San José State University  
Secondary Education  
EDSC 173 (section 1), Spring 2016

Course and Contact Information

Instructor: Mark Felton, PhD

Office Location: SH 324

Telephone: (408) 924-3745

Email: mark.felton@sjsu.edu

Office Hours: T 2:45-4:00; or Th 2:00-3:00 (by appointment)

Class Days/Time: T 12:00-2:45

Learning Outcomes

Course Objectives
Credential candidates will be able to:

1. Understand and explain the basic theories of learning and cognition (TPE6, TPE8)
2. Identify the psychological principles of education that lay behind commonly used models and strategies of teaching. (TPE9)
3. Apply psychological principles to classroom materials, textbooks, and other professional resources (e.g. textbooks, curriculum guides and Internet resources). (TPE9)
4. Analyze student work from the perspective of psychological theories of learning and cognition and discuss this work with colleagues. (TPE3, TPE6, TPE8)
5. Critique lessons for their implementation of the principles of educational psychology. (TPE6, TPE9)
6. Develop lessons that implement the principles of educational psychology (TPE6, TPE8, TPE9)
7. Use psychological principles as a means to develop more equitable learning activities for students from diverse backgrounds, including English language learners, and traditionally underrepresented groups. (TPE4, TPE5, TPE7, TPE12)

Course Equity Objectives
Credential candidates will be able to:

1. Design learning activities that engage and support all learners. (TPE 4, TPE5, TPE7)
2. Develop lessons that use students’ backgrounds and prior experience as the foundation of learning. (TPE4, TPE5, TPE7)
3. Develop lessons that integrate strategies to support English language learners in content area learning. (TPE7, TPE9, TPE12)
Required Text

Course Reader: The Psychological Foundations of Education (EDSC 173). Available at Maple Press. 330 S. 10th St., San Jose CA (408) 297-1000.

Classroom Protocol

Absences. Two (2) EXCUSED absences are permitted through the course of the semester without any extra work or office hours with the professor. While your grade will not be affected directly by absences, more than two absences require discussion with me since it significantly impacts your ability to participate in class discussions and keep up with course assignments. Please contact me by email or phone if you anticipate missing class.

Readings. The required course readings are meant to serve as a foundation and reference. The theoretical material for the course is laid out in the reading. That means that it is essential for you to keep up with the readings, as they are your primary source of information in the course. The readings should also serve as a reference. As you will soon discover, most of the concepts we cover in the course reappear throughout the semester. You’ll find it helpful to refer back to previous readings in order to keep it fresh in your memory.

Academic integrity

Your commitment, as a student, to learning is evidenced by your enrollment at San Jose State University. The University Academic Integrity Policy S07-2 at http://www.sjsu.edu/senate/docs/S07-2.pdf requires you to be honest in all your academic course work. Faculty members are required to report all infractions to the office of Student Conduct and Ethical Development. The Student Conduct and Ethical Development website is available at http://www.sjsu.edu/studentconduct/.

Campus Policy in Compliance with the American Disabilities Act

If you need course adaptations or accommodations because of a disability, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 at http://www.sjsu.edu/president/docs/directives/PD_1997-03.pdf requires that students with disabilities requesting accommodations must register with the Accessible Education Center (AEC) at http://www.sjsu.edu/aec to establish a record of their disability.

Course Requirements and Assignments

Class participation. For the most part, the course is conducted in a mini-lecture and discussion format with additional time spent in small group activities. The mini-lectures will begin with a review of the relevant material for the day. We will review concepts from the reading or from previous classes. Please do not depend on lectures for the course material—we will not cover all the material in the reading in class, and you will need the additional information to complete your assignments. Conversely, please do not miss class. Class time—spent in lecture, discussion, or small group—is designed to help you understand the material, make it meaningful and apply it to teaching. Class time is also spent preparing for the major course assignments. Grades for class participation will be made during each of the three course units based on your participation in small group and whole class discussions. Please make every effort to attend all class sessions and arrive on time each day. If you have to miss class, be sure to notify me in advance as a professional commitment. Missed classes must be made up through contact with peers, the professor and completion of all classwork missed during the absence.
Grading Policy

