**GEO 406LRS: Science Capstone Experience**

**A class for future teachers**

LO 1227 – Monday 5:00 pm – 7:45 pm

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**Instructor Information**

**Ernest Nunez**

**Office Hours**

Location: LO 1224  
Times: Mon 7:45-8:45p and by appointment

**Phone:** 818.677.2039

**Email:** ernest.nunez.880@my.csun.edu

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**Special needs**

I am committed to accommodating those with special physical or learning needs. Please let me know.

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**Fine Print**

It is the responsibility of each student in this course to know and follow all written guidance given by the instructor.

Unforeseen circumstances during the semester might require changes to the syllabus. In this event, a revised syllabus will be posted to Moodle at least one week in advance of the implementation of the change. The original syllabus will remain and the revised syllabus will be identified by the date of the revision as part of the file name. Dates of examinations will never be moved forward.

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**A class for future teachers**

Teaching is one of the most gratifying professions you can imagine, but it is also serious and challenging work. Teachers often spend more time with their students than many parents, and over a career you might deeply touch over a thousand lives (parent to over a thousand children!). You therefore have the responsibility to be a positive role model. You can't be late (or if you are, you'll be fired). You can't yell every time you get a little frustrated (or if you do, you'll be much less effective). You can't lie (your students will always catch you). In many cases, you can't even go to the bathroom. Teachers are superstars. If you want to be one, now is the time to start practicing these skills of excellence. This class has high expectations for learning and integrity, and low tolerance for excuses.

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**Teaching Takes Practice**

As you transition from being a lifelong student to being a career teacher, you'll need to practice facing new situations. In this class, we'll practice teaching science in a supportive environment called microteaching. Each week, you will prepare to teach a micro-lesson to your team of 5-6 peers. The lesson plans are already written and come from the FOSS kits that LAUSD uses to teach elementary science. By teaching your peers, you will master both science content and gain valuable practice in front of a very small, very forgiving "classroom."

Your peers will assess your preparation and performance in order to give you valuable feedback that can help you improve your science teaching.

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**Team based learning**

Research shows that you can learn more from your peers than you can from professors. To facilitate this learning, you will spend a good portion of the class working in teams. You will work with the same team the entire semester, and you will not be able to choose your team. Since having unprepared teammates can impact your experience, there is a procedure for "firing" a student from your team posted on the Moodle website for our class. In past experience, we rarely need to employ this policy. Almost all required teamwork will be in class, so there is no need to worry about coordinating your schedules.

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**Electronic Equipment**

Class time is a few short hours a week to devote to focused learning. Save phone calls, text messages, web surfing, and other activities for designated breaks or after class. Many K-12 schools have "No cell phone" policies, so you might as well get used to it now. Keep your cell phone out of your own sight so you won't be tempted. There will be penalties for violating this policy.
Grades

The grading policy in this class gives merit to three general areas:

- Mastery of science content, as measured by summative quizzes conducted periodically at the end of topics.
- Growth as a science teacher, as measured by peer assessment of your microteaching.
- Reflection on your own teaching and the teaching of others, as measured by completion of homework assignments, peer assessment surveys, and self assessment reflections.

I will calculate your grade using the categories in the table below.

No Extra credit. There will be no individual extra credit, though there will be occasional team bonus points awarded for winning competitions, etc.

Academic dishonesty, copying, cheating

I expect high standards of academic integrity from future teachers so there is a zero-tolerance rule for academic dishonesty in this class. I will refer all cases of academic dishonesty (including copying, allowing others to copy your work, plagiarism, failing to cite your source, copying/pasting text from the internet even with modifications, misrepresentation of others' work as your own, violations of the collaboration policy below, etc.) to the VP of Student Affairs' office for arbitration and possible disciplinary action. The first offense will result in, at minimum, the reduction of your final grade by one partial letter grade (A- becomes B+), the second offense will result in an F for the class. It is not worth the risk to cheat or let someone copy your work in this class.

Late Assignments

NO late assignments will be accepted except for those that result from a medical/legal emergency affecting you or a close family member. Such an emergency will have to be documented in writing by an appropriate medical/legal authority and will be accepted at no penalty. Fill out the Leave Day request on Moodle and provide documentation within 7 days of the absence so that we can make arrangements to make-up missed assignments.

Grades of incomplete cannot be given in laboratory classes.

### Grades are calculated using the following items:

<table>
<thead>
<tr>
<th>Item</th>
<th>Points</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microteaching</td>
<td>150</td>
<td>3 times, 25 / 50 / 75 points</td>
</tr>
<tr>
<td>Peer/Self-Assessment of microteaching</td>
<td>90</td>
<td>18 lessons, 5 points each</td>
</tr>
<tr>
<td>Post-teaching reflections</td>
<td>60</td>
<td>3 times, 20 pts each</td>
</tr>
<tr>
<td>Quizzes</td>
<td>65</td>
<td>3 times, about 20 points each</td>
</tr>
<tr>
<td>Homework</td>
<td>45</td>
<td>5 times, 5-15 points each</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>In class surveys</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>415</strong></td>
<td></td>
</tr>
</tbody>
</table>

Rounding. Final course average scores are rounded to the nearest integer.
Class period schedule
Each student teaches three times during the semester – once during each topic block. Each block lasts 4 weeks. Typical Schedules for each block are shown below

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Weeks 2 &amp; 3</th>
<th>Week 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intro material</td>
<td>5:00-5:55</td>
<td>Microteachers set up</td>
</tr>
<tr>
<td>Break/Microteachers set up</td>
<td>Microteaching I</td>
<td>5:05-5:50</td>
</tr>
<tr>
<td>Microteaching</td>
<td>6:05-6:45</td>
<td>Break / Peer Assessment</td>
</tr>
<tr>
<td>Break / Peer Assessment</td>
<td>Microteaching II</td>
<td>6:10-6:55</td>
</tr>
<tr>
<td>Post Discussion</td>
<td>7:10-7:45</td>
<td>Break / Peer Assessment</td>
</tr>
<tr>
<td></td>
<td>Post Discussion</td>
<td>7:15-7:45</td>
</tr>
</tbody>
</table>

**Microteaching**: When you are the microteacher, you must:
- Pick up supplies the week before
- Arrive on time to set up your classroom.
- Be prepared to teach a full 45 minute lesson – bring extra and be ready to skip material if you need to adjust so that you fill exactly 45 minutes.
- Fill out the Peer Assessment form immediately after you teach, clicking “I was the microteacher”.
- Return borrowed materials in clean and dry condition.
- Fill out the post-teaching reflection (a SECOND Moodle survey) within a week after you receive your grade.

**Obligations when you are the microteacher:**

- **WEEK BEFORE LESSON**: Practice at home.
- **IN CLASS**: Complete “Peer Assessment” on Moodle about your OWN teaching.
- **END OF PREVIOUS CLASS PERIOD**: Meet with instructor to get preview and check out materials to practice at home.
- **IN CLASS**: Teach your lesson to your team.
- **IN CLASS**: Clean & dry teaching materials. Return them.
- **WEEK AFTER LESSON**: Complete Post-Teaching Reflection Survey on Moodle.