



NEW JERSEY CENTER
FOR TEACHING & LEARNING

MET-6101: PSI-PMI Methods and Pedagogy

Course Credit: 2.0 NJCTL credits

Dates & Times:

Graduate Student Handbook: njctl.org/graduate-handbook/

COURSE DESCRIPTION:

This course prepares teachers to instruct students using research-proven methods; methods that were initially developed for the Progressive Science Initiative® (PSI®) and are now being successfully extended to other domains. Teachers will learn best practices for curriculum, pedagogy, technology, formative and summative assessment, grading, and pacing and how those are woven together to create a highly effective teaching and learning environment. Specific topics include best practices for brief direct instruction, inquiry, modeling, facilitating group discussion, social constructivism and frequent formative assessment, inquiry-based science labs, mastery-based summative assessment, appropriate use of retakes to encourage persistence and mastery. Instruction will also focus on the use of student polling devices to drive instruction through formative assessment.

Pre-requisite: None

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STUDENT LEARNING OUTCOMES:

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

- 1 Evaluate your own teaching practice and how to incorporate the PSI-PMI methodology into your classroom.

- 2 Justify the use of formative assessment as a critical teaching tool that is used to guide both teaching and learning.
- 3 Create a positive classroom learning environment that supports risk-taking and growth.
- 4 Evaluate which technology options will best allow you to incorporate PSI-PMI in your classroom.
- 5 Combine short direct instruction with demos and hands-on activities that engage learners.
- 6 Develop ideas for differentiating lessons in your classroom.

TEXTS, READINGS, INSTRUCTIONAL RESOURCES:

Required Texts:

National Research Council. *How People Learn: Brain, Mind, Experience, and School: Expanded Edition*. Washington, DC: The National Academies Press, 2000. ISBN: 978-)-309-07036-2

Please see attached Works Cited for additional course readings

Online Resources:

[New Jersey Center for Teaching & Learning - Course Materials, Media Videos, and Instructional videos](#)

Other Recommended Readings:

[Common Core Mathematics Standards](#)

[New Jersey Student Learning Standards for Mathematics](#)

[Ferlazzo, L. \(2012, January 9\). The best resources on differentiating instruction. Retrieved July 20, 2016, from Edublogs, <http://larryferlazzo.edublogs.org/2012/01/09/the-best-resources-on-differentiating-instruction/>](#)

[Framework for 21st Century Learning](#)

[Next Generation Science Standards](#)