

EM II Microscopic Anatomy and Embryology II (*old curriculum*)

TOPIC LIST FOR THE EMBRYOLOGY PART OF THE FINAL EXAMINATION

General Embryology and the development of the musculoskeletal system, skull

Spermatogenesis, spermiogenesis

Oogenesis

Fertilization, cleavage of the zygote

Blastocyst formation; the bilaminar embryonic disc

Implantation

Formation of body axes, parts of the early embryo (yolk sac, amnion, chorion, body stalk)

Gastrulation

Formation of the intraembryonic mesoderm; the notochord

Neurulation (neural tube and neural crest)

Derivatives of ectoderm, endoderm and mesoderm

Folding of the embryo

The structure and function of the placenta

Development of the fetal membranes (chorion and amnion), umbilical cord

Twin formation

Membranous and cartilaginous neurocranium and viscerocranium

Development of the limbs and vertebral column

Development of the muscular system

Development of organ systems

Development of the primitive vascular systems

Development of the heart

Development of arteries

Development of veins (inferior vena cava, portal vein, superior vena cava, azygos and hemiazygos)

Fetal circulation

Face development (oral and nasal cavities)

Development and differentiation of the foregut

Derivatives of pharyngeal pouches and grooves

Derivatives of pharyngeal arches

Development of the tongue, tooth development

Development and differentiation of the midgut

Development and differentiation of the hindgut

Formation of the liver and pancreas

Development of the peritoneum

Development of the lower airways including the lungs

Development of the diaphragm, division of the body cavities

Kidney development

Development of the urinary passages

Gonadal development, formation and migration of primordial stem cells

Development of the male genital tract

Development of the female genital tract

Development of the male/female external genitals

Development of the nervous system and organs of special senses

Development and primary differentiation of the neural tube

Development of brain vesicles

Development of the peripheral nervous system (neural crest, placodes)

Development of the organ of vision

Development of the organ of hearing&equilibrium