapters 14, 15 and 16: Echinodermata and Chondrichthyes: Sea Star and Dogfish

8. Osteichtyhes and Amphibia; Understanding Muscle Types
   Chapters 17 and 18: Perch and Frog

9. Fetal Pig I
   Chapter 19: External Anatomy, Thoracic Cavity, Pulmonary and Cardiovascular Systems and Sheep Heart.

10. Fetal Pig II
    Chapter 19: Abdominal Cavity: Digestive, Renal and Reproductive Systems.

11. Fetal Pig III – Nervous System Development
    Chap 19: Abdominal Cavity: Renal, Reproductive, Nervous System and Sheep Brain

12. Nervous System – Sensory Systems
    Eye and Ear

13. Practical II