

HUMAN ANATOMY & PHYSIOLOGY I

STUDY GUIDE FOR LAB PRACTICAL II

INSTRUCTOR: CJ SHUSTER

- you must also know all diagrams (including associated word lists).
- you must know all microscope slides and dissections as outlined on this study guide.
- you are also responsible for the wall charts.

THIS IS A REVIEW, AND DOES NOT INCLUDE DRAWINGS, VALUES ETC. FROM THE MANUAL!!!!!! THIS IS NOT A CONTRACT!!! My only guarantee is that this will cover 90-95% of the items seen on the lab practicals.

CHAPTER 21-SPINAL CORD & NERVES:

Know these nerves:

phrenic
median
ulnar
radial
axillary
femoral
obturator
sciatic
tibial

Know the image of nerve structure in lecture book and slide of nerve

know the names of the reflexes, and generally how they are tested

A. ARM MODEL:

axillary n.
brachial plexus
median n.
musculocutaneous n.
radial n.
ulnar n.

B. LEG MODEL:

common peroneal n.
femoral n.
sciatic n.
tibial n.
saphenous n.
popliteal n.

C. SPINAL CORD X-SECTION MODEL (with vertebrae):

anterior/ventral root
anterior column of white matter
anterior horn of grey matter
anterior median fissure
arachnoid mater
central canal
dura mater
epidural space
grey commissure
lateral horn of grey matter
lateral column of white matter
all meninges and spaces
posterior/dorsal root
posterior horn of grey matter
posterior median sulcus
spinal ganglion / dorsal root ganglion
spinal nerve
subarachnoid space
subdural space

D. OTHER SPINAL CORD X-SECTION MODELS:

Everything you can see on above list.

E. FULL SPINAL CORD MODEL (flat mount & the model that shows the curvatures):

cervical plexus
brachial plexus
cervical enlargement
intercostal nerves
lumbar enlargement
lumbar plexus
conus medullaris
sacral plexus
cauda equina
cervical, thoracic, lumbar, sacral and coccygeal nerves

ALSO: know the curvatures on the curved model

F. SLIDE--X-SECTION OF SPINAL CORD:

Pia, dura & arachnoid mater (high power)
central canal
grey & white matter
dorsal root ganglion
posterior (dorsal) horn of grey matter
anterior (ventral) horn of grey matter
anterior median fissure
posterior median sulcus

G. DIAGRAM - NERVE

know all the terms of the image in your **lecture book (13.3)**.

H. SLIDE - NERVE ("medullated")

endoneurium
perineurium
fasciculus or fascicle
blood vessels

I. SLIDE - NEUROMUSCULAR JUNCTION

Find these using the photo in the "Muscle Tissue" lab in your lab book:

axon
axon terminal
end bulb
vesicles with neurotransmitter

J. REFLEXES

Go over the hand-out. Know the category of each reflex, and basically how it is tested. Be prepared for questions like "Which reflex is tested by scraping a sharp object along the sole of an adult's foot? What category of reflex is this?"

(I). Somatic Reflexes (those in bold face are in lab book.)

1. Spinal reflexes
 - i. Stretch: **Patellar, Biceps, Triceps & Achilles'**
 - ii. Superficial: Plantar & **Babinski's sign**
2. Cranial
 - i. Corneal
 - ii. Gag

(II). Autonomic Reflexes: know pupillary reflex, contralateral vs ipsilateral

Guide for Spinal Labs

This is a guide for what the student should learn off of the various models, dissections, etc. This is a guide only; it is not an exclusive list.

Models/Charts found in Regular Lab & Learning Lab

Nervous system Flat Mount: see word list

Nervous System With Curvatures: see word list

Cross section: Blue see word list

Cross Section: Green see word list

Cross Section: with vertebrae see word list

Spinal Cord Chart: Any word list term.

Muscle Wall Chart - Types of Muscle Tissues:

Spinal Cord biomount (small): can see the meninges

Cat Nervous System Biomount: student is not responsible for any terms on practical. Use it as a study guide.

Cat Dissections

None currently for these labs

Slides:

The slides are set up as demos in regular lab. You'll have to set them up in learning lab. Look at these:

Ox Smear: know parts of neuron

"Medullated" nerve slide: know parts of the nerve. There is not one in lab book; use **lecture book photo** instead. Know these terms: endoneurium, perineurium, fasciculus, blood vessels.

Neuromuscular Junction

Peripheral Nerve: if this slide is out, put it on low power and put the "phase adjustment" on '10'

Other

Percussion hammers, pen lights and tongue depressors for testing reflexes. These may not be in the study lab.