Bio 111 Lab 10: Reproduction and Development

Intro to fertiliza Identify and kr ovary oviduct	ation and development now the function of: placenta chorion		<u>r pig uterus and fetu:</u> uterus cervix		<u>×s.</u> vagina	uterine horn	amnion	
What are some key differences between humans and pigs?								
I. Reproducti A. Compare Work together testis bulbourethral	i on human rej to identify <i>ep</i> gland urd	oroductive and know th ididymus ethra	system mod ne function c vas deferen bladder	dels to pa f: s pelvic i	i ges 20 2 bone penis	2 - 207 . prostate glan colon	d	
Work together to identify and know the function of:ovaryuterusvaginaurethraoviductcervixbladderclitoris (notice blue color on both models: same tissue as glans penis).II. Introduction to Development: fertilization & membranesA. Read p. 263 - 265 and Figure 19.1 describe:growth								
differentiation	1							
morphogenesis								
zygote								
morula,								
blastula.								
B. Read p. 250 ("extraembyonic membranes"), Figure 19.4 and Figure 19.5 Be able to identify on a diagram (see back bench illustration) and tell the function of: <i>amnion</i>								
yolk sac								
allantois								
chorion								
albumen								
fetal/maternal placenta								
What portions of an <i>unfertilized</i> chicken egg = the ovum								
What portions of a <i>fertilized</i> egg are a part of the zygote? the ovum? Neither?								
C. Chick Development ***What are the key differences in the bird and mammal arrangement and function of membranes?***								

View demonstration of the live 48 hour and 96 hour chicks: Take notes and/or listen carefully

Key Terms

- o Ovum
- o Albumen
- o Shell
- Germinal vesicle with nucleus
- Vitelline blood vessels

- o Yolk sac
- o Amnion
- Chorion
- o allantois

III. Development: growth, differentiation, and morphogenesis of the embryo

A. Chick development: read pages 268-277 and work together viewing slides at your desks. **Match** the following structures or processes to the appropriate age chick. Determine the stage at which each appear.(some could be visible on more than one):

distinct flexure and torsion
digestive system
somites
<u>i</u> nvagination
allantois,
hind limb bud.
neural fold
yolk sac
limb buds
brain

B. Human development: view photo series (back of room) and preserved specimens (cart).

What chick embryo looks most like the 5 week human embryo? Be able to identify: *brain, eye, heart, limb buds, somites, tail.*

Next Week (Mon-4/16 & Fri-4/20) : Field Trip

-Wednesday students must sign up today for Friday (see me if there is a conflict)

-Meet on Graham Ave. near Handicapped Parking Lot instead of coming to classroom

-Bring your manual and pencil

-Wear proper clothing and footwear for walking outdoors