Course Description:
In this course, we will explore several different theoretical perspectives on learning, cognition, and cognitive development. As we will see, no single theory can account for all aspects of human learning and cognition. By looking at a variety of theories, we can identify a range of principles, perspectives, and tools that may be useful in understanding learning and teaching in a variety of contexts. Keep in mind that this course is essentially a survey of learning and cognition theories. While this means that there is a lot of ground to cover in a relatively short period of time, there are opportunities for you to delve deeper into personal areas of interest.

Primary Course Goals
1. To become conversant with basic assumptions, concepts, and principles of each theory.
2. To grasp possible implications of each theory for different instructional settings.
3. To compare and contrast a range of theories in a variety of settings and age groups.
4. To create, revise, and begin to use your own personal theory of learning.
5. To reflect on how learning theories impact on every aspect of your life.

Learning Approach
I believe that learning is a social, active, and reflective process. As such, the learning activities will include reading, writing, reflecting, and participating in group assignments. While some of our assignments are designed as individual reflection activities, many others are group activities. In addition, I want you to be engaged in hands-on and authentic learning tasks. Thus, the tasks selected here will allow for your active experimentation with learning theories in everyday life.

Available Bonk Videostreams and Podcasts (Flipping the class?):
1. Bonk’s Video Lectures (8-pack): http://mypage.iu.edu/~cjbonk/September102008.html (below are some informal podcasts and other video lectures)
Course Books and Resources:
There are 2 highly recommended books for this course (almost required) and 1 optional book. The Driscoll book is highly recommended. Most readings will come from there.

<table>
<thead>
<tr>
<th>Recommended Highly (I will lecture from this book):</th>
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<tr>
<td>Order any edition: <a href="http://tinyurl.com/mgabgeh">http://tinyurl.com/mgabgeh</a>; <a href="http://tinyurl.com/plseovp">http://tinyurl.com/plseovp</a>; <a href="http://tinyurl.com/kquo72t">http://tinyurl.com/kquo72t</a></td>
</tr>
<tr>
<td>(Also try Half.com, AbeBooks.com, Half-Priced Books from $0.75 to $40.00 for used older editions)</td>
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<table>
<thead>
<tr>
<th>Optional Text: This book is highly recommended but not required (you can buy this cheaply on Amazon or Half.com as a used book!).</th>
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<tbody>
<tr>
<td>New Amazon: $3.99; used $.01; ($0.75-$2.00 at Half.com) <a href="http://tinyurl.com/l2umh77">http://tinyurl.com/l2umh77</a>; <a href="http://tinyurl.com/nph4gky">http://tinyurl.com/nph4gky</a></td>
</tr>
<tr>
<td>Note: there are books like this that are more K-12 (e.g., Eduutopia from the George Lucas Education Foundation). Just ask me for such titles or suggest.</td>
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<thead>
<tr>
<th>Recommended highly: This book is highly recommended (especially for counseling, school psych, teacher education, learning sciences, or ed psych students) but not required (you can buy this cheaply used!).</th>
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<tr>
<td>Note: some instructors use this book in P544 Applied Cognition and Learning Strategies. It is an excellent book for understanding cognitive psychology and its impact in school situations, including chapters on reading, writing, mathematics, science, social studies, etc.</td>
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</table>
Reminder Note: You can purchase these books cheaper or used online at Amazon.com or Half.com, AbeBooks.com, Half-Price Books. Try to avoid buying new books. Some articles will be posted to Oncourse or Canvas.

Other P540 Course Resources:
1. Interactive Multimedia P540 Glossary (with many videos and articles—designed by one of my former students (Umida Khikmatillaeva): http://learningplanet.shutterfly.com/
2. Cool Resource Provider and Top Ten Summarizer Sign Up Page:
3. Wikibook on “The Practice of Learning Theories”:
   http://en.wikiversity.org/wiki/Learning_theories_in_practice

P540 Resources from Other Instructors:
Dr. Joyce Alexander who has kindly placed her P540 lecture notes and resources on the Web.
Modules: http://www.indiana.edu/~p540alex/Summer2003/units.html

Instructional Design and Learning Theory Databases (from Richard Culatta, Director of the Office of Educational Technology for the US Department of Education):
Instructional Design: http://www.instructionaldesign.org/index.html
It includes ID Models: http://www.instructionaldesign.org/models/index.html
Mini ID Glossary: http://www.instructionaldesign.org/glossary.html

Greg Kearsley’s old Theory into Practice (TIP) Database:
(Note: this contains 50 major theories of learning and instruction).

