Study Guide
Test #2

Locomotion Skills

Characteristics of an immature walk
Facts about walking development
Differences between walking and running
Facts about running
Characteristics of a mature horizontal jump
Difference between horizontal jump and hopping
Facts about skipping and hopping

Object Control Skills

Wild’s developmental stages of the overhand throw
Facts about the overhand throw
Total body approach (steps) to the overhand throw
Various factors that affect one’s throw
Facts about the factors as they relate to the overhand throw
Total body approach (steps) to catching
Factors that influence catching
Facts about the factors as they relate to catching
Differences between immature side arm strike and mature side arm strike.
Differences between immature and mature bounce.
Major components of a mature kick.

Models of Development

Haywood’s Steps of development
ABC I CAN Stages of development
Level of Proficiency Model (different levels)
Ecological Task Analysis Approach to motor development

Sensory System and Movement

Changes in the visual development across one’s life span
Changes in visual acuity across one’s life span
Changes in dynamic visual acuity across one’s life span
Changes in coincidence anticipation timing across one’s life span
Effects of aging on visual acuity
Facts about eye dominance, binocular vision, peripheral vision as it relates to motor performance.
Roll central vision plays in controlling motor performance
Roll peripheral vision plays in controlling motor performance
Role vision plays in manual tasks.
How vision controls ballistic skills versus slow, discrete skill of a long duration? 
The roll variable optical tau plays in controlling motor skills. 
How vision operates to catch a ball? 
How vision operates to hit a ball? 
Role the various sense receptors play in providing proprioception information. 
What role does proprioception play in performing a voluntary movement? 
Changes in the auditory system from birth to early childhood. 
The four sources of cutaneous information.

**Physical Changes across One’s Lifespan**

Facts about bone mineral loss by gender and age. 
Changes in max heart rate 
Changes in resting and exercise cardiac output 
Changes in Pulmonary function. 
Changes in V02 max. 
Changes in adipose tissue 
Changes in flexibility 
Effect of resistance trainability on prepubescent children and in the aged. 
Effects of resistance training during puberty. 
Changes in strength. 
Effects of cardiovascular training on prepubescent children, adolescents-adulthood, and with the aged. 
Effects of exercise on the aged.

**Movement in Adulthood**

Reason for studying motor development in the aged. 
Role postural sway on upright balance 
Relationship between balance and falls 
Causes of falls in the aged 
Facts about driving in the aged population. 
Mobility consequence model 
According to Lehman when peak motor performance proficiency occurs. 
Welford’s reasons for changes in motor performance in the aged population. 
Effects of exercise on motor performance. 
Teaching movement skills to the older adult.

**Action Preparation**

Discuss how Hick’s law is relevant to helping us understand the characteristics of factors that influence motor control preparation? 
Understand the following concepts in Chapter 7 about Action Preparation and reaction time:

**Preparation of Movement**
Number of response choices increases RT does what?
Number of response choices decreases RT does what?

**Predictability of stimulus**
100% chance of being correct RT does what?
50%/50% chance of being correct RT does what?

**RT Foreperiod**
When there is no foreperiod? RT does what?
When foreperiod varies? RT does what?
When foreperiod is constant? RT does what?
A foreperiod too short or too long? RT does what?

**Stimulus Response Compatibility**
Response and Stimulus is similar RT does what?
Response and stimulus is not similar RT does what?

**Psychological Refractory Period---What makes good fake??**
Study of the time between different responses to different signals, such as fake.
Delay in RT occurs when the signal and response are not too close or too long in time from the intended action.

**Alertness of the performer**
When performer is too alert? RT does what?
When performer is optimally alert? RT does what?
When performer is not alert? RT does what?

**Focus of Attention on the signal or movement?**
Attention on the signal RT does what?
Attention on the movement RT does what?

**Response Complexity**
Signal and response are similar RT does what?
Signal and response are not compatible RT does what?

**Movement accuracy**
Accuracy demands increase RT does what?
Accuracy demands decrease RT does what?

**With more Practice**
RT does what?

What does a person do from the motor control perspective to get ready to perform?
Another way to state the above question is “What are the motor control activities that occur during action preparation?”

How does performance rituals appear to influence performance?