

EDEP 5114: LEARNING & COGNITION

(CRN 84647)

Instructor: Peter Doolittle
Office: 1750 Kraft Drive (Rm 2039)
Office Hrs: By Appointment
Email: pdoo@vt.edu

Date/Time: Tuesdays, 7:00-9:50 pm
Location: 1750 Kraft Drive (Rm 2080)
Website: www.peterdoolittle.org
Prerequisite: Graduate Status

PURPOSE

How, what, and why do we learn?

How is student agency fostered in instruction?

How are learning, memory, & cognition related?

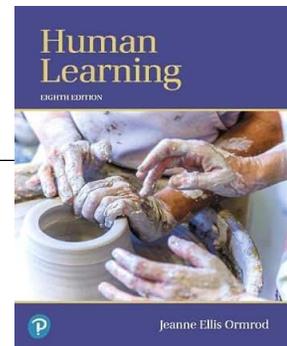
How do we foster deep and flexible learning?

Course Description

The *Learning and Cognition* course examines the nature and application of human learning, from a broad perspective. The course starts with the main theoretical approaches to human learning: behaviorism, including classical and operant conditioning; social cognitive theory, including modeling, self-efficacy, and agency; and cognitive psychology, including learning, memory, and cognition. This examination focuses on three overarching questions: How do we learn? What do we learn? Why do we learn? Finally, in pursuit of applying what we know about human learning to everyday life and education, we will delve into related topics, such as metacognition and self-regulation, problem solving and critical thinking, agency and motivation, and transfer. Ultimately, this course is obsessed with putting theory into practice.

Course Text

Ormrod, J. E. (2020). *Human learning* (8th edition). Pearson.



Pedagogy

reading + experiencing + discussing + applying + creating

Honor Code

The Graduate Honor Code will be enforced within this course. All assignments have a note regarding how the Graduate Honor Code applies to that specific assignment. Students unfamiliar with the Graduate Honor Code are encouraged to read the Graduate Honor System Constitution. Violations of the Graduate Honor Code are divided into four broad categories – cheating, plagiarism, falsification, and academic sabotage (<https://graduateschool.vt.edu/academics/expectations/graduate-honor-system.html>).

Learning Goals and Outcomes

- G1: Students will understand theories of learning and their application to instruction.
 LO1: Students will be able to *explain* theories of learning.
 LO2: Students will be able to *apply* theories of learning to everyday life, formal and informal education, and information, productivity, and social technologies.
- G2: Students will understand the interrelationship between learning, memory, and cognition.
 LO3: Students will be able to *explain* the role that memory plays in learning and cognition.
 LO4: Students will be able to *apply* principles of memory to everyday life, formal and informal education, and information, productivity, and social technologies.
- G3: Students will understand human motivation and agency as they relate to learning, memory, and cognition.
 LO5: Students will be to *explain* human motivation and agency through self-efficacy and self-regulation.
 LO6: Students will be to *apply* principles of motivation and agency to everyday life, formal and informal education, and information, productivity, and social technologies.
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Evaluations

Student performance will be evaluated in four ways: the completion of a series of Oral or Written Explanations, a series of two-page Theory-to-Practice Papers, In-Class Daily Primings, and Daily Class Evaluations. The Oral or Written Explanations provide an opportunity for students to extract the essential meaning from a reading and summarize that meaning clearly and concisely. The Theory-to-Practice Papers provide an opportunity for students to connect learning theory to specific classroom practices. The In-Class Daily Primings provide an opportunity for students to activate and review core ideas from the reading at the beginning of each class. The Daily Class Evaluations allow students the opportunity to reflect on their learning and provide feedback to the instructor on the conduct of the course. The assignments are delineated in the *Oral/Written Explanations*, *Theory-to-Practice Papers*, *Daily Primings*, and *Daily Class Evaluations* handouts.