### Proposed Course Activities and Schedule

<table>
<thead>
<tr>
<th>Unit</th>
<th>Learner-oriented Activity (Based on Driscoll 3rd edition)</th>
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<tbody>
<tr>
<td><strong>Week 1</strong></td>
<td><strong>Introduction (Aug 25th)</strong></td>
</tr>
<tr>
<td><strong>Read:</strong></td>
<td>Driscoll Ch 1 Intro to Theories of Learning and Instruction</td>
</tr>
<tr>
<td></td>
<td>Cunningham Article: May You Teach in Interesting Times (Oncourse or Canvas)</td>
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<tr>
<td><strong>Review:</strong></td>
<td>Dr. Alexander: Approaches to the Study of Learning:</td>
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<tr>
<td></td>
<td><a href="http://www.indiana.edu/~p540alex/Summer2003/unit1.html">http://www.indiana.edu/~p540alex/Summer2003/unit1.html</a></td>
</tr>
<tr>
<td></td>
<td>Flip #1: Introduction to Course and Syllabus: Streaming Archive URL:</td>
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<tr>
<td></td>
<td><a href="http://www.indiana.edu/~video/stream/launchflash.html?folder=istream">http://www.indiana.edu/~video/stream/launchflash.html?folder=istream</a> &amp;filename=fall08/EDUC-P_540_8832_20080905_4.mp4</td>
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</table>
| Week 2 | Behaviorism  
(Sept 1st) | **Read**:  
Driscoll Ch 2: Radical Behaviorism  
Gredler Chapter on Skinner (Posted to Oncourse)  
**Review**: Other articles posted to Oncourse.  
flip #2: Behaviorism: Streaming Archive URL:  
http://www.indiana.edu/~video/stream/launchflash.html?folder=istream &filename=fall08/EDUC-P_540_8832_20080905_1.mp4 |
|---|---|---|
| Week 3 | Social  
Learning Theory  
(Sept 8th) | **Read**:  
Driscoll: Ch 9: Self-efficacy beliefs, pages 316-323 (if you have the 3rd edition); pages 310-316 (if you have the 2nd edition)  
(Bruning 4th Ed addition: Ch 6, pages 110-117; Beliefs About Self)  
**Review**: Explore Web links in Oncourse related to Albert Bandura  
flip #3: Social Cognitive Theory and Self-Efficacy: Archive URL:  
http://www.indiana.edu/~video/stream/launchflash.html?folder=istream &filename=fall08/EDUC-P_540_8832_20080905_2.mp4 |
| Week 4 | Cognitive  
Information Processing  
(Sept 15th) | **Read**:  
Driscoll: Ch 3: Cognitive Information Processing  
(Bruning 4th Ed. addition: Chapters 1-5 on Info Processing Theory)  
**Review**: How People Learn, by Bransford, Brown, and Cocking  
(Eds.) (2 parts): see Oncourse.  
flip #4: Cognitive Theory: Archive URL:  
http://www.indiana.edu/~video/stream/launchflash.html?folder=istream &filename=fall08/EDUC-P_540_8832_20080910_4.mp4 |
| Week 5 | Motivation and  
Self-Regulated  
Learning  
(Sept 22nd) | **Read**:  
Driscoll: Chapter 9 Motivation and Self-Regulated Learning  
Various motivation articles posted to Oncourse.  
(Bruning 4th Ed. add: Ch 6, pages 117-136; Ch 7 on Beliefs & Cog)  
**Due Sept 22nd: Reflection Paper #1**  
flip #5: Motivation and Self-Regulated Learning  
Archive URL:  
http://www.indiana.edu/~video/stream/launchflash.html?folder=istream &filename=fall08/EDUC-P_540_8832_20080910_1.mp4 |
| Week 6 | Meaningful  
Learning &  
Schema Theory  
(Sept 29th) | **Read**:  
Driscoll: Chapter 4 Meaningful Learning and Schema Theory  
(Bruning 4th Edition addition: Chapters 11-14, Learning to Read; Reading to Learn, Writing; and Cognitive Approaches to Mathematics)  
flip #6: Meaningful Learning and Schema Theory  
Archive URL:  
http://www.indiana.edu/~video/stream/launchflash.html?folder=istream |
<table>
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<tr>
<th>Week 7</th>
<th>Catch-up week (Oct 6th)</th>
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<tr>
<td><strong>Read:</strong></td>
<td>Catch up: Motivation, Learning Strats, Metacognition, Schema Theory.</td>
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<tr>
<th>Week 8</th>
<th>Cognitivism and Piaget (Oct 13th)</th>
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<tbody>
<tr>
<td><strong>Read:</strong></td>
<td>Driscoll: Chapter 6 Cognitive and Knowledge Development (Piaget) <em>(Bruning 4th Ed. addition: Chapter 15 Cog Approaches to Science)</em></td>
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**Due October 13th: Reflection Paper #2**

<table>
<thead>
<tr>
<th>Week 9</th>
<th>Constructivism and Situated Learning (Oct 20th)</th>
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<tbody>
<tr>
<td><strong>Read:</strong></td>
<td>Driscoll: Chapter 5 Situation Cognition and Chapter 7 Interactional Theories of Cognitive Development (Vygotsky and Bruner) <em>(Bruning 4th Ed addition: Chapter 9 Classroom Contexts)</em></td>
</tr>
</tbody>
</table>

Flip #7: Jean Piaget, Lev Vygotsky, Jerome Bruner, and Robert Gagne (as well a practice test of 30+ items comparing cognitive constructivism (i.e., Piaget) and social constructivism (i.e., Lev Vygotsky) [http://www.indiana.edu/~video/stream/launchflash.html?folder=istream &filename=fall08/EDUC-P_540_8832_20080910_3.mp4](http://www.indiana.edu/~video/stream/launchflash.html?folder=istream &filename=fall08/EDUC-P_540_8832_20080910_3.mp4)

<table>
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<tr>
<th>Week 10</th>
<th>Constructivism (Oct 27th)</th>
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<tbody>
<tr>
<td><strong>Read:</strong></td>
<td>Driscoll: Chapter 11 Constructivism</td>
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Flip #8: Constructivism, Social Constructivism, Learner-Centered Instruction, and PBL


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<thead>
<tr>
<th>Week 11</th>
<th>More Constructivism (Nov 3rd)</th>
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<tbody>
<tr>
<td><strong>Read:</strong></td>
<td>Constructivism Continued…</td>
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*(Early) Nov 3rd: Reflection Paper #3 (or anytime after)*

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<thead>
<tr>
<th>Week 12</th>
<th>Instructivism &amp; Instructional Design (Nov 10th)</th>
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<tr>
<td><strong>Read:</strong></td>
<td>Articles assigned from David Merrill on ID (see Oncourse)</td>
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Chapter 10 Gagne’s Theory of Instruction

Bonk’s Last Principles of Instruction

**Review:** Articles and videos posted to Oncourse.

**Note:** Optional lecture (student 20 percent time).

<table>
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<tr>
<th>Week 13</th>
<th>Connectivism (Nov 17th)</th>
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<tbody>
<tr>
<td><strong>Read:</strong></td>
<td>Oncourse articles on Connectivism.</td>
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</tbody>
</table>

*(Bruning Ed. add: Chapter 10 on Tech Contexts for Cog Growth)*
Reflection Paper #3 is Optionally Due Nov 17th (or December 8th)

Note: Optional lecture (student 20 percent time).

