

# California State University SAN MARCOS School of Education

San Marcos, California 92096-0001 www.csusm.edu/education

# EDSS 543B Section 1 SECONDARY MATHEMATICS EDUCATION

CRN #20603 Thursdays 5:00 – 6:50 pm University Hall 273 Spring 2015

Conceptual Framework Theme: Engaging diverse communities through leading and learning for social justice.

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Hours: By appointment

# **School of Education Mission & Vision Statement**

(Adopted by SOE Governance Community, January 2013)

#### Vision

To serve the educational needs of local, regional, and global communities, the School of Education advances innovative practice and leadership by generating, embracing, and promoting equitable and creative solutions.

# Mission

The mission of the School of Education community is to collaboratively transform education. We:

- Create community through partnerships
- Promote and foster social justice and educational equity
- Advance innovative, student-centered practices
- Inspire reflective teaching and learning
- Conduct purposeful research
- Serve the School, College, University, and Community

# **Basic Tenets of our Conceptual Framework**

- Student centered education
- Research and theory specific to the program field inform practice
- Connections and links between coursework and application
- Strong engagement between faculty and candidates
- Co-teaching clinical practice
- Culturally responsive pedagogy and socially just outcomes

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# **COURSE DESCRIPTION**

Focuses on developing an understanding of theory, methodology, and assessment of Mathematics in integrated and inclusive secondary classrooms: Part B.

# **Course Prerequisites**

Admission to the Single Subject Credential Program.

# SINGLE SUBJECT COURSE WORK INFORMATION AND REQUIREMENTS

# **Learning Outcomes**

Teacher Candidates will be required to complete a California Teaching Performance Assessment (CalTPA), show proof of Teacher Performance Expectations (TPEs) and complete critical assessment tasks- specific assignments for this course. It is the teacher candidates responsibility to understand expectations and complete assignments by stated due dates.

# **School of Education Attendance Policy**

Due to the dynamic and interactive nature of courses in the School of Education, all teacher candidates are expected to attend all classes and participate actively. At a minimum, teacher candidates must attend more than 80% of class time, or s/he may not receive a passing grade for the course at the discretion of the instructor. Individual instructors may adopt more stringent attendance requirements. Should the teacher candidate have extenuating circumstances, s/he should contact the instructor as soon as possible. (Adopted by the College of Education Governance Community, December, 1997.)

Instructor application of Attendance Policy: This course and teaching in general are participatory; therefore, your attendance and participation are important. Students are expected to attend all live sessions during the course and to fully participate in online sessions. Absences and late arrivals/early departures will affect the final grade much as it would affect evaluation in the work place.

- Missing more than one class meeting will result in the reduction of one letter grade.
- Arriving late or leaving early on more than two occasions will result in the reduction of one letter grade.

You are expected to inform the instructor *prior* to an absence.

# Teacher Candidates with Disabilities Requiring Reasonable Accommodations

Teacher candidates with disabilities who require reasonable accommodations must be approved for services by providing appropriate and recent documentation to the Office of Disable Student Services (DSS). This office is located in Craven Hall 4300, and can be contacted by phone at (760) 750-4905, or TTY (760) 750-4909. Teacher candidates authorized by DSS to receive reasonable accommodations should meet with their instructor during office hours or, in order to ensure confidentiality, in a more private setting.

#### **All University Writing Requirement**

The writing requirements for this class will be met as described in the assignments. Every course at the university, including this one must have a writing requirement of at least 2500 words.

# **CSUSM Academic Honesty Policy**

Students will be expected to adhere to standards of academic honesty and integrity, as outlined in the Student Academic Honesty Policy. All written work and oral presentation assignments must be original work. All ideas/materials that are borrowed from other sources must have appropriate references to the original sources. Any quoted material should give credit to the source and be punctuated with quotation marks.

Teacher candidates are responsible for honest completion of their work including examinations. There will be no tolerance for infractions. If you believe there has been an infraction by someone in the class, please bring it to the instructor's attention. The instructor reserves the right to discipline any student for academic dishonesty in accordance with the general rules and regulations of the university. Disciplinary action may include the lowering of grades and/or the assignment of a failing grade for an exam, assignment, or the class as a whole. Incidents of Academic Dishonesty will be reported to the Dean of Students. Sanctions at the University level may include suspension or expulsion from the University.