Grading	Oral/Written Explanations	(13 x 100 points)	1300 pts
	Theory-to-Practice Papers	(5 x 200 points)	1000 pts
	In-Class Daily Priming	(13 x 30 points)	390 pts
	Post-Class Evaluations	(13 x 30 points)	390 pts
			3080 pts

A	3080-2895	100-94 %	B+	2771-2679	89-87%	C+	2463-2371	79-77%	F	< 1848
A-	2894-2772	93-90	B	2678-2587	86-84	C	2370-2279	76-74		
			B-	2586-2464	83-80	C-	2278-2156	73-70		

Attendance Policy and Late Policy

All students are expected to attend class regularly and promptly, and to come prepared to class by having read the day's readings, completed any pre-class assignments, and contemplated the reading's meaning and application. Submitting an assignment late will result in a grade of 0 points unless the late submission was cleared by the instructor in advance of the due date.

Mental Health and Well-Being

Supporting the mental health and well-being of students in my class is of high priority to me and Virginia Tech. If you are feeling overwhelmed academically, having trouble functioning, or are worried about a friend, please reach out to any of the following offices:

Cook Counseling

- Schedule an appointment and/or 24/7 crisis support: 540-231-6557
- **ucc.vt.edu** for more information

Dean of Students Office

- General advice: 540 231-3787
- After-hours crisis: 540-231-6411
- **dos.vt.edu** for more information

Hokie Wellness

- **hokiewellness.vt.edu** for more information about health and wellness workshops and consultations
- Virginia Tech Recovery Community: **hokiewellness.vt.edu/students/recovery.html**

Services for Students with Disabilities (SSD)

- Accommodations and other disability-related supports: 540-231-3788
- **ssd.vt.edu** for more information

See a full listing of campus resources on **well-being.vt.edu**

Also, please feel free to speak with me. I will make every effort to work with you; I care about your well-being and success.

Essential Needs

For any student who has difficulty affording groceries, accessing sufficient food to eat every day, or who lacks a safe and stable place to live, and if you believe this may affect your performance in this course, you are urged to contact the Dean of Students office for support at 540-231-3787 or complete an interest form to participate in The Market at Virginia Tech (https://cm.maxient.com/reportingform.php?VirginiaTech&layout_id=15).

The Dean of Students, through The Market at Virginia Tech, offers food options and other resources. There is also a Student Emergency Fund program (<https://dos.vt.edu/emergencyfund.html>). If you are comfortable in doing so, please notify your professor or departmental advisor of your situation. This will enable them to provide any resources they have access to.

Principles of Community

Virginia Tech is a public land-grant university, committed to teaching and learning, research, and outreach to the Commonwealth of Virginia, the nation, and the world community. Learning from the experiences that shape Virginia Tech as an institution, we acknowledge those aspects of our legacy that reflected bias and exclusion. Therefore, we adopt and practice the following principles as fundamental to our on-going efforts to increase access and inclusion and to create a community that nurtures learning and growth for all of its members:

- *We affirm* the inherent dignity and value of every person and strive to maintain a climate for work and learning based on mutual respect and understanding.
- *We affirm* the right of each person to express thoughts and opinions freely. We encourage open expression within a climate of civility, sensitivity, and mutual respect.
- *We affirm* the value of human diversity because it enriches our lives and the University. We acknowledge and respect our differences while affirming our common humanity.
- *We reject* all forms of prejudice and discrimination, including those based on age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, and veteran status. We take individual and collective responsibility for helping to eliminate bias and discrimination and for increasing our own understanding of these issues through education, training, and interaction with others.
- *We pledge* our collective commitment to these principles in the spirit of the Virginia Tech motto of *Ut Prosim (That I May Serve)*.

Services for Students with Disabilities

Virginia Tech welcomes students with disabilities into the University's educational programs. The University promotes efforts to provide equal access and a culture of inclusion without altering the essential elements of coursework. If you anticipate or experience academic barriers that may be due to disability, including but not limited to ADHD, chronic or temporary medical conditions, deaf or hard of hearing, learning disability, mental health, or vision impairment, please contact the *Services for Students with Disabilities* (SSD) office (**540-231-3788**, ssd@vt.edu, or visit www.ssd.vt.edu). If you have an SSD accommodation letter, please meet with the instructor privately during office hours as early in the semester as possible to deliver your letter and discuss your accommodations. You must give the instructor reasonable notice to implement your accommodations, which is generally 5 business days and 10 business days for final exams.

