Rubric for Learning Commentaries

Element	Excellent	←→		Inadequate
Physics Content	Essay demonstrates deep understanding of physics covered in class; essay addresses the complexity and ambiguity implicitly raised by class activities. (7 points)	Essay demonstrates solid understanding of physics covered in class; central idea is worth developing, but may be limited to material explicitly covered in class. (5 or 6 points)	Essay demonstrates surface understanding of physics explicitly covered in class, perhaps with some minor mistakes; central idea may be too obvious or simple. (3 or 4 points)	Essay exposes flawed thinking about basic physics ideas covered in class or the essay contains little or no physics. (0 to 2 points)
Reflection	Essay critically analyzes the limits/strengths of the author's own learning process and the author's current understanding about a physics subject. (7 points)	Essay examines the author's own learning process about a physics topic, including some description of author's prior knowledge and current understanding. (5 or 6 points)	Essay demonstrates some thinking about the author's learning process concerning a physics topic. (3 or 4 points)	Essay does not examine or is uncritical about the author's learning process concerning a physics topic. (0 to 2 points)
Focus	Essay coherently follows the development of the author's own thinking concerning a single physics concept *or* explores the author's learning during a single class activity; details clearly relate to a single central theme. (2 points)	Essay follows the development of the author's own thinking concerning a single physics concept *or* explores the author's learning during a single class activity, but details may not clearly relate to the central theme of the essay. (1 point)		Essay lacks coherence or addresses too many topics. (0 points)
Support	Essay uses evidence appropriately and effectively; evidence convincingly supports central idea of essay. (3 points)	Essay uses evidence to support the essay's central idea. Essay begins to explain connections between central idea and evidence. (2 points)	Essay often uses generalizations to support ideas; connection between evidence and essay's main idea may not be readily apparent. (1 point)	Evidence is missing or does not support central idea of essay. (0 points)
Clarity/Mechanics	Essay is easy to read. Uses words precisely and effectively. Sentences are well structured and writing style makes the logical structure of the ideas presented evident. Paper is almost entirely free of punctuation, spelling and grammar mistakes. (3 points)	Essay is generally easy to read, but has imperfections. The writing style might obscure the logical structure of ideas. Essay may contain some errors which may annoy the reader, but do not impede understanding. (2 points)	Essay contains some errors that temporarily confuse the reader but do not impede overall understanding. (1 point)	Essay is difficult to read or interpret. Essay contains many errors that block the reader's ability to see connections between thoughts. (0 points)

To construct a grade from this rubric:
- If the student gets a *zero in any box*, the student must *rewrite* the Learning Commentary.
- Otherwise, **add** the scores for each category together. Scores of 20 and up are considered "perfect papers." To get percentages, divide the score by 20.