ECE 227 – Human Development & Personality I: Childhood

Concepts addressed:
Stages of physical development (e.g., gross motor and fine motor development, brain) and implications for learning

Students should refer to the text used in this course, *Children by Santrock (8th Ed)* Chapters 6, 9 & 12.

Specifically, students should review:

**Physical growth and development in infancy**
- Physical growth and development
  - Cephalocaudal & proximiodistal patterns
  - Height & weight
  - The brain
    - The brain’s development
    - The brain’s lobes and hemispheres
    - Early experiences and the brain
- Sleep
  - Sleep-waking cycle
  - REM sleep
  - Shared sleeping
  - SIDS
- Nutrition
  - Nutritional needs and eating behavior
  - Breast-vs.-Bottle-feeding
  - Malnutrition in infancy
- Motor development
  - Reflexes
  - Gross motor skills
    - Development of posture
    - Learning to walk
  - Fine motor skills
- Sensory and perceptual development
  - Sensation & perception
  - Visual perception
    - Visual acuity
    - Color
    - Visual preference
    - Depth perception
    - Visual expectations
  - Other senses
    - Hearing
Touch and pain
Smell
Taste
Intermodal perception
Perceptual-motor coupling

**Physical development in early childhood**

Body growth & change
Height and weight
Brain
  - Brain size
  - Growth curve
  - Neuronal changes
  - Structural changes
  - The brain & cognitive development
Visual perception
Motor development
  - Gross & fine motor skills
Young children’s art
Handedness
  - Origin and development of handedness
  - Handedness, the brain and language
  - Handedness and other abilities
Sleep & sleep problems
  - Transitional objects
Sleep problems
  - Nightmares
  - Night terrors
  - Sleep walking and sleep talking
Nutrition
  - Energy needs
  - Eating behavior
    - Daily eating routines
    - Fat & sugar consumption
    - Sweets, snacks and “fussy eaters”
    - Malnutrition in young children from low-income families
Health, safety, and illness
  - Childhood injuries
    - Range & incidence
    - Preventing childhood injuries
  - Contexts of young children’s health
    - Poverty
    - Home & childcare
    - Environmental tobacco smoke
    - Exposure to lead
    - The state of illness and health in the world’s children

**Physical development in middle and late childhood**

Body growth & proportion
Skeletal & muscular systems
Tooth development
Motor development
Children’s health
Nutrition
Exercise & sports
Health problems
  Obesity
  Cancer
  Cardiovascular disease
  Asthma
  Accidents and injury

Helpful Websites

American Academy of Pediatrics: [www.aap.org](http://www.aap.org)

[www.earlyonmichigan.org/articles/12-03/SH-Brain5-25-03b.htmT](http://www.earlyonmichigan.org/articles/12-03/SH-Brain5-25-03b.htmT)