Mobile Technologies

Mobile technologies, such as cell phones, tablets, and laptop computers may only be used in class for class related purposes. Please respect your fellow students and the professor by turning off cell phones before class begins and refraining from using computers and tablets during class to check email or social media. There will be time during class breaks to check email and social media.

Cell Phones: Cell phones should be turned off during all classes. It is understood that there may be occasions when you will need to leave your cell phone *on* to receive a phone call of extreme importance. In these extreme cases, please notify the instructor prior to the beginning of the class, have your cell phone set to vibrate.

Tablets and Laptop Computers: Tablets and laptop computers should only be used for legitimate class related purposes (e.g., taking notes, reviewing readings, searching the web for class-based concepts). Please refrain from using these technologies for entertainment purposes during class (e.g., email, movies, music, social media).

Zoom Interface: Zoom may be used to conduct the class synchronously online in the case of snow, pandemic, illness, or some random even of which we are currently unaware. It is requested that you attend a Zoom class with your camera (video) on and your Zoom profile display name set your preferred name (e.g., Peter Doolittle). This is a request only.

Inclement Weather

In the presence of inclement weather, there are three guidelines related to class cancellation:

1. *University Cancels Class:* VT campus closings due to inclement weather may be obtained by calling the Weather Hotline, (540) 231-6668; tuning to WVTF-FM 89.1 or 91.9; accessing the VT Twitter feed, twitter.com/vtalerts; or, viewing the VT home page, <http://www.vt.edu> or University State page, <https://vt.edu/status.html>. If the university is closed, then we do not have class and I will send the class an email to that effect.
 2. *Instructor Cancels Class:* If the weather is potentially hazardous, and the university is not closed, then I may cancel class myself. If I cancel class, then I will send an email to the class indicating the cancellation no later than 4 pm (although I will try for 12:00 pm) the day of class with the final word regarding whether class will be held.
 3. *Student Misses Class:* If you determine that traveling to campus during inclement weather might be hazardous, then please send me an email indicating that you will not be attending class. Please use your best judgment in making this type of decision – be safe! If you decide not to come to class, based on inclement weather, you are still responsible for any work missed. You can participate in class using Zoom if travel is not an option.
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Course Zoom

There may be a time when you simply cannot make class in person and, thus, must attend class via Zoom. If so, here's the course's Zoom link (see below). That said, you **should not** think of this Zoom link as an option. That is, if you are sitting at home on your couch at 6 pm, with your dog or cat or favorite child, and think "do I want to go to class or should I just Zoom into class," your next thought should be "No!" or "Nein!" or "Hemæ!" or "Nej!" or "¡No!" or "Het!" or "Não!" or "Geen!" or "不 !" or "Non!" or "Οχι!" or "नहीं!" or "Nil!" or "いゝえ !" or "아니요!" or "Minime!" or "لا." or رقم

Zoom is an option of you need it, but not as a casual alternative to attending class in person.

<https://virginiatech.zoom.us/my/doolittle/>

Religious and Ethnic Holidays

From the VT website (<https://www.registrar.vt.edu/dates-deadlines/religious-ethnic-holidays.html>):

As a publicly funded institution of higher education, Virginia Tech does not officially recognize religious holidays and celebrations. However, as an institution we recognize the importance of such events in the lives of our community members. In the spirit of inclusive excellence and our Principles of Community, faculty, staff, and students are encouraged to be cognizant of major religious and cultural observances when planning courses and campus events and to be sensitive to potential conflicts.

If you have religious or ethnic holidays that may prohibit or impact your attendance or participation in class, please let the instructor know in advance. While completion of all assignments and understanding of all material will still be required, adjustments to address your needs will be enacted, as possible.