| Week 14 | Read:  
|----------|-----------------------------------------------|
| Self-Directed and Informal Online Learning and Personal Exploration Week (Dec 1st) | Bonk articles on Self-Directed and Informal Online Learning  
Driscoll: Ch 12 Toward a Personal Theory of Learning and Instruction |
| **Course Catch-up Week:** Options (Counseling Majors: Critical Thinking from Bruning book or other; Other Majors: choice from Chapter 8 of Driscoll on brain bases for learning and memory, critical thinking, or anything of interest—2-4 articles or book chapters) |
| Note: Optional lecture (student 20 percent time). |

| Week 15 | Present and Turn in Final Papers (Jeopardy Quiz?)  
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<tr>
<td>Final Papers (Dec 8th)</td>
<td>Due Dec 8th: Final Wikibook Chapter, Track Theorist, YouTube video or video blog, Glossary, or Super Summary Papers, Other/Student Choice (and third reflection papers)</td>
</tr>
<tr>
<td>Note: Student presentations of 20 percent time.</td>
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**Course Policies:**

**Lateness, Incompletes, Plagiarism, Paper Submission Policies.** I am flexible. You can turn in any paper late (you have 2 free cushion days (48 hours) on any paper). However, on the 3rd day late you will lose 5% and you lose 5 percent for every day beyond that. A grade of "I" will be given for medical emergencies, extreme situations, and unforeseen emergencies only. All other policies and regulations (e.g., regarding "academic honesty and plagiarism") as stated in the Graduate Bulletin apply in this course (this is a required note in any IU syllabus). Unless I am traveling, I respond to email within 48 hours; more likely, within an hour or 2 or quicker.

**Classroom Courtesy:** Using your laptops or mobile devices to take notes in class or look up course information is a courtesy. Please do not abuse it by reading the news, checking email, posting to Facebook, or distracting your peers in some way during class. If I observe such behaviors, I will ask you to check your technology at the door for the remainder of the semester.

**Submitting Assignments**
You can submit papers to me in class, via email, the drop-box in Oncourse, campus mail, or fax. Just let me know which you choose if you do not bring to class. Email or FTF work best.

**Course Points.** There are **270 points** in this course, as follows:

1. 30 points = Participation on Class Discussion
30 points = Cool Resource Finder and Top Ten Summarizer
30 points = Class Attendance

II. 30 points = Reflection Paper #1 (choice of 8 options)
30 points = Reflection Paper #2 (choice of 8 options)

III. 30 points = Reflection Paper #3 (choice of 4-5 options)

IV. 90 points = Pick from 7 choices: Super Summary Paper, YouTube vide or Video Blog, Wikibook Chapter, Track a Learning Theory, Personal Glossary, OCW or MOOC review, or Other Student Option

Course Grading: I reserve the right for a quiz or test at some point during the semester which will increase the point total here. We will use 90-80-70-60 scale for the course.

270 pts or more = A+
252 = A
243 = A-
234 = B+
225 = B
216 = B-
207 = C+
198 = C
189 = C-

Course Requirements and Assessments

I. Class Discussion, Cool Resources, and Class Attendance
We will typically cover a chapter or unit each week. My Webstreamed class lectures, virtual presentations, and podcasts can be found online. See: http://mypage.iu.edu/~cjbonk/streamed.html#p. Each week, you are asked to read the chapter assigned, watch 2 assigned YouTube or TED videos (from several posted), and come to class. If you miss class, you must watch or listen to any relevant lecture materials I have posted (see http://mypage.iu.edu/~cjbonk/youtube_videos.htm). If there are multiple parts to a video, you are encouraged to watch all parts. On a couple of weeks during the semester (when I am at a conference), we will meet online or have an optional face-to-face meeting. See syllabus.

A. Participation in Any Discussion Face-to-Face or Online (30 Points):
In this Web course, your completion of weekly activities and regular participation in course discussions will be essential to your success. There are 30 points allocated to participating in weekly in face-to-face class sessions as well as any online discussions. 27-30 for high participators; 24-26 for medium participators; 21-23 for low participators; and 0-20 for others.

B. Top Ten Summarizer and Cool Resource Provider (30 Points).
Each week, we will have 1 or 2 people in charge of bringing in 1-2 cool resources to the class session that extend the class as well as bring in some cool resources. This person or pair will also take on the role of a Top Ten Summarizer. In effect, they will provide a list of the top ten points from the article or chapter readings for the week. They must start with the summary from last
year as a base and build on it, extend it, delete it, modify it, etc. The online sign-up sheet for these two roles can be found in Oncourse Resources (see http://www.trainingshare.com/p540.php).

In effect, the Cool Resource Providers will explore the Web resources for the week and present them to the class. The team will submit a list to me of 2-4 Web resources prior to class and also post it to Oncourse. Typically, just 1 or 2 of these resources will be shown in class. Such resources might include online psychology tests, simulations, animations, models, videos (e.g., YouTube or Vimeo), researcher Websites, or audio clips, etc. as well as paper-based information. A corresponding handout is helpful but not required. The presentation will take 2-3 minutes followed by questions and answers from the class. As Top Ten Summarizers, they will also post ten key points for the week on the right side of the marker board. They will also have a one page top ten list handout for the class. This too will take about 4-7 minutes or 10 minutes total.

You will likely be a Top Ten Summarizer and Cool Resource Provider just once during the semester. This is a mastery assignment—you get full credit if done well.

C. Class Attendance and Warm-up Quizzes (30 Points—mainly for attendance).
I will take attendance each week. It will be worth 30 points. I may also design a weekly warm-up quiz in the form of a crossword puzzle, maze, matching exercise, etc. based on terms in the Driscoll book. Most of these will be just for fun, but we might give bonus points for high scores on some of them. We might also treat 1-2 of them as a quiz (most likely with advance notice).

