Chapter 6 Review

Measurement and Evaluation of Human Performance

1. Be able to calculate using a graphing calculator the mean and standard deviation of a given set of values.
2. Understand the values that are represented by +/- 1, 2, and 3 standard deviations in a group of data that is normally distributed.
3. Define and describe the use of T-tests and Correlation
4. Define and be prepared to describe the importance of the following in measuring an individual’s fitness levels and designing a study:
   * 1. Specificity
     2. Accuracy
     3. Reliability
     4. Validity
5. Understand and identify different types of experimental design and be prepared to describe the strength of each
6. Describe the importance of the PAR-Q
7. Define field and laboratory tests and be able to give the strengths and weaknesses of each
8. Define maximal and sub-maximal tests and be able to give the strengths and weaknesses of each
9. Distinguish between Health Related and Skill Related fitness components
10. Define each of the following fitness tests and be able to give an example of a test used to test each one, and advantages/limitations of each
    * 1. Body Composition
      2. Muscular Strength
      3. Muscular Endurance
      4. Flexibility
      5. Cardio-vascular Endurance
      6. Speed
      7. Power
      8. Agility
      9. Reaction Time
      10. Balance
11. Outline the general elements of a general training program and the purpose of each
12. Define and apply the following basic principles of training:
    * 1. Progression
      2. Overload (Frequency, Intensity, Type, Time)
      3. Specificity
      4. Reversibility
      5. Variety
13. Describe the following methods of monitoring exercise intensity
    * 1. Training Heart Rate Concept
      2. Karvonen Method
      3. Training Heart Rate Zone
      4. BORG scale
      5. OMNI scale
      6. CERT scale