Communicating with the Instructor

All students are welcomed and encouraged to communicate with the instructor on issues relating to the course, grading, and special issues. The best way to contact me is in person: before, during, or after class. The second-best way to contact me is via email at pdoo@vt.edu. If you use email and you do not get a response from me in 48 hours, please email me again (I appreciate the reminders!).

Syllabus Change

The syllabus is subject to change by the instructor in the event of extenuating circumstances. All changes will be announced in class and provided to students in writing.

Tentative Course Calendar Version 1.0

Date	Topic	Reading for Class	Weekly Assignment
8/22	Day 1: Introduction <ul style="list-style-type: none"> Syllabus Introductions 	None	<ul style="list-style-type: none"> ✓ Oral Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Oral Explanation: None			
8/29	Day 2: Defining Learning <ul style="list-style-type: none"> Framing Learning Learning Theories 	Chapter 1	<ul style="list-style-type: none"> ✓ Oral Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Oral Explanation: Principles, laws, & theories, including advantages & disadvantages of theories (pp. 6-11); https://flip.com/b0bbfe0a			
9/5	Day 3: Behaviorism I <ul style="list-style-type: none"> Classical Conditioning Applications 	Chapter 3	<ul style="list-style-type: none"> ✓ Oral Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Oral Explanation: Classical Conditioning (pp. 43-52)			https://flip.com/9f83fa1f
9/12	Day 4: Behaviorism II <ul style="list-style-type: none"> Operant Conditioning Applications 	Chapter 3	<ul style="list-style-type: none"> ✓ Oral Explanation ✓ Daily Priming ✓ Post-Class Evaluation ✓ Theory-to-Practice 1 (CC)
Oral Explanation: Operant Conditioning (pp. 52-64)			https://flip.com/398ed123
9/19	Day 5: Behaviorism III <ul style="list-style-type: none"> Classroom Management Classroom Instruction 	Chapter 4	<ul style="list-style-type: none"> ✓ Oral Explanation ✓ Daily Priming ✓ Post-Class Evaluation ✓ Theory-to-Practice 2 (OC)
Oral Explanation: Applications of Behaviorist Principles (pp. 106-118)			https://flip.com/cb7a58c4
9/26	Day 6: Social Cognitive Theory I <ul style="list-style-type: none"> Observational Learning Self-Efficacy/Self-Regulation 	Chapter 5	<ul style="list-style-type: none"> ✓ Written Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Written Explanation: Modeling (pp. 131-139), Self-efficacy (pp. 140-144), Self-Regulation (pp. 144-150), and Implications (pp. 151-154)			
10/3	Day 7: Social Cognitive Theory II <ul style="list-style-type: none"> Human Agency Human Identity 	Special Chapter (distributed in class)	<ul style="list-style-type: none"> ✓ Written Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Written Explanation: Special chapter: What are agency and identity, and why are they important?			
10/10	Day 8: Cultural Perspectives I <ul style="list-style-type: none"> Piaget & the Individual Piagetian Pedagogy 	Chapter 9	<ul style="list-style-type: none"> ✓ Written Explanation ✓ Daily Priming ✓ Post-Class Evaluation ✓ Theory-to-Practice 3 (SCT)
Written Explanation: Key Ideas (pp. 285-289) and Implications (pp. 305-309). **Read only pages 284-289 and 305-311.			
10/17	Day 9: Cultural Perspectives II <ul style="list-style-type: none"> Vygotsky & the Social Vygotskian Pedagogy 	Chapter 10	<ul style="list-style-type: none"> ✓ Written Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Written Explanation: Key Ideas (pp. 313-318) and Implications (pp. 329-330)			