#### **Plagiarism**

As an educator, it is expected that each teacher candidate will do his/her own work, and contribute equally to group projects and processes. Plagiarism or cheating is unacceptable under any circumstances. If you are in doubt about whether your work is paraphrased or plagiarized see the Plagiarism Prevention for Students website <a href="http://library.csusm.edu/plagiarism/index.html">http://library.csusm.edu/plagiarism/index.html</a>. If there are questions about academic honesty, please consult the University catalog.

# **Academic Integrity**

Teacher candidates must come to class having done close reading of the required texts in preparation for class or Socratic seminar-style discussions, submit required assignments, and participate in class activities, including facilitation of and feedback to colleagues, role plays, and small group tasks. Teacher education is a professional preparation program. Teacher candidates will be expected to adhere to standards of dependability, academic honesty and integrity, confidentiality, and writing achievement. Because it is important for teachers to be able to effectively communicate their ideas to students, colleagues, parents, and administrators, writing that is original, clear and error-free is a priority in the College of Education. Late work will not be accepted. If there are extenuating circumstances, the instructor may accept late work; however, it will not receive full credit.

# **Electronic Communication Protocol**

Electronic correspondence is a part of your professional interactions. If you need to contact the instructor or other teacher candidates, e-mail is often the easiest way to do so. It is my intention to respond to all received e-mails in a timely manner. Please be reminded that electronic correspondences are a very specific form of communication, with their own form of nuances, meanings, and etiquette. Please be mindful of courtesies and limitations with regards to professional e-mail, on-line discussion messages you send to your colleagues, to faculty members in the School of Education, or to persons within the greater educational community. All electronic messages should be crafted with professionalism and care. A guiding principle when writing an email is to assume that everyone in your school district will be reading it, including your principal.

Things to consider:

- Would I say in person what this e-mail specifically says?
- How could this e-mail be misconstrued?
- Does this e-mail represent my highest self?
- Am I sending this e-mail to avoid a face-to-face conversation?

In addition, if there is ever a concern with an email I send to you, let's talk in person so we can correct any confusion.

# **Authorization to Teach English Learners**

This credential program has been specifically designed to prepare teachers for the diversity of languages often encountered in public school classrooms. The authorization to teach English learners is met through the infusion of content and experiences within the credential program, as well as additional coursework. Teacher Candidates successfully completing this program receive a credential with authorization to teach English learners. (Approved by CCC in SB 2042 Program Standards, August 2002.)

#### TEACHER CANDIDATE LEARNING OUTCOMES

Teacher Candidates will be required to complete a Teaching Performance Assessment, show proof of Teacher Performance Expectations and complete critical assessment tasks and specific assignments for this course.

# California Teacher Performance Assessment (CalTPA)

Beginning July 1, 2008 all California credential candidates must successfully complete a state-approved system of teacher performance assessment (TPA), to be embedded in the credential program of preparation. At CSUSM this assessment system is called the CalTPA or the TPA for short.

To assist your successful completion of the TPA, a series of informational seminars are offered over the course of the program. TPA related questions and logistical concerns are to be addressed during the seminars. Your attendance to TPA seminars will greatly contribute to your success on the assessment.

Additionally, SOE classes use common pedagogical language, lesson plans (lesson designs), and unit plans (unit designs) in order to support and ensure your success on the TPA and more importantly in your credential program.

The CalTPA Candidate Handbook, TPA seminar schedule, and other TPA support materials can be found on the SOE website: http://www.csusm.edu/education/CalTPA/ProgramMaterialsTPA.html

#### Technology

This course infuses technology competencies to prepare candidates to use technologies, emphasizing their use in both teaching practice and student learning. Candidates are expected to use technology for their own professional development and practice, as well as be able to strategically place it in the hands of students for their learning and understanding of concepts you teach.

# **Enduring Understanding**

Teacher candidates understand that effective teaching and student achievement is based upon the practitioner's ability to reflect upon events and individual students as a means to meet student needs and continually grow in the profession.

#### **Essential Questions for Teacher Candidates**

- 1. What is my belief system regarding the nature and education of adolescents?
- 2. What does the Current Age require of its citizens and how is this reflected in my teaching?
- 3. How do I reflect upon my own biases and ensure equity in my classroom?
- 4. How do I communicate openly, empathetically, and productively in a variety of situations, including: Socratic seminars, class discussions, presentations, and role-plays?
- 5. How do I present myself as a professional educator?