Class participation (25%); Activity Plan Analysis (25%); Lesson Plan Analysis (25%); Scaffolding Case (25%). Your final grade in the course will be an average based on the numeric grades for each of the four course requirements. A letter grade will be assigned to your average based on the following cut-offs:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
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<tbody>
<tr>
<td>A</td>
<td>93.0 – 97.0</td>
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<tr>
<td>A-</td>
<td>90.0 – 92.9</td>
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<tr>
<td>B+</td>
<td>87.0 – 89.9</td>
</tr>
<tr>
<td>B</td>
<td>84.0 – 86.9</td>
</tr>
<tr>
<td>B-</td>
<td>81.0 – 83.9</td>
</tr>
<tr>
<td>C+</td>
<td>78.0 – 80.9</td>
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<tr>
<td>C</td>
<td>75.0 – 77.9</td>
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<tr>
<td>C-</td>
<td>72.0 – 74.9</td>
</tr>
<tr>
<td>D+</td>
<td>68.0 – 71.9</td>
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</tbody>
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Note that “All students have the right, within a reasonable time, to know their academic scores, to review their grade-dependent work, and to be provided with explanations for the determination of their course grades.” See University Policy F13-1 at http://www.sjsu.edu/senate/docs/F13-1.pdf for more details.
Assignment #1: ACTIVITY PLAN & ANALYSIS

PURPOSE: The purpose of this assignment is to apply the principles of Piagetian theory and Constructivism to an Activity Plan.

PART I: ACTIVITY PLAN. To begin, you need to select some content that lends itself to active, student-centered learning. Next, you can either create a lesson activity from scratch or build off of an idea that you’ve encountered in class, from internet resources for teachers or any other curriculum resources that you have access to. The lesson activity, itself, should conform to the structure outlined in Price & Nelson (Chapter 5) from the reader. Please include a copy of the activity plan that you will discuss in your analysis. Your plan should include the following sections. Recommended length 1-2 pages, double-spaced, 12 pt. font.

1. Preplanning Tasks.
2. Activity Beginning
3. Activity Middle
4. Activity Closing

PART II: APPLICATION & ANALYSIS. In Part II, you will analyze how your activity plan makes use of constructivist principles of teaching and learning. Please divide your analysis into the following 4 sections and, in each section, please be sure to address the questions posed. Recommended length: 5-6 pages, double-spaced, 12 point font.

(A) Constructivist theory: Explain what a scheme is, what kind of knowledge is best taught constructively and why. Explain the role of prior knowledge in building new schemes. (0.5 page)

(B) New scheme(s): In this section you should specify the central concept or new scheme that students will learn in your activity. You should think about that knowledge not only in terms of what students will learn, but also how it will relate to their prior knowledge and experience, or prior schemes. Be sure to identify any misconceptions or incomplete understanding students might have at the start of the lesson. Finally explain how the new scheme relates to the learning objectives you have written for the lesson. (0.5 page)

(C) Prior knowledge: Explain how your activity is designed to tap into students’ prior content knowledge or personal prior knowledge. How have you elicited or built that prior knowledge in the activity? Use Piagetian theory and/or constructivist principles to provide a rationale for the lesson design. (0.5 page)

(D) Activity Opener: Setting a purpose & creating disequilibrium. Provide a rationale, based on constructivist theory, for setting a purpose in a lesson and creating disequilibrium. Explain how you have used experience and/or questioning to create disequilibrium (and therefore set a purpose) in students’ minds for the activity. Finally, explain how you have prepared students for disequilibrium in such a way as to avoid confusion. (0.5 page)

(E) Activity Middle: Supporting accommodation. Identify principles to creating effective learning experiences based on Piagetian theory and/or constructivism. Explain how you sequence questions, materials and/or experiences to guide students to new knowledge. Explain how you aid the active construction of new knowledge with concrete, observation-based and/or experiential learning. Use Piagetian theory and/or constructivist principles to provide a rationale for the design of the activity middle.

