



NEW JERSEY CENTER  
FOR TEACHING & LEARNING

## **MET6104: PSI-PMI Field Experience 2**

### **Alternate Course Numbers/Titles:**

- MATH6404: MS Mathematics Field Experience 2
- MATH6408: HS Mathematics Field Experience2
- PHYS664: Physics Field Experience 2
- CHEM6704: Chemistry Field Experience 2
- CSCI6304: Computer Science Field Experience 2

**Course Credit:** 3.0 NJCTL credits

### **Dates & Times:**

This is a 3-credit, self-paced course, covering 5 modules of content. The exact number of hours that you can expect to spend on each module will vary based upon the module coursework, as well as your study style and preferences. Outside of this online course, you should plan to teach at least one course section of the content aligned with your endorsement program for a minimum of ten (10) consecutive weeks. Within this course, you should plan to spend 3-5 hours per module, completing the required written reflections and video submissions.

**Graduate Student Handbook:** [njctl.org/graduate-handbook/](http://njctl.org/graduate-handbook/)

### **COURSE DESCRIPTION:**

This is the second of two field experience courses in which candidates teach at least one section of PSI Physics or Chemistry, Biology, MS Science, PMI Mathematics (MS or K12), or Computer Science to students. Learners will develop a deeper understanding of PSI, PMI, or Computer Science content and teaching methods. Content topics will be drawn from prerequisite coursework.

### **STUDENT LEARNING OUTCOMES:**

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

1. Evaluate which technology and materials will best allow you to incorporate the PSI-PMI methodology and address PSI or PMI subject matter in your classroom.\*
2. Demonstrate the use of effective protocols to support classroom processes.
3. Combine short direct instruction with demos and hands-on activities that engage learners in

- risk-taking and growth as they learn about PSI or PMI subject matter.
4. Demonstrate the use of various questioning techniques designed to elicit rich classroom discussion and evidence of student understanding of PSI or PMI content.
  5. Justify the use of formative assessment as a critical teaching tool that is used to guide both teaching and learning of PSI or PMI content from the first content course(s) in each NJCTL Program.
  6. Develop and utilize ideas for managing behavior and maximizing social constructivism in your classroom.
  7. Justify the selection and use of various reflexive teaching strategies designed to match instruction with student readiness to learn about PSI or PMI subject matter.
  8. Demonstrate mastery of, and fluency with, PSI or PMI content from the first content course(s) in each NJCTL Program.
  9. Demonstrate mastery of the use of PSI- or PMI-specific activities from the first content course(s) in each NJCTL Program.

## **TEXTS, READINGS, INSTRUCTIONAL RESOURCES:**

### **Required Texts:**

None

### **Recommended Texts:**

You should familiarize yourself with the Teacher Self-Reflection Checklist available within the course. If you need a refresher on any of the elements that are briefly highlighted in this Checklist, be sure to re-visit MET6121, available in your Moodle course dashboard.

You may choose to reference your textbooks from prerequisite courses.

### **Instructional Resources:**

- Google Drive (or other “cloud”) Account: You will use your account to create shareable links to a variety of materials, including release forms and video artifacts.
- Mobile Device with Camera: Likely, a smart phone, which you will use to capture video evidence of your mastery of PMI application.
- Bluetooth Microphone: A Bluetooth headset that is connected to your video recording device will capture quality audio of your teaching, and is required. You can purchase one from Amazon, BestBuy, etc. for about \$20-\$30, if you do not have one already.
- Mobile Device Bracket & Tripod: These are optional but may help you to gain better quality recording

## **COURSE REQUIREMENTS:**

Consistent attendance in your online courses is essential for your success. Failure to verify your attendance within the first 7 days of this course may result in your withdrawal. If for some reason you would like to drop a course, please contact your advisor.

Online classes have assignments and participation requirements just like on-campus classes. Budget your time carefully. If you are having technical problems, problems with your assignments, or other problems that are impeding your progress, let your instructor know as soon as possible.

## GRADE DISTRIBUTION AND SCALE:

In order to receive a Passing grade, the participant must complete the following course requirements: signed release forms; written reflections; and video submissions outlined in the *Assignments* section of the Class Schedule (below).