# Evidence of Understanding - Teacher Performance Expectation (TPE) Competencies

The course objectives, assignments, and assessments have been aligned with the CTC standards for the Single Subject Credential. This course is designed to help teachers seeking a California teaching credential to develop the skills, knowledge, and attitudes necessary to assist schools and districts in implementing effective programs for all students. The successful candidate will be able to merge theory and practice in order to realize a comprehensive and extensive educational program for all students. Failure to meet a minimum level of competence in any of the TPEs by the completion of the program will prevent the acquisition of the Single Subject Credential (A full-text version of the TPE descriptions can be downloaded from the COE webpage: <a href="https://www.csusm.edu/COE">www.csusm.edu/COE</a>).

The following Teacher Performance Expectations (TPEs) are addressed in this course and are imbedded in the Teacher Performance Assessments (TPAs).

TPE	How assessed
TPE 1B - Subject-Specific Pedagogical Skills for Single Subject	ELD Infused Lesson Design and
Teaching Assignments	Reflection on Video-taped
Understands and uses the state-adopted academic content standards	performance
Develops planning instruction that addresses the standards	Lesson Analysis
Consistently demonstrates the ability to teach to the standards	TPA 3 & 4
TPE 2: Monitoring Student Learning During Instruction	ELD Infused Lesson Design and
Uses progress monitoring during instruction to inform instruction	Reflection on Video-taped

TPE	How assessed
Pace and re-teach content based on assessment evidence	performance
Anticipate, check for and address common misunderstandings	Lesson Analysis
	TPA 4
TPE 4: Making Content Accessible	
States in every lesson plan the State standards	Lesson Analysis
Uses activities and materials that support stated objectives	
Uses multiple ways to reinforce the content of the standard	TPA 3 & 4
Follows a logical, sequence of instruction in the lesson plan	
TPE 5 - Student Engagement	ELD Infused Lesson Design and
Ensures students understand the objective of the lesson	Reflection on Video-taped
Actively involves students with the lesson	performance
Uses a variety of strategies to involve the students and increase their	
understanding of the lessons objectives	Lesson Analysis
TPE 6c - Developmentally Appropriate Practices in Grades 9 -12	ELD Infused Lesson Design and
Understanding important characteristics of the learners	Reflection on Video-taped
Designing instructional activities	performance
Providing developmentally appropriate educational experiences	Lagara Anglesia
TDE 7. Table to Early Language	Lesson Analysis
TPE 7 – Teaching English Learners	ELD Infused Lesson Design and
Applies pedagogy for comprehensive instruction of English learners Knows and can apply instruction for English Language development	Reflection on Video-taped
Draws upon information about students' backgrounds to build new	performance
knowledge	TPA 3 & 4
TEP 8 Learning about Students	11 / 3 & 4
Using formal and informal methods, they assess students' prior	Student Interview
mastery of academic language abilities, content knowledge, and skills.	Stadent interview
Thatery of academic language abilities, content whowever, and chille.	
Through interpersonal interactions, they learn about students' abilities,	
ideas, interests and aspirations.	
They understand how multiple factors, including gender and health,	
can influence students' behavior.	
TPE 9 - Instructional Planning	ELD Infused Lesson Design and
Establishing academic learning goals	Reflection on Video-taped
Connecting academic content to the students backgrounds, needs,	performance
and abilities	
Selecting strategies/activities/materials/resources	Lesson Analysis
TPE 10 - Instructional Time	ELD Infused Lesson Design and
Appropriately allocates instructional time to maximize student	Reflection on Video-taped
achievement	performance
Effectively and efficiently maximizes instructional time through	Lesson Analysis
management based on reflection and consultation	TPA 4
Adjusts the use of instruction time to optimize learning opportunities	

# **COURSE INFORMATION AND REQUIREMENTS**

# **Required Texts**

- Abbot, E (1884). Flatland: A romance of many dimensions. Public Domain (This book can be downloaded for free on the Kindle)
- Driscoll, M. J. (2007). Fostering geometric thinking: A guide for teachers, grades 5-10. Portsmouth, N.H.: Heinemann.
- \*\*\*Several other readings are required and will be made available for download.

#### **Recommended Texts**

- Boaler, J. (2008). What's math got to do with it?: Helping children learn to love their most hated subject—and why it's important for America. New York: Viking.
- Carr, J., Carroll, C., Cremer, S., Gale, M., Lagunoff, R., Sexton, U. (2009). *Making mathematics accessible to English learners*. San Francisco: WestEd.
- Cohen, E. G. (1994). *Designing groupwork: Strategies for the heterogeneous classroom*. New York: Teachers College Press. [purchased for fall 2010]
- Smith, M. S., Stein, M. K. (2011). 5 practices for orchestrating productive mathematics discussions. Reston, VA: NCTM.