10/24	Day 10: Cognitive Psychology Ia <ul style="list-style-type: none"> Information Processing Memory & Knowledge 	Chapter 6	<ul style="list-style-type: none"> ✓ Oral Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Oral Explanation: The Dual Store Model (pp. 167-183)			https://flip.com/c00737f9
10/31	Day 11: Cognitive Psychology Ib <ul style="list-style-type: none"> Information Processing Memory & Knowledge 	Chapter 6	<ul style="list-style-type: none"> ✓ Oral Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Oral Explanation: Alternative Views (pp. 186-189)			https://flip.com/2eecde4a
11/7	Day 12: Cognitive Psychology II <ul style="list-style-type: none"> Information Processing Memory & Knowledge 	Chapter 7	<ul style="list-style-type: none"> ✓ Oral Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Oral Explanation: Constructive Processes (pp. 197-206) & Factors Affecting LTM Storage (pp. 207-216)			https://flip.com/2bcc30bc
11/14	Day 13: Cognitive Psychology III <ul style="list-style-type: none"> Information Processing Memory & Knowledge 	Chapter 8	<ul style="list-style-type: none"> ✓ Oral Explanation ✓ Daily Priming ✓ Post-Class Evaluation ✓ Theory-to-Practice 4 (IP)
Oral Explanation: Knowledge (pp. 241-246), Concepts (pp 251-259), and Schemas/Scripts (pp. 259-261)			https://flip.com/d9c4dbb7
11/21	Day 14: Break		
Explanation: None			
11/28	Day 15: Complex Learning I <ul style="list-style-type: none"> Metacognition & Self-Efficacy Self-Regulation & Motivation 	Chapter 12	<ul style="list-style-type: none"> ✓ Written Explanation ✓ Daily Priming ✓ Post-Class Evaluation ✓ Combined T-to-P 5 (All)
Written Explanation: Promoting Effective Learning and Study Strategies (pp. 409-415)			
12/5	Day 16: Complex Learning II <ul style="list-style-type: none"> Problem Solving Critical Thinking 	Chapter 13	<ul style="list-style-type: none"> ✓ Written Explanation ✓ Daily Priming ✓ Post-Class Evaluation
Written Explanation: Facilitating Transfer and Problem Solving (pp. 445-452)			

¹ To sign-up for **flip.com**, use <https://flip.com/a744c6c7>

² Submit written explanations on the course website.

EDEP 5114: LEARNING AND COGNITION

ORAL EXPLANATIONS

Purpose: The purpose of this assignment is to provide you with the opportunity to clarify, communicate and make tangible their understanding of various ideas, concepts, and procedures that arise through reading scholarly articles, chapters, and books

Rationale: Learning is an active endeavor involving the processing of knowledge and experience. This processing enhances learning when it involves (a) the retrieval of the new knowledge (not just re-experiencing the new knowledge), (b) the meaningful use of the new knowledge (not just a rote application of new knowledge), (c) the retrieval and use of the new knowledge over time (not just a one day or one week experience), and (d) the self-generation of understanding and use (not just a reception of ideas). Thus, oral explanations are designed to require you to read a chapter and organize the ideas and concepts in a meaningful (to you) way in order to create and deliver the oral explanation. This approach results in active learning.

Format: The Oral Explanations should result in a clear, concise, and coherently organized explanation and application, not to exceed 5 minutes. *The oral explanation should focus on the readings indicated on the Tentative Course Calendar.* This discussion should include sufficient details and examples (not from the reading) to make the concept(s) under discussion clear to someone not familiar with the reading.

The content of each oral explanation should reflect *your understanding* of the reading. Do not try to “cover” everything in a reading so that the explanation is simply a content dump. The oral explanation should be constructed (a) to **explain** the reading to an audience that is unfamiliar with the concept(s), and (b) to **apply** the concept(s) to a current problem, issue, or situation. Both explanation and application are essential.

