

Literacy Solutions PD, Inc. - ONLINE

ELA and Next Gen Science, Grades 9-12

Dates & Times: Online: This 15-hour online, asynchronous course, divided into 10 modules

COURSE DESCRIPTION:

The Next Gen Science Standards and expectations that align with the Common Core Standards for English Language Arts in reading, writing, listening and speaking are the fundamentals of expanded study. Through the development and use of models, investigations, analysis, interpretation of data, and the use of applied thinking strategies to demonstrate understanding of core scientific concepts, participants will develop, practice with, and plan to implement literacy teaching strategy into science curriculum as they align to the expectations of Next Gen Science Standards and the Common Core. Through the citing of evidence, provision of support for ideas and text, gathering of information from multiple sources, transfer of visual information to the written, participants will understand how to help students make the important leaps from curriculum and knowledge, to application through hands-on performance tasks.

STUDENT LEARNING OUTCOMES:

Upon completion of this course, the student will be able to:

- Explain the Next Gen Science Standards and their alignment to the Common Core.
- Develop, practice with, and implement the teaching of literacy strategy into grade appropriate science curriculum as it supports the Common Core and Next Gen Standards.
- Devise the facility to help students make important leaps from curriculum and knowledge to hands-on performance tasks.

TEXTS, READINGS, INSTRUCTIONAL RESOURCES:

- Achieve, Inc. (2013). On behalf of the twenty-six states and partners that collaborated on the NGSS. Next Generation Science Standards.
- (2011). A Framework for K-12 Science Education: Practices, crosscutting concepts, and core ideas (p. 10). Washington DC: National Academies Press. Retrieved from http://www.nap.edu/catalog.ph/?record_id=13165
- Jost, M., Carter, T., Lipscomb, N., Worrell, T. W., & Shimmel, K. (2011). NASA Summer Research Institute: Enhancing 21st Century Teachers' Capacity for STEM Instruction. *National Teacher Education Journal*, 4(4), 61-69.
- Shanahan, T., Callison, K., Carriere, C., Duke, N. K., Pearson, P. D., Schatschneider, C., & Torgesen, J. (2010). *Improving Reading Comprehension in Kindergarten Through 3rd Grade: A Practice Guide (NCEE 2010-4038)*. Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved 2/3/2014 from [whatworks.ed.gov/publications/practice guides](http://whatworks.ed.gov/publications/practice_guides).

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- Shiverdeck, T. Reading Through the Lens of Inquiry. Adolescent Literacy in Perspective, February, 2009 (p. 11).
- Fisher, D., Frey, N., and Williams, D. (2002). Seven literacy strategies that work. Reading and Writing in the Content Areas. V60(3).
- Mayes, R., & Koballa Jr., T. (2012). Exploring the Science Framework. Science & Children, 50(4), 8-15.
- Senn, G., McMurtrie, D., & Coleman, B. (2013). RAFTing with raptors: Connecting science, English language arts, and the Common Core State Standards. Middle School Journal, 44(3), 52-55.

COURSE REQUIREMENTS:

Students will have 10 weeks to complete each course, after which time they will be un-enrolled. If you need an extension, please email the instructor. Complete one module at a time. This is a 15-hour course. Each module will take approximately 1.5 to 2 hours to complete, give or take with some less and some more, to constitute 15 full instructional hours. The system will auto-check the course components when the requirements have been met. Requirements include reading lectures, viewing video, and responding to discussion prompts or scenario prompts. Keep in mind that:

- Some course elements are optional such as grade-band video and resources, in which case you can toggle over the check box and self-check to keep a record of your progress.
- Certificates of Completion will be made available in the final module once all assignments are submitted, participation and hours requirements met.

In order to receive a Passing grade, the participant must complete the following course requirements:

- All discussion forums and/or scenario responses must include 1 original post to the question prompt and one to another student in the cohort.
- All video viewed. When there are several video divided by grade-band, select the appropriate and view.
- All books read in full, scrolling from beginning to end.
- All practice lessons and/or activities complete.
- All assignments complete (lessons or unit plans)
- Certificates will not be printable until all of the above conditions have been met, with a passing grade issued by the instructor.

Grade Scale:

Grading will be Pass/Fail: A minimum score of 80% will be required to pass.