II. Reflective Writing Activity #1 is Due September 22nd and Activity #2 Due October 13th (Pick 2 tasks from 8 options below)
You have 3 total reflective writing papers to complete. Two are in this section with eight options. The first one is due September 22nd and the second one is due October 13th. Except for last four options, these will be 2-3 page single-spaced papers. Try to skip a space between paragraphs, however. Use 12 point times roman font and one inch margins or something similar that looks nice and does not make me go blind. Please include your name and option description. I have no preferences. Each paper is worth 30 points.

Option A. Learning Journeys or Edutopia book (30 Points)
I recommended the book, “Learning journeys: Top management experts share hard-earned lessons on becoming mentors and leaders,” for a reason. The book is filled with 37 stories and lessons in life from some of the world’s best known management mentors and leaders. A used copy of this book can be bought online at Amazon.com or Half.com for under $10 and sometimes as low as $1. (If you do not want to select this particular book because you are a K-12 educator, feel free to find a similar book in your field if you can find one, or perhaps buy an autobiography that is filled with rich learning experiences. I must approve any alternative book selection, however. Please read 4-5 stories from the “Learning Journeys” book (or 4-5 chapters for an alternative book) and link aspects of them to different learning theories in a 2-3 page single-spaced paper (one of these pages might be a chart of course terms alluded to in the chapters you read and a description of how these relate to class). For K-12 people, there is a book called Edutopia from the George Lucas Education Foundation that you could select. Or you
might suggest and get approval for a different book. In your paper, please describe the learning principles, ideas, and guidelines embedded in the stories that you chose. How does the story validate or refute the theory? How might it be applied in still other ways? What is missing from the story that you might like to know more about? You might send your learning journey review to the expert who wrote it for potential feedback. If you do, a copy of your email would be worth 2 extra points and any feedback would be worth one more. These will be graded for: (1) appropriate relevant linkages to class concepts; (2) completeness of your review; and (3) coherence and organization (10 points each).

Option B. Learning and Cognition Trends Paper (30 Points)
From your perspective, what trends in learning and cognition theory seem to be particularly important today? Perhaps it is forming learning apprenticeships. Maybe you are interested in active learning or constructivistic teachers and schools. Or, perhaps, creating a better overall learning environment intrigues you most. Well, in this option, you are to explore the literature on a topic of interest. You are to find, filter, and explore articles, conferences, books, professional organizations, research reports, magazines, etc. on this topic. Then tell us what the state of knowledge is in this area and why it is important to you. Where are the open research issues, the apparently important applications, and the upcoming opportunities? How might this particular class soon be impacted by this area? Your 2-3 page single-spaced paper (with appropriate appendices) will be evaluated for (1) exploration and creativity; (2) completeness, coherence, effort, and amount of digging; and (3) relevancy and timeliness for this class.

Option C. Job Application Paper (30 Points)
Here, you are to write a 2-3 page single-spaced paper where you evaluate one or more theories or approaches from the perspective of an educational setting, issue, or problem of importance to you (preferably your current or past job). Since I am your audience, don't take up much space restating the theory. In addition, be sure your paper is about something, instead of a series of unrelated reflections or observations about the theory. Like all good papers, it should have a descriptive title, some kind of thesis statement, and a conclusion. Of course, we also expect it to be well organized and coherent. Since this is not a library research paper, you do not necessarily need to use any resources other than the text and class discussion. These papers will be graded for: (1) demonstration of understanding of the theory; (2) relevant application or critique of the theory in some educational setting or context; and (3) coherence and organization of the paper.

Sample papers: Sample titles include “Behaviorism and coaching,” “Making sense of Bruner’s theory of cognitive development in college instruction,” “A year in a life of a constructivistic math instructor,” and “My grandmother was a situated cognitivist.”

Option D. Personal Learning Theory—Joint Learning Theory (30 Points)
One of the most important goals of this course is for you to form a personal sense of how these learning and instructional theories can be used in your future "educational" practices. During the first week of the course, I might ask you to post a 1-3 paragraph summary of your personal theory of learning in Oncourse. After reading the postings of your peers, you might find one or more people who you have something in common with and create a joint personal theory of learning. Just how does your personal learning theory merge with or relate to someone else’s? If you decide on a collaborative paper, you must turn in a 4-5 page single-spaced paper. If you write an individual paper, it should be 2-3 pages single spaced. Your personal theory of learning
should include examples or ideas from your present job and anticipated work environments. It will be graded for: (1) insightful and creative ideas; (2) coherence and organization; and (3) completeness.

To complete this task, you might ask yourself a series of questions about each of the theories. However, since the goal of this task (and this course, by the way) is to construct your own unique understanding of the theories, we cannot dictate all the questions you might ask. But we can suggest some possibilities, such as:

- What aspects of learning and cognition are addressed by this theory?
- What are the main processes or mechanisms that are proposed to account for learning, according to this theory?
- What is the single most important "big idea" from this theory?
- With what other theories or viewpoints is this theory most compatible?
- Does this theory or perspective resonate with your own experiences and beliefs?
- Does this theory seem to be a good match for the kinds of learners you're interested in?
- What about for the learning tasks you intend to use?

Option E. Case Situations or Problems (30 Points)
Here, you will write 3 case situations or vignettes related to your current or most recent job setting (each will be about one page long single spaced). In these cases, you will point out the situation or problem in 1-2 paragraphs as well as the key questions or issues. Next you will detail the concepts that relate to this class. Finally, you will provide a resolution based on your readings in this class. If anyone shares their cases with co-workers or peers and gets feedback on them, you will get 2 bonus points provided you attach this to your work. Your paper will be graded for (1) sound solution and overall demonstration of understanding of learning and cognition theories; (2) case richness and detail; and (3) coherence and organization of the paper.