(F) Activity Closing: Clarifying new schemes and checking for understanding. Explain how you clarify new schemes with students and check for understanding at the end of the activity. (0.5 page)

HOW YOUR ASSIGNMENT WILL BE EVALUATED: Your analysis will be assigned a numeric grade based on a rubric (see Canvas). I will go over the rubric and my expectations on the assignment the week before it is due. Please be sure to re-read this assignment and review the rubric before you begin and after you’ve completed the assignment to make sure that you have not omitted anything.
Assignment #2: LESSON PLAN & ANALYSIS

PURPOSE: This assignment gives you the opportunity to put your knowledge about adapting your instruction to student needs to work. You must take a lesson that you have designed or one that you have found and augment it with alternative instructional materials and activities designed to support students who may struggle with the quantity, pace, complexity and content of your lesson.

PART I: LESSON PLAN. Please include a copy of the lesson plan that you will discuss in you analysis (based on Price & Nelson, Chapter 4). If you have made any additions or changes to an existing lesson plan, please submit the revised version of the lesson along with any resources and materials that you discuss in Part III of the assignment. There are no page requirements for this section and it is not graded directly.

PART II: THEORY. Please explain how each of the following affects the learning process, focusing on how and why teachers should support learners with each. Be sure to use cognitive theory and research to justify your claims. Please dedicate approximately 2-3 pages (double spaced) to this section of the assignment.

(1) Attention: Grabbing, Engaging & Directing Attention
(2) Active Working Memory: Intrinsic & Extraneous Cognitive Load
(3) Long Term Memory: Meaning-Building, Elaboration, & Student-Induced Organization

PART III: APPLICATION & ANALYSIS. Please explain how your choice of lesson activities, strategies and materials maximize student learning by addressing the core concepts from Cognitive theory listed above (Part II: Theory). In your analysis, be sure to specify how you have addressed attention, cognitive processing demands and encoding throughout the lesson in a way that guides, supports and assesses student progress towards your key learning outcomes. Please dedicate 4-5 pages (double spaced) to this section of the assignment.

HOW YOUR ASSIGNMENT WILL BE EVALUATED: Your analysis will be assigned a numeric grade based on a rubric. I will go over the rubric and my expectations on the assignment the week before it is due. I will also upload the rubric to Canvas for your reference Please be sure to re-read this assignment and review the rubric before you begin and after you’ve completed the assignment to make sure that you have not omitted anything.
Assignment #3:  
SCAFFOLDING PLAN PRESENTATION

PURPOSE: This assignment gives you the opportunity to develop an assessment plan for a particular skill in your subject area. The plan may span a single unit of study, or it may span multiple units over a longer period of time covering the same skill set. The assignment will be a presentation (using presentation software, like PowerPoint or Prezi), plus materials to be submitted via Canvas.

IMPORTANT NOTE (about what to submit to Canvas): Although this assignment will be a presentation, you will need to upload a copy of your rubric (see Part II, below) and your material scaffold (see Part IV, below) to Canvas before your presentation. Please also have hard copies (total of 7 copies) for your classmates to refer to during your presentation.

Assignment: Please prepare the following presentation and materials

(1) PART I: SKILL. In the first section of your paper you should describe the skill that you have chosen and explain why you chose it, given its relative importance in your subject area. This section can be brief. Simply explain what the skill is, explain its importance for academic success in your subject area, and describe any prerequisite competencies that students must have to be successful in this skill. (1/2 page of analysis)

(2) PART II: RUBRIC. In section two, include your rubric. In this section, you should explain your choice of criteria for the rubric, and the principles that underlie the different levels for one criterion. In explaining the choice, explain why these criteria represent essential components to the skill. In explaining the levels for the one criterion you have chosen to focus on, explain how the levels are qualitatively different as you move from lowest to highest.

(3) PART III: ASSESSMENTS. Design two assessments (one formative and one summative) that will allow you to gather information about student proficiency in the skill you have selected. Remember, each assessment must be rich enough to give you information to fill out your entire rubric. To be effective they must allow you to judge not just “right or wrong” or “can or can’t” but levels of proficiency. One assessment should be formative and the other summative covering the same skill (even if the content is different). Explain how each assessment relates to the other and how they will allow you to collect information about students’ performance on your rubric.