### Grade Distribution:

Portfolio Project (Video Uploads)	75%
Written Reflections	25%

### Grade Scale:

A	93 – 100
A-	90 – 92
B+	86 – 89
B	83 – 86
B-	80 – 82
C+	77 – 79
C	73 – 76
C-	70 – 72
D	60.0 – 69.9
F	59.9 or below

## Grading Rubrics:

The following rubric is used to grade the written reflections:

<b>Content</b>	Meets Expectation - Demonstrates excellent knowledge of concepts, skills, and theories relevant to topic. <i>7 points</i>	Approaches Expectation - Demonstrates fair knowledge of concepts, skills, and theories. <i>5 points</i>	Below Expectation - Demonstrates incomplete or insubstantial knowledge of concepts, skills, and theories <i>3 points</i>	Limited Evidence - Demonstrates little or no knowledge of concepts, skills, and theories. <i>1 points</i>	No Submission <i>0 points</i>
<b>Depth of Reflection</b>	Meets Expectation - Content is well supported and addresses all required components of the assignment. <i>7 points</i>	Approaches Expectation- Content is partially supported; addresses most of the required components of the assignment. <i>5 points</i>	Below Expectation - Content contains major deficiencies; addresses some of the required components of the assignments. <i>3 points</i>	Limited Evidence - Content is not supported and/or includes few of the required components of the assignment. <i>1 points</i>	No Submission <i>0 points</i>
<b>Evidence and Practice</b>	Meets Expectation - Response shows strong evidence of synthesis of ideas presented and insights gained throughout the entire course. The implications of these insights for the respondent's overall teaching practice are thoroughly detailed, as applicable. <i>7 points</i>	Approaches Expectation - Writing is mostly clear, concise, and well organized with good sentence/paragraph construction. Thoughts are expressed in a coherent and logical manner. There are no more than five spelling, grammar, or syntax errors per page of writing. <i>5 points</i>	Below Expectation - Response is missing some components and/or does not fully meet the requirements indicated in the instructions. Some questions or parts of the assignment are not addressed. Some attachments and additional documents, if required, are missing or unsuitable for the purpose of the assignment. <i>3 points</i>	Limited Evidence - Response excludes essential components and/or does not address the requirements indicated in the instructions. Many parts of the assignment are addressed minimally, inadequately, and/or not at all. <i>1 points</i>	No Submission <i>0 points</i>
<b>Writing Quality</b>	Meets Expectation - Writing is well organized, clear, concise, and focused; no errors <i>4 points</i>	Approaches Expectation - Some minor errors or omissions in writing organization, focus, and clarity. <i>3 points</i>	Below Expectation - Some significant errors or omissions in writing organization, focus, and clarity. <i>2 points</i>	Limited Evidence - Numerous errors in writing organization, focus, and/or clarity. <i>1 points</i>	No Submission <i>0 points</i>

The following rubrics are used to grade the three video submissions.

<b>Module 2 Video Rubric: Short, Dynamic Direct Instruction - and - Formative Assessment &amp; Student Polling</b>			
<b>Grading Criteria (30 points total)</b>	<b>Meets Expectation 5 points</b>	<b>Approaches Expectation 4 points</b>	<b>Below Expectation 3 points</b>
<p><b>Student Engagement</b></p> <p>1) Most students maintain physical attentiveness</p> <p>2) Most students participate with multiple peers in group learning</p> <p>3) Appropriate evidence of active learning (i.e. student involved in the discussion)</p> <p>4) Students are seated in groups</p> <p>5) All students submitting answers using a polling tool</p>	All are shown	4 criteria shown	Fewer than 4 criteria shown
<p><b>Content Delivery</b></p> <p>1) Teacher clearly states the objective/purpose of the lesson</p> <p>2) Delivers content in a clear and concise manner</p> <p>3) Teacher talk time is limited to no more than 25% of the class period</p> <p>4) Teacher utilizes appropriate wait time</p> <p>5) Teacher calls on various students</p>	All are shown	4 criteria shown	Fewer than 4 criteria shown
<p><b>Formative Assessment Management</b></p> <p>1) Teacher is circulating the room and joining social groups</p> <p>2) Teacher prompts student-centered interactions and higher order thinking</p> <p>3) Appropriate time is given for peer collaboration, most of the time, before polling students</p> <p>4) Questions are delivered one at a time</p>	All are shown	3 criteria shown	Fewer than 3 criteria shown
<p><b>Formative Assessment Follow-up</b></p> <p>1) Classwide formative assessment data is shared with students anonymously</p> <p>2) Teacher uses formative assessment data to drive follow-up discussions</p> <p>3) Teacher asks questions and prompts students to discuss their strategies for problem solving</p> <p>4) Students sometimes take the initiative to lead class discussions, explaining their</p>	All are shown	3 criteria shown	Fewer than 3 criteria shown

