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### EDU 510.50: Developmental and Learning Sciences

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**C&I 510 Developmental and Learning Sciences (online)**

Instructor: Jingjing Sun, Ph.D., Assistant Professor

Email address: Jingjing.Sun@umontana.edu

Office: 103, Education Building

Office hours: By email appointment

Credit hours: 3, Graduate level

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**Course Description**

C&I 510 is an advanced course that addresses application of psychological concepts in educational settings. This course will focus on theories of development, teaching and learning, and on applications of psychological research to learning, primarily to classroom settings. The majority of this course covers learning in childhood. This course is divided into two major themes, which we cover separately. In the first part of the course (I), we will examine theoretical perspectives that impact the ways in which we conceive of learning. In this part of the course, we will first cover historically important theories, which continue to impact our understanding of learning (I.A.), and then cover more recent and emerging theoretical perspectives (I.B.). In the second part of the course (II), we will focus on learning in the content areas of literacy, mathematics, and science.

The course will be updated weekly on Monday. You can anticipate that the weekly activities will be devoted to an in-depth discussion of the issues raised in that week's readings.

**Learning Goals**

Many of you are about to become, or already are, education professionals who are classroom teachers, administrators, or library and information science educators. Thus, in this course we'll strive to link between understanding the behavioral science of teaching and learning, and applying that information to your professional work with students.

**Required Readings**

The textbook is available for purchase at UM Bookstore. All additional required readings will be available on Moodle and are subject to change, with advance warning.

**Textbook (both 2005 and 2011 editions are fine):** Crain, W. (2011). *Theories of development: Concepts and applications*. Upper Saddle River, NJ: Prentice Hall.

**Accommodation for Special Requirement**

As I teach, I try to be aware of the special needs of individuals as well as the needs of the group. If you require some accommodation, I encourage you to e-mail me as soon as possible. Please feel free to contact me to discuss assignments or the content of the course. I would also be happy to meet with you via ZOOM as we navigate the COVID-19 situation.

**Course Policies, Resources, and Expectations**

**Online Decorum:** In online spaces, it is especially important to monitor one's tone while communicating. Humor and sarcasm are easily understood when one can see another person's face, but this is not true in online settings. Accordingly, please be thoughtful to convey respect in your written and verbal comments. If anyone at any time feels that classmates are not being respectful, please contact Dr. Sun immediately, and I will remedy the situation. Besides, as email is the primary way you will communicate

with me, I appreciate your efforts to follow email courtesy and write concisely about your questions or concerns, so I can help address them timely.

**Writing Center:** Since you will write quite a bit for this online course, I'd recommend you to take advantage of the University of Montana Writing Center's outstanding (and free!) services of reviewing written assignments for online and distance students. You can set up an appointment in advance for staff to review your work before assignments using this [link](#).

**Student Conduct Code:** All students will be expected to comply with the academic honesty policies described in the [University of Montana Student Conduct Code](#), which embodies the ideals of academic honesty, integrity, human rights and responsible citizenship. It is also expected that each student will foster a collegial learning environment by sharing his or her experiential and academic knowledge and practices, as well as respectfully listening to the viewpoints of others and following basic netiquette rules. Students who need individualized accommodation due to a disability should contact Dr. Sun at the beginning of the course.

**Academic Misconduct Policy:** Any instances of academic misconduct, including plagiarism, will result in an **F** for the course.

**Accommodating Disabilities:** I wish to fully include each student in this course. The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students. If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or 406-243-2243. I will work with you and Disability Services to provide an appropriate modification. For more information, visit the [Disability Services website](#).

### **Course Grading and Evaluation**

Please keep a record of your own performance. It is a good idea to keep a copy of work and materials submitted online to me.

#### **Grading**

100-93 (A)	92-90 (A-)	89-87 (B+)	86-83 (B)	82-80 (B-)
79-77 (C+)	76-73 (C)	72-70 (C-)	69-67 (D+)	66-60 (D)
59 or below (F)				

### **Course Requirements & Due Dates Policy**

Time management is part of the graduate and professional training in any field and industry. The due dates are set to facilitate completion of certain milestones in the course before moving to subsequent goals. To maintain fairness and respect for those who try to maintain punctuality, no late assignments are accepted without advance communications with the instructor.