Grading of the Oral Explanations: Each Oral Explanation is worth 100 pts and graded thusly:

- | | |
|--|--------|
| 1. Organization | 15 pts |
| a. are introductions and conclusions used effectively? | |
| b. do the expressed ideas follow a logical progression? | |
| c. are explanations and applications provided? | |
| 2. Clarity of Thought and Expression | 25 pts |
| a. are the ideas expressed well, well thought out, and integrated? | |
| b. are there clear and logical transitions between ideas/components? | |
| c. are correct grammar and syntax used? | |
| 3. Essential Content Explanation | 30 pts |
| a. does the explanation address the concepts read? | |
| b. does the explanation explain, rather than just list, the concepts in the reading? | |
| c. can the reading be well understood after listening to the explanation? | |
| 4. Essential Content Application | 30 pts |
| a. is a problem, issue, or situation explained clearly? | |
| b. are concepts from the texts and class used to address the cited problem? | |
| c. is the application thorough, meaningful, and appropriate? | |
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Process: The Oral Explanations will be submitted using **Flip** (see info.flip.com). Flip will allow you to record your explanation using the web via a desktop or laptop computer, or your cell phone. The videos that are created will be private and secure, that is, no one will be able to see your video except you and the instructor. In addition, you will not need to sign-up or join Flip. You will receive a flip code/url from the instructor via the course website with a link that will take you to a page to create your video. Finally, you will receive feedback on your explanation via flip and the course website.

You can **check to see if your browser works** with Flip using: <https://info.flip.com/en-us/about/system-check.html>

Pragmatics:

- | | |
|------------------|---|
| 1. Be thoughtful | • think before you create. |
| 2. Be concise | • there is a lot to include in a short explanation. |
| 3. Be creative | • as long as the central tenets of the explanation are addressed. |
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Course Flip Link:

Here is the link for the course Flip site: <https://flip.com/a744c6c7> That said, for each Flip reading response, there's a specific link as well. See the course calendar for those links.

Timeline:

See the Syllabus.

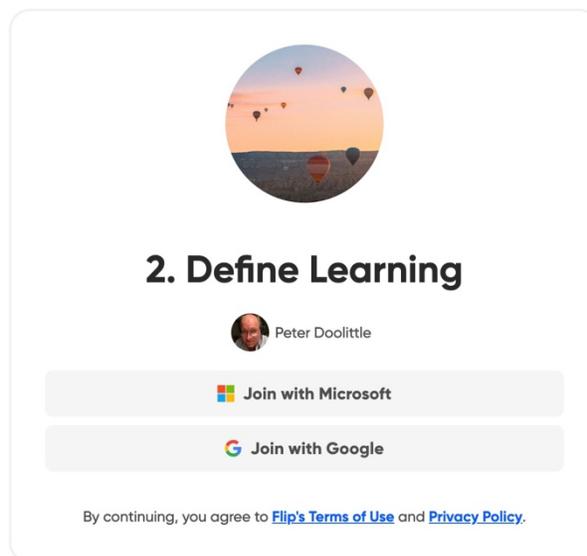
Honor Code: The Graduate Honor Code will be strictly enforced on this assignment. Any suspected violations of the Honor Code will be promptly reported to the Honor System. Students are allowed to discuss with other students the nature of this assignment, their understanding of the readings, and the general concepts they will be discussing in the oral explanations. Students should not, however, share their completed explanations with other students in the class. Beyond that, the Honor Code's general principles of cheating, plagiarism, falsification, and sabotage are still applicable (see <http://ghs.grads.vt.edu/>).

USING FLIP

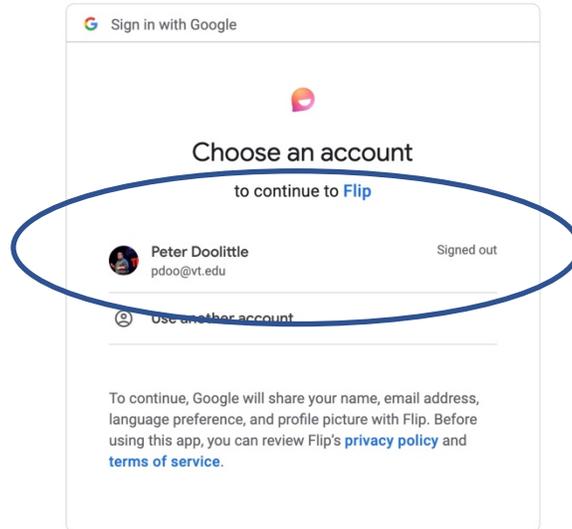
To manage these oral explanations, the class will use Flip (info.flip.com). Flip will allow you to create and store your oral explanations in a *secure environment*. The only person who can see your videos is the instructor.

