FIVS 435

Three page review of a scientific discipline

Forensic scientists are expected to understand both the scientific and legal value of scientific research. It is also important to understand the potential differences in the scientific quality of forensic and non-forensic applications of a scientific discipline. You must find a scientific discipline that is presented in a court case found on either the LexisNexis or Westlaw databases; then you must find six related scientific articles (three from a non-forensic application of the discipline and three from a forensic application of a discipline) and evaluate the scientific quality within and between applications of the discipline.

Format: Minimum of three pages (not counting references); maximum of four pages; double spaced; 11 point text; Times New Roman font.

An assignment that is considered well written will possess the following:

1. Proper referencing
2. Logical, cohesive, accessible, respectful, and valid arguments
3. Logical organization
4. Arguments relevant to the topic
5. Proper grammar

A presentation that is considered well presented will possess the following:

1. A well prepared and presentable speaker
2. The same qualities noted for a well written paper
3. Engagement of the speaker with the audience

FIVS 435 (50 points written, 50 points oral)

You will be evaluated on your comprehension of the scientific method as it applies to your chosen discipline. **You must address the following questions for both the 1) forensic science and 2) non-forensic science applications of the discipline:**

1. Are there testable hypotheses in the discipline?
2. If so, what are typical hypothesis tested in the discipline?
3. How do researchers operationalize their hypotheses?
4. Do the researchers measure what they claim to measure?
5. Are the interpretations of the researchers valid?

You must also compare and contrast the sub-disciplines:

1. What are differences in the hypotheses tested between sub-disciplines?
2. Is one sub-discipline more scientific than the other? Why?
3. Would Popper and Lakatos agree as to whether or not each sub-discipline is scientific?
4. Is there a balance in the depth of knowledge and technical capabilities demonstrated by practitioners of each sub-discipline or is there a large imbalance between sub-disciplines?
5. What are possible reasons for any differences between sub-disciplines?