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| ***Secondary Science Methods* Rubric for Assignment 7 – Unifying Concepts in Science**  **Total of 100 points** | | | | |
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| **Subarea Score \***  **(with NSTA standards)** | **Unacceptable** | **Acceptable** | **Competent** | **Exemplary** |
| Five articles addressing special needs’ student accommodations in science  *NSTA Standards 5a, 5b, 5f and 8a* | 0-18 There were not three articles reviewed that contained at least 3 sentences each, and/or the topic did not relate to science, and/or each did not have a response | 19-23 All three article reviews contained a description of at least 3 sentences, the topic related to secondary science, and had a personal response | 24-27 All three article reviews contained a description of at least 3 sentences, the topic related to secondary science, and had a personal response that was insightful | 28-30 All three article reviews contained a thorough description of at least 3 sentences, the topic related to secondary science, and had a personal response that was thorough and insightful |
| Modifications to science lessons for impaired students  *NSTA Standards 5b, 9a and 10c* | 0-7 No description of modifications was given or it was too brief to adequately explain changes for the disabilities listed a) - d) | 8-10 A description of modifications for written material, lab experiences and lectures was given to detail the disabilities listed as a) - d) | 11-13 A 2 or more sentence description of modifications for written material, lab experiences and lectures was given to detail the disabilities listed as a) - d) | 14-15 A thorough 2 or more sentence description of modifications for written material, lab experiences and lectures was given to detail the disabilities listed as a) - d) |
| Determining scientific validity using the nature of science  *NSTA Standards 2b, 2c, 3a, 3b and 4b* | 0-14 No lesson for the nature of science was planned or it was done poorly without consideration of each of the lesson’s intended objectives | 15-19 Lesson plans for instruction on the validity of sources, the peer-review process, and the different venues for conveying new science information | 20-23 Lesson plans for detailed instruct-tion on the validity of sources, the peer-review process, and the different venues for conveying new science information | 24-25 Lesson plans for detailed and thorough instruction on the validity of sources, the peer-review process, and the different venues for conveying new science information |
| Building on prior knowledge and beliefs of students  *NSTA Standard 5e* | 0-4 No new objectives were given or they were poorly done without adding any personal relevance to the lessons | 5-6 At least 2 new objectives were included that incorporate local or recent events to build upon prior knowledge and add personal relevance to the unit | 7-8 At least 2 new objectives were detailed and explain-ed that incorporate local or recent events to build upon prior knowledge and add personal relevance to the unit | 9-10 At least 2 new objectives were thoroughly detailed and explained that incorporate local or recent events to build upon prior knowledge and add personal relevance to the unit |
| Relevance of the Unifying Concepts in Science  *NSTA Standard 1b and 2a* | 0-3 The relevance of each of the 13 unifying concepts to the selected life science discipline was not explained | 4 The relevance of most of the 13 unifying concepts to the selected life science discipline was explained | 5-6 The relevance of each of the 13 unifying concepts to the selected life science discipline was explained | 7 The relevance of each of the 13 unifying concepts to the selected life science discipline was thoroughly explained |
| Connection of the Unifying Concepts in Science  *NSTA Standard 1b and 2a* | 0-3 No connections between the concepts among life science with other disciplines is explained | 4 The connections between the concepts among life science with other disciplines is explained | 5-6 The connections between the concepts among life science with other disciplines is thoughtfully explained | 7 The connections between the concepts among life science with other disciplines is thoughtfully and insightfully explained |
| One unifying concept explained socially and historically with modern relevancy  *NSTA Standard 1b and 2a* | 0-3 No unifying concept was explained and/or it did not include the historical relevancy and a modern application | 4 One unifying concept was ex-plained and included some historical relevancy and some application to a modern application | 5 One unifying concept was explained and included the historical relevancy as well as a modern application | 6 One unifying concept was thoroughly explained and included the historical relevancy as well as a modern application |

\*The acceptable level is the minimum allowed score.