Option F. Library Day (30 Points)
Here is your chance to explore your own interests. From your perspective, what trends in learning and cognition theory seem to be particularly important today? Perhaps it is forming learning apprenticeships. Maybe you are interested in active learning or constructivistic teachers and schools. Well, in this option, you are to explore the literature on a topic of interest and then use it in practice. You are to find, filter, and explore articles, conference proceedings, book chapters, professional organization reports, research reports, magazines, etc. on this topic. I want you to spend a day in a physical library or searching the Web online or both and find 15-20 articles related to your area(s) of interest, chapters, or reports and briefly summarize them in a short super summary form which I will provide for you (1 page). In the super summary form, you will note the following: (1) the article citation; (2) topic area, concepts, ideas, etc.; (3) short summary of article; and (4) your article rating. Your library day summaries will be evaluated for: (1) coherence; (2) completeness, effort, and amount of digging; and (3) relevancy and timeliness for this class. No additional paper is required for this assignment.

Option G. Mini Personal Course Glossary (30 Points)
In this option, you will create a 30 word glossary. Each term will have a brief textbook-like definition (in your own words) as well as a story or example related to the concept. The story or
example should not be more than a few sentences long. Please arrange these in alphabetic order. They might further be sorted by chapter or theory if you so choose. Visuals of any concept are helpful but not required. No additional paper is required.

**Option H. Chapter Concept Maps (30 Points)**
In this option, you will create 3 concept maps for each of 3 different chapters or learning theories. Your concept maps will each include at least 20 terms including terms that relate to one another. You will have main ideas as macropropositions and details as micropropositions. You are encouraged to use a computer software package for this. Popplet (http://popplet.com/) is a tool that allows you to hyperlink terms and ideas within your concept map. Inspiration (http://www.inspiration.com/), Gliffy http://www.gliffy.com/, and Mindomo (http://www.mindomo.com/) are other such tools. Students can work in pairs on this project. A 2 page single-spaced paper will explain your connections and ideas as well as your learning growth from this assignment.

**III. Flipping, Connectivism, Technology, and Learning Reflective Writing Task #3 (November 17th …or December 8th)**

**Option A. Flipped Classroom Reflection (30 Points)**
We have moved from an age of information scarcity to information abundance. In this new age, learners have to take greater control of their own learning. Are you a self-directed learner? Would you like to perhaps learn information in multiple ways? In this new option, I would like for you to watch 4 of the 8 flipped classroom video lectures from Dr. Bonk prior to the class lecture for that topic and reflect on the key concepts learned. For a list of the videos, see: http://mypage.iu.edu/~cjbonk/September102008.html page single spaced reflection paper, I want you to compare your learning to what you read in the book, learned from extra articles posted online, and learned in the lectures and class activities and discussions. Which aspects of the course were the most beneficial and why? What was perhaps redundant and could be eliminated? Have you designed any new ideas, concepts, or general thinking as a result of engaging in the flipped classroom activities? These will be graded for content, coherence, and originality.

**Option B. YouTube Observations and Reflections (30 Points)**
I will post a summary sheet of YouTube and other shared online videos to watch each week (see http://mypage.iu.edu/~cjbonk/youtube_videos.htm). You must watch at least 2 of these each week (Note: multiple part videos count as just 1 video in total). We will hold discussions, debates and reflections on these videos in Oncourse or Canvas. I want everyone to connect terms they see in the online videos to the readings. The first assignment is to take one or more of those videos and write a 2-3 page single spaced paper about the learning experience from such viewing. What terms make more sense now? How are one or more learning theories or concepts better understood from watching these videos? What is still unclear or missing? How might you use YouTube in your present or future teaching and learning situations? Before writing your paper, be sure to read the article by Curt Bonk on using video as a macrocontext for learning (see Oncourse or Canvas). Students can suggest additional YouTube videos to me for a bonus point. For another bonus point you might rate the YouTube videos that I made available this semester.
Option C. Reflection Connectivism: Is it a learning theory? (30 Points)
In this option, I want you to read at least a half dozen articles that discuss connectivism. And then decide whether it is a learning theory. If not, what is missing? I want you to reflect on the key underlying principles of connectivism. In addition, discuss how it is similar to at least one other learning theory that we are discussing in this course as well as dissimilar from another learning theory. What makes it a learning theory or not? How might it be applied in schools, universities, or training situations? Finally, should I continue to include it as a topic in P540 in the future? Why or why not? What remains unexplained in terms of connectivism? Please define key terms at the end in an appendix or glossary. Put sure to also insert your references. You are to write a 2-3 page single spaced paper on this.

Option D. Web Resource Portal Explorations and Reflections (30 Points)
In this option, I want you to explore the Web for resources related to this class (e.g., theory information sites, videos, animations, interviews of authors, conference sites, special journal issues online, other related course portals, etc.). I want you to find at least 5 of them and evaluate how they could be used in a class like P540. What are their strengths and weaknesses? How might an instructor use them? How might each one be improved? What is missing?

Writing Task #3 Paper Grading (30 Total Points or 10 pts each dimension):
1. Critical thinking displayed: sound analysis and evaluation, logical, backs up claims
2. Coherent and complete: logical flow to the critique or review, unity, well organized, sequence
3. Learning displayed: breadth/depth of thought, knowledge growth, understands theories.

IV. Final Assignment Options (includes Pink Time or 20 percent time projects) (90 Points, Due: December 8th)

Student Choice (Pink Time/20 Percent Time Projects) (90 Points)
Using ideas from Daniel Pink’s (2009) book called Drive, we will be trying out some new ideas in this class. I will be granting you authority to work on whatever project you want to take on. You do not even have to come to class. You will decide what you will learn and how you will learn. The key caveat is that you will need to share your final project during Week 15. My goal is for you to become more active and autonomous in your learning. In effect, during Weeks 12, 13, and 14, you can work on any project you want related to class.

So, instead of one of the options above, you can create or design something of similar worth as a final product or project for this class. You might help an organization, institution, corporation, or school in your local community using some of the ideas from this class. You must get approval from the instructor prior to commencing on such a project (preferably by mid November). You must turn in any report you have produced for that organization or institution along with a 3-5 page (single spaced) reflection paper on what you have learned from that experience. You must specify at least a dozen principles, concepts, or terms from the course that link to their final project. An appendix of such terms must be included with your paper.