strategies for problem solving and/or ask questions of their peers			
<b>Use of PSI-PMI Materials</b> 1) PSI-PMI slides are used (with appropriate modifications, if needed) 2) Polling tools are readily available	Both criteria are shown	1 criterion shown	Not shown
<b>Self-Reflection (Written)</b> 1) Teacher reflects on the lesson using the Teacher Self-Reflection checklist 2) Teacher makes connections to improvement of practice, citing specific strategies they will use in the future	Both criteria are shown	1 criterion shown	Not shown

Module 3 Video Rubric: Formative Assessment & Student Polling - and - Facilitating Classwork or Labs using Social Constructivism			
Grading Criteria (30 points total)	Meets Expectation 5 points	Approaches Expectation 4 points	Below Expectation 3 points
<b>Student Engagement</b> 1) Students are seated in groups 2) Students are actively working together without teacher prompting 3) All students submitting answers using a polling tool	All are shown	2 criteria shown	Fewer than 2 criteria shown
<b>Formative Assessment Management</b> 1) Teacher is circulating the room and joining social groups 2) Teacher prompts student-centered interactions and higher order thinking 3) Appropriate time is given for peer collaboration, most of the time, before polling students 4) Questions are delivered one at a time	All are shown	3 criteria shown	Fewer than 3 criteria shown
<b>Formative Assessment Follow-up</b> 1) Classwide formative assessment data is shared with students anonymously 2) Teacher uses formative assessment data to drive follow-up discussions 3) Teacher asks questions and prompts students to discuss their strategies for problem solving	All are shown	3 criteria shown	Fewer than 3 criteria shown

4) Students sometimes take the initiative to lead class discussions, explaining their strategies for problem solving and/or ask questions of their peers			
<b>Classroom Management</b> 1) Teacher is circulating the room and joining social groups 2) Teacher prompts student-centered interactions and higher order thinking 3) Appropriate time is given for peer collaboration, most of the time	All are shown	2 criteria shown	Fewer than 2 criteria shown
<b>Use of Materials</b> 1) PSI-PMI slides, lab/ activities/ classwork are used (with appropriate modifications, if needed) 2) Polling tools are readily available	Both criteria are shown	1 criterion shown	Not shown
<b>Self-Reflection (Written)</b> 1) Teacher reflects on the lesson using the Teacher Self-Reflection checklist 2) Teacher makes connections to improvement of practice, citing specific strategies they will use in the future	Both criteria are shown	1 criterion shown	Not shown

**Module 4 Video Rubric: PSI-PMI Instructional Exemplar Video  
(Direct Instruction, Polled Formative Assessment, and Social Constructivism)**

<b>Grading Criteria (35 points total)</b>	<b>Meets Expectation 5 points</b>	<b>Approaches Expectation 4 points</b>	<b>Below Expectation 3 points</b>
<b>Student Engagement</b> 1) Most students maintain physical attentiveness 2) Most students participate with multiple peers in group learning 3) Appropriate evidence of active learning (i.e. student involved in the discussion) 4) Students are seated in groups 5) All students submitting answers using a polling tool	All are shown	4 criteria shown	Fewer than 4 criteria shown
<b>Content Delivery</b> 1) Teacher clearly states the objective/purpose of the lesson	All are shown	4 criteria shown	Fewer than 4 criteria shown

