Biol 2404 Lecture Outline for Exam II: **Introduction to Cells & Tissues**

I. I	Membranes & Glands
]	Define "Organ"
]	Membranes
	Kinds of Membreanes
	Mucous
	Serous
	Serous
	pleura
	pericardium
	peritoneum
	vigoanal va maniatal
	visceral vs parietal
	Synovial

Glands		
II. Integumentary System		
General Functions		
Layers		
Epidermis		
Dermis		

Cutaneous

Skin Color		
Derivatives of the skin		
hair		
nails		
skin glands		
TIL Chaladal Cardana Carra I		
III. Skeletal System - General Functions of the skeletal system		

Hypodermis

general structure of bone organs	
bones	
kinds of bones	
killus of bolles	
general structure of a long bone	
general suraction of a rong world	
microscopic structure of bone tissue	

cartnage
microscopic structure of cartilage tissue
kinds of cartilage tissues
IV. Skeletal System Anatomy bone markings
two subdivisions of the skeletal system
skull
facial bones vs cranial bones
fontanels

	sinuses
	examples of paired skull bones
	examples of unpaired skull bones
ve	ertebral column
	regions of vertebral column

ribcage		
sternum		
ribs		
nectoral annowde ac		
pectoral appendage		
upper arm		
lower arm		

hand

pelvic appendage		
girdle		
upper legs		
lower leg		
foot		
2000		
V. Skeletal Articulations		
classification:		
by degree of movement		

by structure

immoveable fibrous joints	
slightly moveable cartilaginous joints	
freely moveable synovial joints	
tendons vs ligaments	
bursae	
VI. Skeletal Physiology	
composition of bone	
importance of calcium	

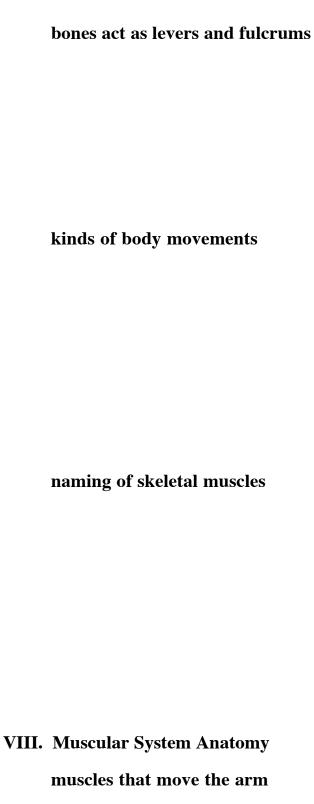
examples of each type

kinds of bone cells
bone formation and ossification
effects of hormones on bone growth

VII. Muscular System - General general functions of muscular system

fibrous connective tissue		
nervous tissue		
muscle tissue		
blood supply and compartmen	ts	
some basic principles of muscle fu	ınction	
muscle can only null not nush	шсион	

general structure of muscle organs



pectoral girdle

upper arm		
lower arm		
hand		
musales that mayo the log		
muscles that move the leg		
muscles that move the leg upper leg		
upper leg		

muscles of the head & neck	
muscles of the thorax	
breathing muscles	
muscles of the abdominal wall	
IX. Muscular Physiology	
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general structure of muscle cells	

now a muscle cell contracts & relaxes
kinds of muscle contractions
twitch
tetanus
isotonic
isometric
"all or none" vs "graded strength"

threshold	
motor unit	
recruitment	
energy requirements of muscles	
aerobic respiration	
anaerobic respiration	
function of glycogen	
function of myoglobin	
fatigue and oxygen debt	