Your final project will be graded for:
Sample Grading Criteria (90 Points; 10 points each):
1. Importance of the project;
2. Creativity, novelty, and originality;
3. Effort, involvement, commitment, and helpfulness (for/to client);
4. Content and design effects;
5. Coherence and logical sequence;
6. Completeness of the project;
7. Course linkages and relevance;
8. Client satisfaction and project appropriateness;
9. Overall quality of the project

If possible, please include a note from the client about his or her satisfaction with the product and your overall effort, commitment, and helpfulness. Such projects might involve volunteering in the community or they might be related to a current job or work setting.

Your final project might be a super summary of your learning in the course that is useful for future students. It might also be a video project of your learning or a documentary of the course itself. It might be a new book or an extension of an existing wikibook. Or, as noted below, you might track the present state of a learning theory or theorist.

Examples from Prior Semesters:

Final Project Idea #1. Super Summary (90 Points)
Near the end of the semester, you are to write a 2,500-3,500 word (I will accept up to 3,500 words not counting appendices and references) super summary of what was important in this course, at least in terms of the class discussions. Here you must specifically refer to the comments of at least four cool resource providers or top ten summarizers from four different weeks in the semester. In your paper, you should point out what you learned from the course, how learning theories be used in your own job setting or educational practices, what concepts are important from this class, what would you do differently, and how you can now use course material when you leave this class? In addition, what aspects of learning and cognition are addressed by this theory? What is the single most important "big idea" from this theory? Does this theory or perspective resonate with your own experiences and beliefs? Does this theory seem to be a good match for the kinds of learners you're interested in? How might your learning theory be used in your current job or in an educational setting, issue, or problem of importance to you (preferably your current or past job). At the end, you might also include a glossary of terms learned with personal definitions or examples or something else which creatively demonstrates your learning in this course.

Final Project Idea #2. Wikibook Chapter or Extension (90 Points)

I am a firm believer in learning by doing. This task is one of doing! Here, you are to write a chapter for a book—a wikibook—which is available for free to the whole community. You pick the topic, the title, and the content to include. Anyone in the world with an Internet connection
can modify it or extend it. The focus is taking the theory that you have learned in this class and putting it into practice. Seven years ago, Dr. Mimi Lee’s class at the University of Houston and my P540 class in Bloomington built a wikibook on “The Practice of Learning Theories” (The POLT). The focus of The POLT is on implementation, pragmatic use, or realization of a learning theory in the field. In this option, you can significantly modify an existing chapter or write a new one. Just create your own username and password and you are ready to make changes to the POLT. You can write these documents in Word as well as place them in the wikibook. In this assignment, you will get something to add to your resumes.

**Final Project Idea #3. Track the Present State of a Learning Theory (90 Points)**
In this option, I want you to track a theory or theorist. If this person is still alive, I want you to write to this person, follow his/her Twitter feed or podcast posts, read his/her articles (at least 10-12 such articles), read articles from others on this theory, watch one or more conference presentations from him/her, and interview 1-2 others about the theory (e.g., IU Professor Richard Shiffrin on cognitive information processing theory, George Siemens or Stephen Downes on Connectivism). I want you to dig in deep and summarize the state of their theory today. You might also analyze how it is being applied in educational settings (e.g., schools, businesses, military training, etc.). Who is applying it? And why? What works and what does not? Is there anything replacing it? You will turn in a report on the state of that theory. Your paper will be a maximum of 4,000 words, excluding appendices, references, interview transcripts, etc.

**Grading Criteria for Option A, B, and C (90 Points; 10 points each):**
1. Insightful/Originality: novel, creative, takes risks, relationships drawn, unique.
2. Interesting: engaging, unique perspective
3. Completeness: thorough, detailed, dig deep, effort
4. Relevance: appropriate, effort, related to class.
5. Content: learning displayed, connections to class, informative reflection.
7. Critical thinking displayed: sound analysis and evaluation, logical, backs up claims.

**Final Project Idea #4. Create a YouTube Video or Video Blog (Vlog) of Your Personal Learning Theory (90 Points)**
Instead of a final paper, chapter, or test, you can post a 5-10 minute video reflection of your personal learning philosophy or approach. In it, you might explain how you are going to use the content of this course. You might address issues such as how learners are viewed from this approach, key principles, concepts, or ideas, what it attempts to explain, the ages or types of learners it is best suited for, and what led you to these beliefs.

**Prior Examples:**
Anthony Schmidt P540 (personal theory): [http://www.youtube.com/watch?v=x3FJyi4Pn_E](http://www.youtube.com/watch?v=x3FJyi4Pn_E)
Tonya Clark P540 (making connections) [http://www.youtube.com/watch?v=eD1awpaSuP0](http://www.youtube.com/watch?v=eD1awpaSuP0)
Dan Halluka (dan 178 singing): [http://www.youtube.com/watch?v=tOL7IrGsqnw](http://www.youtube.com/watch?v=tOL7IrGsqnw)
Yue (Ma) in Teachingland: [http://v.youku.com/v_show/id_XMzM1MzE2Njk2.html](http://v.youku.com/v_show/id_XMzM1MzE2Njk2.html)
The ambitious might create a video for their school, organization, or institution (created by first year teacher at Lorma, Hannah Kimberly Omar):

**Lorma International School: [http://www.youtube.com/watch?v=1C435Ut-GzA](http://www.youtube.com/watch?v=1C435Ut-GzA)**

**Grading Criteria for D (90 Points; 10 points each):**
1. Insightfulness into P540 class content: Does he/she understand the course content?
2. Creativity and originality in style and content of video: Snappy, exciting, cool, etc.?
3. Effort and commitment to this project: What is the sense of effort in the product?
4. Design and visual effects: What is the cool and wow factor?
5. Coherence and logical sequence of the video: Can one understand it?
6. Completeness: Sufficient coverage of content?
7. Relevance: Does this relate to P540 content?
8. Audio: Is any sound used and is it in synch with the visuals?
9. Overall content quality: The multimedia, depth, interesting, etc.?