# COURSE ASSIGNMENT DESCRIPTIONS

- 1. ELD infused lesson design with reflection on video-taped performance (25%) In this assignment, you will design a content lesson that is based on a Common core state standard and is differentiated for English Learners so as to ensure that your English Learner students have access to the core curriculum. You will implement the lesson, film yourself, and reflect upon your teaching. You will need to obtain permission from each student for the filming. Use the permission forms for TPA 4.
- 2. Student Interview (25%) Students will design prompts and/or a task in order to conduct a clinical interview with a grades 6-10 student. This interview protocol will be designed to inquire into the student's geometric ways of thinking. The purposes of this activity are to begin thinking about students' mathematical understanding, to learn how to effectively pose questions and interpret the meaning of students' answers, and to interact with students about mathematics.
- 3. Personalized Project (25%) This assignment is designed to empower you as a teacher. Each site has its individual strengths and challenges. Others may impose what they believe you need but ultimately you are the one guiding 180 or more students throughout the year. In this assignment you will find one area that is a challenge and come up with a plan to work towards making things better.
- 4. Lesson Analysis (25%) You will develop a lesson based on Complex Instruction in a traditional geometry class at Rancho Buena Vista High Scholl (RBV). In this lesson you will have the opportunity to address the needs of ELL and Special Ed students in a cooperative learning environment. In teams, you will co-plan with me at RBV to make use of the resources and learn about the students. Part one will be an observation of my class with the intent to learn as much as you can about the students, part two will be a planning session with me (done after the observations), part three will be the delivery of the lesson and part four will be a reflection on revisions and implications. Plan on missing two days at your site, please inform your cooperating teacher ASAP.

COURSE CALENDAR (TENTATIVE)

Date	Topic*	Assignment to be completed BEFORE Class Session
Session 1 1/22 4:00-7:00	Course Introduction: Where we are and where we want to go, Complex Instruction and Geometric Thinking.	Preview Flatland, pp. iii-40
Session 2 2/5 4:00-7:00	Rich problems, ELL	Personalized project topics
Session 3 2/19 4:00-7:00	Fostering Geometric Thinking and Complex Instruction Technology	Read F.G.T. – Driscoll, chs. 1-2
Session 4 3/5 4:00-7:00	Complex Instruction	<b>1. ELD lesson</b> Read F.G.T. – Driscoll, ch. 3
Session 5 3/12 4:00-7:00	Complex Instruction	Read F.G.T. – Driscoll, ch. 4-5
Session 6/7 3/14 9:00-3:00	Interview share out and personalized projects. "Things I wish we would have done."	2. Interview **Bring your laptop
Session 8 3-31 to 4-10	Observe and collaborate as a lesson team with me	
Session 9 3-31 to 4-10	Implementation of lesson plan at RBV	
Session 10 4/23 4:00-7:00	Reflections on Student Teaching & Mathematics Education Mock interviews with department chairs.	Personalized Project     Lesson Analysis

<sup>\*</sup>The above is a tentative schedule of assignments. Based on the issues that arise during the course, additional readings and resources will be provided.

# **ASSIGNMENTS AND RUBRICS**

# Teaching English Learners: Lesson Design, Implementation, and Reflection

In this assignment, you will design a content lesson that is based on a Common core standard and is differentiated for English Learners so as to ensure that your English Learner students have access to the core curriculum. You will implement the lesson, film yourself, and reflect upon your teaching. You will need to obtain permission from each student for the filming. Use the permission forms for TPA 4.

The following information should be included in your write-up.

# Design the Lesson

- Information about your whole class, including linguistic background, content and academic language abilities, cultural considerations, and interests. You will likely have some of this information from your student survey.
- Physical, social, and emotional factors that influence the instruction of adolescents and how you use this knowledge to inform your teaching, especially in this particular class.
- Briefly describe the lesson, including content standards, an ELD standard, where the lesson fits into a unit or sequence of instruction, formative and summative assessment. (attach the actual lesson plan as an appendix).
- Describe the adaptations you have made to the lesson to ensure that your English Learners, at their particular levels, can access the curriculum, build academic language skills, and reach the learning goals you have identified for this lesson.
- Describe the assessment based on the content and ELD standards stated

# Analyze the lesson after viewing

- Overall, what worked, what did not work, what would you modify the next time you teach the lesson.
- To what extent did the whole class achieve the learning goals?
- Overall, how well did the lesson connect with student backgrounds and interests?
- What will you do for students who did not achieve the learning goals?
- With regard to your English Learners, how well did the lesson work? not work?
- To what extent did the student achieve the content learning goals and the development of English?