<b>Assignment</b>	<b>Percentage of Course Grade</b>	<b>Due Date</b>
Participation (online activities/discussions)	30%	Initial post by Fri, comments to others by Sun
Leading Discussion	15%	Throughout your assigned week

Case Study	25%	Zoom meeting on 2/25, project due by 3/7
Final Exam	30%	4/28
Total	100%	

### **Course Activities:**

#### ***Participation (30%)***

Every Monday, you will receive an email reminder about the start of a new week's content. Every week there will be some forms of online activities, such as discussion forums, short quiz, glossary, etc. You will engage in in-depth online discussions with your classmates where you will critically examine, reflect upon, discuss and debate, and analyze readings in relationship to early and modern theories of learning and current educational practices and policies. Class participation will be evaluated on how consistent, timely, and thoughtful your contributions are to Moodle discussions.

There are only two mandatory one-hour Zoom meetings. Both are set up to run from 5:30 to 6:30pm on Thursdays, one on Feb 25 and the other on Apr 22. The meetings are designed to facilitate our case study and the final review. Please mark your calendar and I will send detailed info as the dates get close.

#### **Threaded Discussion Guidelines**

In order to maximize the discussions, the following guidelines apply to your submissions.

- 1.) You should submit your initial reflection by **Friday night**. I do not mandatorily require you to respond to someone else's post every week, however, you are expected to do so for most weeks to promote in-depth discussions with your peers.
- 2.) Your submission should be reflective, and show an effort to analyze the question from your perspective. The best submissions will be those that attempt to analyze problems from multiple perspectives, and pose critical questions in response to others' entries.
- 3.) A rule of thumb for length of submissions- about a couple of paragraphs.
- 4.) Don't forget to read other students' responses to your own post and reply back to them, just like what you would normally do during face-to-face discussions. This builds a strong, intellectually challenging, but rewarding discussion, and helps all of us learn the material better.
- 5.) These guidelines are certainly not meant to limit your participation—only to provide a suggested minimum. I'm eager to see what your responses are, and look forward to participating in this with you.

#### ***Leading Discussion (15%)***

To increase active participation and engagement in the class, you will be responsible for leading one online discussion this semester. Please sign up for the week that you'd like to lead on the google sheet posted under Course Introduction on Moodle. As a leader, you do **not** have to post your own reflections that week, however, you will assume responsibility to think critically of the week's topic, read through all of your peers' posts on the online discussion forum, respond to a minimum of five peers' posts, identify issues that need further clarification, and prepare an enlightening and informative summary that can keep us focused on important concepts. The format of your summary can be, but is not limited to an online post, a podcast, a Youtube video, annotated PowerPoint slides, or handouts. Post the final version of your summary no later than 11:55pm on **Sunday** of your assigned week.

#### ***Case Studies of Children's Reasoning (25%)***

One goal of this course is to help you apply theoretical and empirical understandings about children's development and learning to your present or future teaching. The case study will directly serve the goal of "knowing what students know and think." We will be using online resources to analyze one or a few children's thinking and reasoning. The Case Study folder will be open on Moodle on Feb 8<sup>th</sup>.

**Final Exam (30%)**

There will be a take home exam covering the material of the course. The exam will include questions about the material in the assigned readings and class discussions. The major emphasis will be on the integration of learning material across the different topic areas and your critical analysis of the material. The exam will be distributed on Mon, Apr. 19, and will be due midnight on Wed, Apr. 28. The exam constitutes 30% of your grade.

**Topical Outline**

Week	Date	Topic	Due Assignments, dates
1	1/11	Course Overview	Ongoing, as assigned
2	1/18	Early Developmental Theories	
3	1/25	Piaget	
4	2/1	Vygotsky	
5	2/8	Socializing Intelligence through Academic Talk & Dialogue	Case Study Open
6	2/15	Social Learning Theory	
7	2/22	Information Processing	Case Study Zoom Meeting Thur, 2/25, 5:30-6:30pm
8	3/1	Achievement Motivation and Stereotype Threat	Case Study due, 3/7
9	3/8	Metacognition and Executive Function	
10	3/15	Literacy	
11	3/22	Math	
12	3/29	Science	
13	4/5	Social and Emotional Learning	
14	4/12	Power, Privilege, & Multiculturalism in Education	
15	4/19	Review Week, Take-home Final Exam Open	Review Zoom Meeting Thur, 4/22, 5:30-6:30pm Exam due, 4/28