(4) PART IV: SCAFFOLDING PLAN. In section four, you must present a proposal for supports that can be used to assist students on this skill. The support should be carefully selected or designed to assist the specific needs that might be identified in your rubric. For this reason, it should be clearly connected to, and a logical outgrowth of the assessment instruments presented in Part II (above). Please prepare two kinds of support—(1) a material scaffold that you think will support their performance in class, and (2) a learning activity or lesson routine that uses either teacher-based or peer-based support to provide assistance to your student. Explain how each is designed to help students make progress on your rubric (that progress may be specific to one criterion, or general to the whole skill set).

HOW YOUR ASSIGNMENT WILL BE EVALUATED: Your presentation will be graded using a rubric. We will go over the rubric and my expectations on the assignment in class before it is due.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading Due</th>
<th>Application Question</th>
<th>In-class Activity</th>
<th>Assignment Due</th>
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<tr>
<td>2/2</td>
<td>Introduction to Course</td>
<td></td>
<td>What does it mean to learn and to understand?</td>
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<td>2/9</td>
<td>Constructivism I An Introduction</td>
<td>Foote 1 &amp; 2 Wadsworth 1 &amp; 2</td>
<td>What are the elements of the constructivist learning process?</td>
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<td>2/16</td>
<td>Constructivism II Prior Knowledge</td>
<td>McKenna &amp; Robinson, 5 Price &amp; Nelson 5</td>
<td>What is the role of prior knowledge in learning? How do I tap into and/or build student’s prior knowledge?</td>
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<td>2/23</td>
<td>Constructivism III Setting a purpose to learning</td>
<td>McKenna &amp; Robinson 7 Gabler 4</td>
<td>How do I use questions and dialogue to focus student learning?</td>
<td>What an activity assumes</td>
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<td>3/1</td>
<td>Constructivism IV Engaging students in active learning</td>
<td>Zook 2 Harmin 1, 2 &amp; 6</td>
<td>How can I plan an activity around active student engagement?</td>
<td>Activity Plan</td>
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<td>3/15</td>
<td>Cognitive Theory I Attention and Memory</td>
<td>Ormrod 9 Price &amp; Nelson 4</td>
<td>How do I grab, maintain and direct students’ attention?</td>
<td>Effective openers and closers</td>
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<td>3/22</td>
<td>Cognitive Theory II Active Working Memory</td>
<td>Ormrod 10 Artino 1</td>
<td>How do I avoid overwhelming my students with learning tasks?</td>
<td>Lesson materials</td>
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<td>3/29</td>
<td>SPRING BREAK</td>
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<td>NO CLASS THIS WEEK</td>
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<td>4/5</td>
<td>Cognitive Theory III LTM and Effective Encoding</td>
<td>Ormrod 13 Price &amp; Nelson 6</td>
<td>How do I encourage students to think deeply about the content?</td>
<td>Activity plans</td>
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<td>4/12</td>
<td>Classroom Equity II Learning to learn</td>
<td>Ormrod 14 Boykin &amp; Noguera 5</td>
<td>How do learning strategies and metacognition level the playing field?</td>
<td>Case study</td>
<td>Lesson Plan &amp; Analysis</td>
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<tr>
<td>4/19</td>
<td>Sociocultural Theory I Tools for Learning</td>
<td>Bodrova &amp; Leong 1 &amp; 2</td>
<td>How and what do students learn through apprenticeships?</td>
<td>Skill analysis</td>
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<tr>
<td>4/26</td>
<td>Sociocultural Theory II Zone of Proximal Development</td>
<td>Bodrova 4</td>
<td>How do I decide how much assistance a student needs?</td>
<td>Rubric design</td>
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<tr>
<td>5/3</td>
<td>Sociocultural Theory III Material scaffolds</td>
<td>Roshoshine &amp; Meister Ch 13</td>
<td>What kinds of materials can I develop to scaffold learning?</td>
<td>Interview design</td>
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<td>5/10</td>
<td>Sociocultural Theory IV Community of Learners</td>
<td>Bodrova, Ch 9; Tharpe and Gallimore</td>
<td>How can I use classroom routines and peer-based activities to scaffold learning?</td>
<td>Scaffolding plan</td>
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<td>5/20</td>
<td>Presentation</td>
<td>None</td>
<td>We will arrange ourselves into presentation groups in advance. Times and order of presentation TBD</td>
<td>N/A</td>
<td>Scaffolding Case Presentation</td>
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