# Reflect on the lesson

- Given your analysis of this lesson and the student learning, how will you use this information to guide your planning for future lessons?
- What have you learned about the need for making adaptions for English Learners as you plan for differentiated instruction? Cite specific information about the students, your plan for instruction, and the analysis of the lesson to explain your answer.
- What are your professional development goals for continued progress and learning with regard to planning and differentiating instruction for English Learners?

# Rubric Teaching English Learners Lesson Design, Implementation, and Reflection

Name	_Reviewer
All assignment criteria and guide guestions should be	e addressed.

Criteria	Appropriate, relevant, accurate, clear, connected across the reflection	Minimal, limited, inconsistent, ambiguous, weakly connected	Inappropriate, irrelevant, missing, unconnected
Information about your whole class, including linguistic background, content and academic language abilities, cultural considerations, and interests.			
Physical, social, and emotional factors that influence the instruction of adolescents and how you use this knowledge to inform your teaching, especially in this particular class.			
Description of the lesson, including content standards, an ELD standard, where the lesson fits into a unit or sequence of instruction, formative and summative assessment.			
Description of the assessment based on the content and ELD standards stated.			
Analysis includes what worked, what did not work, and modifications you would make the next time you teach the lesson.			
Analysis includes the extent to which the whole class achieved the learning goals.			
Analysis includes information regarding how the lesson connected with student backgrounds and interests.			
Analysis includes what will you do for students who did not achieve the learning goals.  Analysis includes the extent to which the lesson worked for			
your English Learners.  Analysis includes the extent to which your target English			
Learner achieved the content learning goals and progressed in the development of English.			
Reflection includes how you will use the information from this analysis to guide your planning for future lessons.			
Reflection includes what you have learned about the need for making adaptions for English Learners as you plan for differentiated instruction. Specific information about the students, plan for instruction, and analysis are cited as evidence and to explain.			
Professional development goals for continued progress and learning with regard to planning and differentiating instruction for English Learners are included.			

Comments:

# **Student Interview Assignment**

**Task:** In a one-on-one setting you will conduct an interview with a student from grades 6-11. Instructions are attached below. This interview protocol is designed to inquire into the student's geometric ways of thinking.

**Purpose:** Most concisely, to *learn to listen* for a child's ways of thinking mathematically and of knowing mathematically. Jo Boaler just said in a workshop in Vista, "assessment should only be used to inform student learning, not for evaluative judgment."

The student interview is designed to provide you with opportunities to focus on and build a model of a single child's thinking about mathematics. The purposes of this activity are to begin thinking about students' mathematical understanding, interpret the meaning of students' answers, and to provide you with an opportunity to interact with students about mathematics. It will also help you to improve your use of inquiry for assessment purposes and to better understand secondary level students with different understandings.

# Prior to the interview:

- Identify a (one) student. Although there are many good reasons to select a student from within a
  classroom you may be teaching, any student (grades 6-11) could make for a productive
  experience. One that you have found to be verbally expressive may be best. Arrange with the
  student and his/her teacher to interview this one child for 20-30 minutes in a quiet place outside
  the classroom.
- Consider what clarifying prompts you may have to give to the student during the interview.

# **During the interview:**

Work with the child in a setting removed from the classroom environment. Begin the interview by informing the child that you will be giving her/him a series of math problems to solve and that you are interested in his/her thinking process and in the strategies s/he uses to solve these problems. Inform the child that s/he can solve the problems in any way s/he wants. Please remind the child that the interview is voluntary and that s/he can end the interview at any time (if a student does cut the interview very short, then please find another willing student). Do everything you can to help make the child comfortable. Orally provide the child with your task and provide her/him with sufficient time to complete each problem. You will be challenged to establish comfort, for both you and the student, to think quietly for the extended period of time necessary for the child to meaningfully engage in the task. You may also want to prepare a written copy of each problem, in case you find the child prefers this way of interpreting the task. Note the questions you ask and the child's responses. It may be necessary to ask the child to wait while you are writing—it is OK to ask the child to wait. You should not tape-record/video-tape the interview. During the interview, be sure to consider the following:

- The best thing you can be is genuinely curious. Remember the point of the interview is to discover how the child thinks—*NOT* to guide the child to the correct answer (try to fight the urge to be "teacher").
- Although you may prepare a script to help guide your interview, I encourage you to not feel
  limited to your script. Allow your interaction to explore a student's idea, to learn more about the
  child's insights into a question, their disposition toward exploration, what may constrain what they
  are able to do, and to practice your own interaction with children.
- Do respect the suggested and arranged time limit.
- Be careful to respond similarly to all responses, whether you may consider it to be a "correct" or "incorrect" answer. Be curious about all solution strategies; how is this student thinking? what question may they be asking?—is it the one you first assumed they were asking? what question may they be answering?—is it the one you first assumed you asked?
- This is not a teaching episode; it is an interview.
- Your primary role is to listen (Davis, 1997). Make sure you allow enough wait time—many children need time to think before speaking and/or answering.
- Make sure the child feels comfortable during the entire interview. If the child clearly cannot answer a problem, you may need to probe to help develop connections the child may have to similar mathematical experiences. Two useful questions: tell me what you do know about the problem, and tell me about a similar problem you've worked on before. If you feel that the child is really struggling and frustrated, you may want to end the interview or give the child a problem you are fairly certain s/he can solve and then end the interview. It is worthwhile to come with this sort of simpler problem, as well as an extension to the task you intend to ask for those who respond quickly. If you cut an interview short for any reason, be sure to discuss in your write-up.

#### After the Interview:

Write a three to four-page (double-spaced) reflection that includes a brief discussion on each of the following points:

- What specifically did you learn about this child's mathematical understanding? Here you will want
  to make some claims about the mathematics your student understands or doesn't understand. I
  intend for this portion to emphasize what the child CAN do, and what might be a worthwhile next
  instructional focus, rather than what the child cannot do.
- Suggest some specific ideas for instruction based on what you have observed about the students understanding and methods of approaching the problems.
- Discuss what types of geometric thinking you observed the student use.
- Share some thoughts on your role as a listener in this activity, and as you consider your profession as a mathematics teacher.
- Attach any recorded work generated by the student without the student's "actual" name listed.

**Grading:** Specifically, I expect a well-written paper (3-4 pages, double-spaced) that clearly and specifically expresses what you learned about: (a) the child's mathematical understanding, (b) the experience of observing mathematical thinking.

Due: March 14, 2014 Be prepared to share with the class.

# **Personalized Project**

**Task:** Identify an aspect of your practice that you would like to improve upon. Research possible solutions and create a measurable action plan. Implement your plan, collect data and reflect.

**Purpose:** Each site poses its own challenges. There is an abundance of research that addresses how students learn and what you should do as an educator in various situations. Teaching is complex in that there are a variety of variables that define success. You will be exposed to many professional developments throughout your career however, knowing is different than doing. This is your opportunity to focus on one aspect of your practice and making a difference in something you believe is a crucial aspect of your teaching. We cannot be simply lifelong learners but rather lifelong doers.

**Details:** Identify an aspect of your practice that you would like to improve or change. Investigate the existing research and come up with a plan.

**Report:** The report should be 2-3 pages with evidence supporting the progress toward your goal. This might include student work, pictures or data.

**Grading:** Worth 25 points, awarded for completion of the specifics of the task, and the quality of the response. A grade of **B** will be awarded for completing the task; an **A** for doing so exceptionally well, and a **C** for partial completion.

Due: April 23, 2014. Be prepared to share with the class.

# **Lesson Analysis**

**Task:** Implement a lesson based on your knowledge of Complex Instruction in a traditional high school geometry class as a collaborative team of colleagues.

**Purpose:** Bridging the gap between theory and practice is an ongoing experience that should be done collaboratively with colleagues. We will take advantage of having a team of teachers plan and collect data about our goals in a lesson. Our focus second semester has been geometry therefore we will deliver the lesson in a geometry class. Many schools will be using the integrated pathway therefore having exposure to geometry is essential.

**Details:** Part one will be an observation of my class with the intent to learn as much as you can about the students, part two will be a planning session with me (done after the observations), part three will be the delivery of the lesson and part four will be a reflection on revisions and implications. The observation and planning are done prior to the lesson delivery date. The lesson delivery will be done twice, each time with different teacher. The debrief will be done after the lesson.

**Report:** Be prepared to share out with the class in as jigsaw. You do not need to prepare a write-up. **Grading:** Worth 25 points, awarded for completion of the specifics of the task, and the quality of the response. A grade of **B** will be awarded for completing the task; an **A** for doing so exceptionally well, and a **C** for partial completion.

Due: April 24, 2014. Be prepared to share with the class.