<p>2) Delivers content in a clear and concise manner</p> <p>3) Teacher talk time is limited to no more than 25% of the class period</p> <p>4) Teacher utilizes appropriate wait time</p> <p>5) Teacher calls on various students</p>			
<p><b>Formative Assessment Management</b></p> <p>1) Teacher is circulating the room and joining social groups</p> <p>2) Teacher prompts student-centered interactions and higher order thinking</p> <p>3) Appropriate time is given for peer collaboration, most of the time, before polling students</p> <p>4) Questions are delivered one at a time</p>	All are shown	3 criteria shown	Fewer than 3 criteria shown
<p><b>Formative Assessment Follow-up</b></p> <p>1) Classwide formative assessment data is shared with students anonymously</p> <p>2) Teacher uses formative assessment data to drive follow-up discussions</p> <p>3) Teacher asks questions and prompts students to discuss their strategies for problem solving</p> <p>4) Students sometimes take the initiative to lead class discussions, explaining their strategies for problem solving and/or ask questions of their peers</p>	All are shown	3 criteria shown	Fewer than 3 criteria shown
<p><b>Classroom Management</b></p> <p>1) Teacher is circulating the room and joining social groups</p> <p>2) Teacher prompts student-centered interactions and higher order thinking</p> <p>3) Appropriate time is given for peer collaboration, most of the time</p>	All are shown	2 criteria shown	Fewer than 2 criteria shown
<p><b>Use of Materials</b></p> <p>1) PSI-PMI slides, lab/ activities/ classwork are used (with appropriate modifications, if needed)</p> <p>2) Polling tools are readily available</p>	Both criteria are shown	1 criterion shown	Not shown
<p><b>Self-Reflection (Written)</b></p> <p>1) Teacher reflects on the lesson using the Teacher Self-Reflection checklist</p> <p>2) Teacher makes connections to improvement of practice, citing specific strategies they will use in the future</p>	Both criteria are shown	1 criterion shown	Not shown

**ACADEMIC STANDING:**

NJCTL has established standards for academic good standing within a student’s academic program. Students enrolled in any NJCTL online course must receive an 80 or higher to successfully complete a course and receive credit for that course. An 80 is equivalent to a GPA of 2.7 or B-. Additionally, students in an endorsement program must receive a cumulative GPA of 3.0 for all courses combined in order to successfully complete the program.

**ACADEMIC INTEGRITY:**

Students must assume responsibility for maintaining honesty in all work submitted for credit and in any other work designated by the instructor of the course. Academic dishonesty includes cheating, fabrication, facilitating academic dishonesty, plagiarism, reusing /re-purposing your own work, unauthorized possession of academic materials, and unauthorized collaboration.

**CITING SOURCES WITH APA STYLE:**

All students are expected to follow proper writing and APA requirements when citing in APA (based on the APA Style Manual, 6th edition) for all assignments.

**DISABILITY SERVICES STATEMENT:**

We are committed to providing reasonable accommodations for all persons with disabilities. Any student with a documented disability requesting academic accommodations should contact [admissions@njctl.org](mailto:admissions@njctl.org) with additional information to coordinate reasonable accommodations for students with documented disabilities.

**NETIQUETTE:**

Respect the diversity of opinions among the instructor and classmates and engage with them in a courteous, respectful, and professional manner. All posts and classroom communication must be conducted in accordance with the student code of conduct. Think before you push the Send button. Did you say just what you meant? How will the person on the other end read the words?

Maintain an environment free of harassment, stalking, threats, abuse, insults or humiliation toward the instructor and classmates. This includes, but is not limited to, demeaning written or oral comments of an ethnic, religious, age, disability, sexist (or sexual orientation), or racist nature; and the unwanted sexual advances or intimidations by email, or on discussion boards and other postings within or connected to the online classroom.

If you have concerns about something that has been said, please let your instructor know.

**CLASS SCHEDULE:**

Module	Required Readings	Assignments
1 – Introduction & Philosophy	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Reflection</li> <li>Mandatory Forms Submission</li> </ul>
2 – Direct Instruction & Formative Assessment	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Pre-Video Submission</li> <li>Reflection</li> <li>Video Submission</li> </ul>

<p><b>3 – Polled Formative Assessment &amp; Social Constructivism</b></p>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Video Submission Reflection</li> <li>• Video Submission</li> </ul>
<p><b>4 – PTI Instructional Exemplar Video</b></p>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-Video Submission Reflection</li> <li>• Video Submission</li> </ul>
<p><b>5 – Final Reflection</b></p>	<ul style="list-style-type: none"> <li>• None</li> </ul>	<ul style="list-style-type: none"> <li>• Final Reflection</li> </ul>