**Final Project Idea #5. Personal Course Glossary (90 Points)**
In this option, you will create minimum 90 word glossary. Each term will have a brief text-book like definition (in your own words) as well as a story or example related to the concept. The story or example should not be more than a few sentences long. Please arrange these in alphabetic order. They might further be sorted by chapter or theory if you so choose. Visuals of any concept are helpful but not required.

**Grading:** This will be based on terms that are correctly, creatively, and interestingly explained. If you have 90 good ones filled with rich, unique, lively, and accurate examples, you have a good chance of getting doing very well on this assignment. You can submit up to 10 extra terms for a couple of potential bonus points. I will grade according to the following criteria:

**Sample Grading Criteria (90 Points; 10 points each):**
1. Coherence and logic,
2. Easy to follow format and design (engaging),
3. Comprehensive, effort, digging,
4. Course linkages and relevance,
5. Creative and insightful examples,
6. Interesting, unique, novel examples
7. Accurate examples,
8. Overall completeness,

**Final Product Idea 6. Usable Class Product (90 Points)**
Students choosing Option 4 might design their own final project or combine ideas together into something truly unique (i.e., a mash-up). As part of this effort, they might create or perform a meaningful activity for the class. For example, you might summarize the learning principles embedded in different articles or readings for each week of the course. Or, you might create a unique categorization scheme for the learning theories and principles discussed this semester. The more ambitious of you might create an interactive multimedia glossary or comprehensive
Website for the course as an individual or as part of a team. Still others might create an online database of articles on a particular theory or perspective.

There are still more options. Among them, you might create a mobile application or mobile book related to a learning theory. Others might organize a class mini-conference or real conference symposium on an idea related to this class for your school, company, or organization and then reflect on it. Such tools might have relevance in K-12, military, corporate, or higher education settings or perhaps in more informal settings such as a museum, zoo, or computer club.

You might also engage in a major problem-based learning project related to this class with a school, company, organization, or institution. In this option, you make the contact and find out what needs to be resolved and then get it approved by the instructor. The final product might be a distance learning evaluation project. It might involve the design of e-learning tools and resources. It might entail the creation of a strategic plan, white paper, or vision statement. Whatever the problem or task, it must be authentic. Anyone selecting this option should include a 2-4 page single-spaced reflection paper on what your learned (Note: any final project report to an organization or institution can substitute for that final reflection paper). The grading scheme will be project specific.

**Grading (10 points each):**

1. **Insightful/Originality and Interesting:** innovative ideas, insightful relationships drawn, unique, aesthetics, perspective, engaging writing, unique perspective, interesting work
2. **Completeness:** thorough, detailed, dig deep, effort, fulfills spirit of the assignment.
3. **Relevance:** concepts and ideas from experience appropriate and related to class, perhaps includes a recap list or summary table of what learned, real world implications
4. **Practice Impact:** Audience stated, purpose, goals, intent, extendable, long-term possibilities, short-term impact
5. **Content Reviewed/Included:** learning displayed in some way, made several key connections to class, highly informative reflection (helps the reader form new understandings).
6. **Exploratory and Reflective:** pushing out, metacognitive, reflecting on oneself as a learner or on how fellow learners benefit from this project or idea; shows that one was reflecting on the experience both as a learner as well as in light of the content of this class
7. **Coherent, Logical Flow, and Well Organized:** easily read or to learn from, transitions, conclusions, logical flow to project, critique, review, or experience, well organized project, sequence of ideas makes sense

**Final Product Idea #7. OpenCourseWare (OCW) or MOOC Review Option**

Recently, there is a huge explosion of open educational contents. Among these new learning resources are open educational resources (OER), OpenCourseWare (OCW), and massive open online courses (MOOCs). OCW and OER typically are freely available contents without direct contact with instructors. MOOCs are instructor-driven courses which are usually free and open to the world community, thereby involving large enrollments. An optional assignment idea for this class is to explore or enroll in one or two massive open online courses (MOOCs) related to learning, cognition, and instruction. Some possibilities related to our course can be found in Class Central or. Even if you do not select this task, you might explore a few of these MOOCs and observe how they are conducted. And then reflect, reflect, reflect!
You could replace the midterm or final by enrolling in one or more MOOCs and writing a 2-4 page single spaced reflection paper on what you learned as it relates to various topics from this course (Note: you might include a recap table or chart at the end summarizing key concepts or ideas mentioned in your paper). You would NOT have to complete the course; just sit in and lurk if you want. Your MOOC review paper should include your insights about the learning environment and learning theories relied upon as well as a few specific examples of instructional tasks and ideas from the course. It will be graded for: (1) connections to course content; (2) coherence and organization; and (3) overall insights and conceptual understandings.

If you complete the course or get a certificate (Coursera calls these “Signature” courses), you can replace your final assignment. Even if you do not complete a MOOC, you could replace your final assignment if you write a longer reflection paper or extend the assignment in some way (e.g., interview the MOOC instructor(s) about their instructional approaches and beliefs about learning; interviewing other participants/students taking this course about their learning experiences; etc.). As part of these efforts, you might also explore some of the open educational portals and contents listed in your syllabus or that you find online.

**Portals to MOOC courses:**
MOOC Provider Companies and Organizations:
Canvas: [https://www.canvas.net/](https://www.canvas.net/)
Coursera list of courses: [https://www.coursera.org/courses?orderby=upcoming](https://www.coursera.org/courses?orderby=upcoming)
CourseSites: [https://www.coursesites.com/webapps/Bb-sites-course-creation-BBLEARN/pages/mooccatalog.html](https://www.coursesites.com/webapps/Bb-sites-course-creation-BBLEARN/pages/mooccatalog.html)
edX courses: [https://www.edx.org/course-list](https://www.edx.org/course-list)
FutureLearn: [https://www.futurelearn.com/courses/upcoming](https://www.futurelearn.com/courses/upcoming)
iversity: [https://iversity.org/](https://iversity.org/)
NovoEd: [https://novoed.com/](https://novoed.com/)
Open2Study: [https://www.open2study.com/](https://www.open2study.com/)
Udemy: [https://www.udemy.com/](https://www.udemy.com/)
Udacity: [https://www.udacity.com/courses#!/all](https://www.udacity.com/courses#!/all)

