Learning Guide: Growth and Development

Study Guidance: Students should understand basic cell division and reproduction, and the hereditary and environmental factors (e.g., tobacco smoke, lead exposure) that may affect the fetus, infant and child. Students should have a concept of growth and development as a continuous process at the macro and cellular level from conception to death. Students should be familiar with the basic concepts of development and growth in infancy, childhood, adolescence and adulthood. Students should be vaguely aware of growth and development as being influenced by many factors including those that are ecological, evolutionary, and environmental.

Be able to discuss the following:
Mitosis versus Meiosis
Growth and development factors in the prenatal period of life
Assisted reproduction (egg and sperm donation, in vitro fertilization)
Birth defects, varying risk factors (e.g., genetics, environmental) and prevention
Development as a biological process
Influence of environmental factors, chemical and physical factors on growth and development
Biological and molecular components of life long development

Be able to define, identify, and differentiate the terms found in the lectures and the glossary with respect to cardiovascular diseases. Here are just some examples.

Cystic Fibrosis
Sickle Cell Anemia
Tay Sachs
Hemophilia
In-Vitro Fertilization
Fetus
Conception
Prenatal
Genetic Disorder
Prematurity
Infancy
Childhood
 Genetic Traits
Somatic Cell
Translation
Transcription
Codon
Fertilization
Spina Bifida
Rubella
Syphilis
Diabetes Mellitus
New Ballard Scale
Apgar Scores
Failure to Thrive

Required Readings: None

Additional Readings and Information Used for Lectures and Glossary
1) Growth and Development Through the Lifespan: by Kathleen M Thies
Chapter 11, 12, 13, 17, 25, 26, 44 (Chapters are only 2-4 pages long)
2) http://www.collegeboard.com/student/testing/clep/ex_hgd.html
4) http://www.cdh.org/HealthInformation.aspx?pageId=P02217: Central Dupag Hospital
5) http://faculty.tcc.fl.edu/hss/mcguffr/Glossary%20of%20Key%20Terms%20in%20Human%20Development.do: Unknown Developer
6) http://www.magicfoundation.org/www/docs/12.801/: Magic Foundation
7) http://www.ucmp.berkeley.edu/glossary/glossary_4.html: UCMP glossary