Unit Objectives: Unit 4

_Students should be able to:_

1. Explain the concept of reliability in terms of true score variance versus error variance.

2. Describe the methods and conceptual information derived from the following types of reliability:
   - Measures of stability
   - Measures of equivalence
   - Measures of internal consistency

3. Identify the sources of error associated with measures of stability, equivalence, and internal consistency.

4. Explain reliability in terms of the concepts of accuracy and consistency.

5. Explain the concept underlying standard error of measurement.

6. Calculate, from memory, the formula for standard error of measurement.

7. Accurately interpret an examinee's performance on a test using the concept and calculation of the standard error of measurement, in addition to the use of confidence intervals.

8. Explain the methodological and utilitarian differences between the various measures of internal consistency—split half, KR-20, KR-21, and coefficient alpha.

9. Describe the conditions under which the reliability of a difference score would be calculated, and what the value means.