**MOOC Lists:**
Class Central: [https://www.class-central.com/subject/education](https://www.class-central.com/subject/education)
The MOOC List: [http://www.mooc-list.com/](http://www.mooc-list.com/)
Open Culture: [http://www.openculture.com/free_certificate_courses](http://www.openculture.com/free_certificate_courses)
TechnoDuet: [http://www.technoduet.com/a-comprehensive-list-of-mooc-massive-open-online-courses-providers/](http://www.technoduet.com/a-comprehensive-list-of-mooc-massive-open-online-courses-providers/)

**Some questions you might ask before writing your paper:**
- What is the overall feel of this learning environment? Is there any particular learning approach or philosophy that you feel or experience?
- What aspects of learning and instruction are addressed in this MOOC or by this open educational resource? Stated another way, what theory of learning and instruction does the instructor or the course design tend to rely upon?
- What learning theory or perspective might be used to improve the course? How might you improve this course if asked?
- Are there any specific learning concepts and principles embedded in any module or in multiple modules of the course?
- How does the MOOC utilize existing OER content? How might it better take advantage of such resources?
- Which tasks or activities seem most effective and why? What are the most creative?
- What is the least effective aspect of this course and why?
- What aspects of learning and instruction or theoretical perspective do you understand better now? And why?

MOOC Review Grading Criteria if a Final Project (90 Points; 10 points each):

1. **Insightful/Originality**: innovative ideas, insightful relationships drawn about MOOCs and open education, helps the reader form new understandings about MOOCs.
2. **Interesting**: engaging writing, unique perspective on MOOCs and open education.
3. **Completeness**: thorough, detailed, dig deep, effort, fulfills spirit of the assignment.
4. **Relevance**: concepts and ideas from MOOC experience appropriate and related to class, perhaps includes a recap list or summary table of what learned.
5. **Content**: learning displayed, made several key connections to class from MOOC experience, highly informative reflection (helps the reader form new understandings).
6. **Exploratory and Reflective**: pushing out, metacognitive, reflecting on oneself as a learner or on how fellow learners benefit from MOOCs, shows that one was reflecting on the experience both as a learner as well as in light of the content of this class.
7. **Coherent, Logical Flow, and Well Organized**: easily read, transitions, conclusions, logical flow to the critique or review of MOOCs or MOOC experience, well organized review, sequence of ideas makes sense.
8. **I will also look for**: breadth/depth of thought, knowledge growth displays, understands theories, concepts, and principles in relation to the MOOC experience.
9. **And I will want to see some critical thinking displayed** including sound analysis and evaluation of instructional approach taken in MOOC, logical, backs up claims.

**Grading Note**: Extra consideration (and the potential for bonus points) given for those who cite references on MOOCs or open education, create a summary or recap table of terms or concepts mentioned in their reflection paper, participate in more than one MOOC, and those who actually complete the course. Summary or recap tables are especially welcome.

**MOOC reflection rubric**

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Superior (5)</th>
<th>Good (4)</th>
<th>Acceptable (2-3)</th>
<th>Poor (0-1)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Depth of Reflection</strong></td>
<td>Response demonstrates an in-depth reflection on, and personalization of the MOOC experience. Viewpoints and interpretations are insightful and well-articulated. Clear, detailed examples are provided, as applicable.</td>
<td>Response demonstrates a general reflection on, and personalization of the MOOC experience. Viewpoints and interpretations are supported. Appropriate examples are provided, as applicable.</td>
<td>Response demonstrates a minimal reflection on, and personalization of the MOOC experience. Viewpoints and interpretations are unsupported or supported with flawed arguments. Examples, when applicable, are not provided or are irrelevant to the assignment.</td>
<td>Response demonstrates a lack of reflection on, or personalization of, the of the MOOC experience. Viewpoints and interpretations are missing, inappropriate, and/or unsupported. Examples, when applicable, are not provided.</td>
</tr>
<tr>
<td><strong>2. Required Components</strong></td>
<td>Response includes all components and meets or exceeds all requirements indicated in the</td>
<td>Response includes all components and meets all requirements indicated in the</td>
<td>Response is missing some components and/or does not fully meet the</td>
<td>Response excludes essential components and/or does not address the</td>
</tr>
<tr>
<td>3. Learning Growth</td>
<td>Response makes extensive connections to course content, shows breadth/depth of thought, shows understanding of one or more theories, makes connections from MOOC to learning and instruction theory, many key concepts or principles mentioned.</td>
<td>Response makes modest connections to course content, shows some breadth/depth of thought, shows understanding of one or more theories, makes connections from MOOC to learning and instruction theory, some key concepts or principles mentioned.</td>
<td>Response makes limited connections to course content, vaguely touches upon learning or instructional theories without much breadth or depth, connections made in passing to from MOOC to learning and instruction theory, not many concepts or principles mentioned.</td>
<td>Response lacking connections to course content, fails to mention learning or instructional theories, no connections made from MOOC to learning and instruction theory, no concepts or principles mentioned.</td>
</tr>
<tr>
<td>4. Evidence of Synthesis and Practice</td>
<td>Response shows strong evidence of synthesis of ideas presented and insights gained throughout the MOOC experience. The implications of these insights for the respondent's overall teaching or learning practice are thoroughly detailed, as applicable.</td>
<td>Response shows evidence of synthesis of ideas presented and insights gained throughout the MOOC experience. The implications of these insights for the respondent's overall teaching or learning practice are presented, as applicable.</td>
<td>Response shows little evidence of synthesis of ideas presented and insights gained throughout the MOOC experience. Few implications of these insights for the respondent's overall teaching practice are presented, as applicable.</td>
<td>Response shows no evidence of synthesis of ideas presented and insights gained throughout the MOOC experience. No implications for the respondent's overall teaching and learning practice are presented, as applicable.</td>
</tr>
</tbody>
</table>