Here's the routine:

1. You will be provided with a link for each reading that looks something like this: flip.com/96ca306c. This is available on the course website and syllabus.
2. Click on "Join with Google" to verify your email address (you won't be signing up for Flip, just the discussion/topic). **You must use your vt.edu address.**



3. Select your vt.edu email address.



4. You will now be set to record your response to the reading.

2022 Learning & Cognition / 2. Define Learning

August 20, 2022

 Moderated topic

2. Define Learning

In 5 minutes or less, summarize/explain the Neurological Basis of Learning (p. 34) and Implications of Brain Research (pp. 35-38) sections in the text.

 Add Response

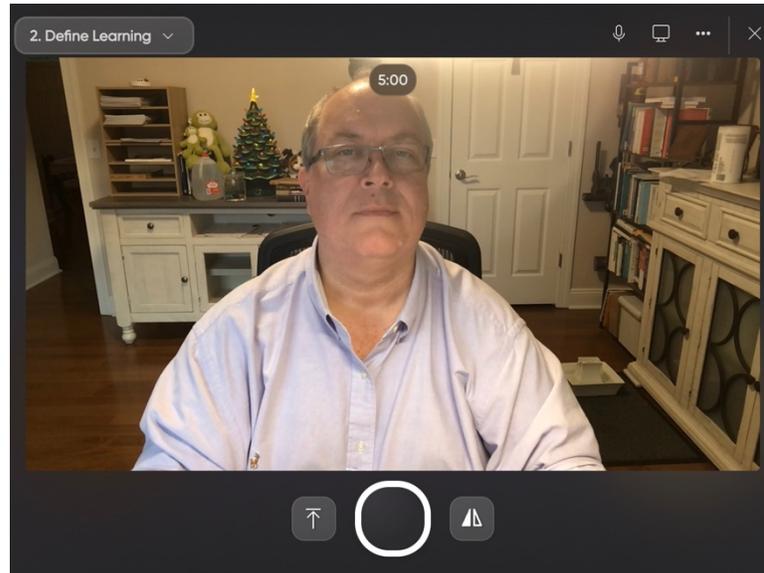
0 Responses

0 views · 0.0 hours of engagement

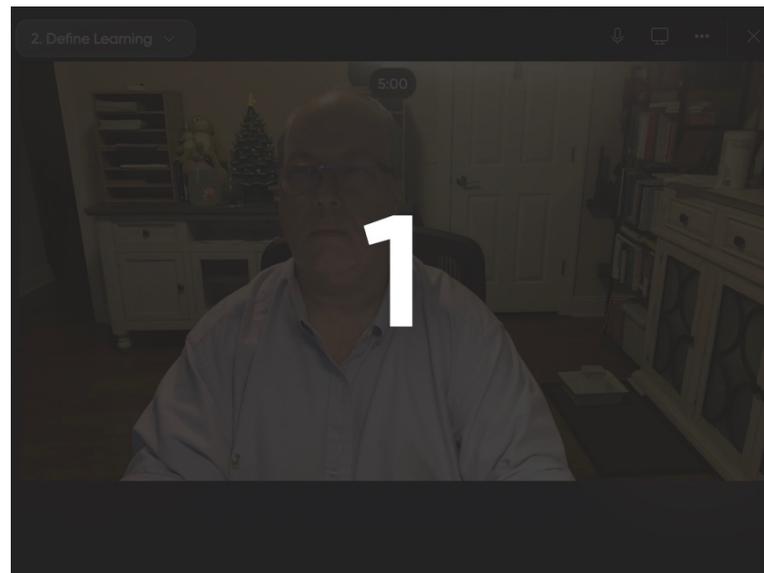
Miscellaneous

Here are a few miscellaneous ideas to help you out.

1. The video you create will only be viewable by yourself and the instructor. You can verify this by looking for “Moderated” below the record button.

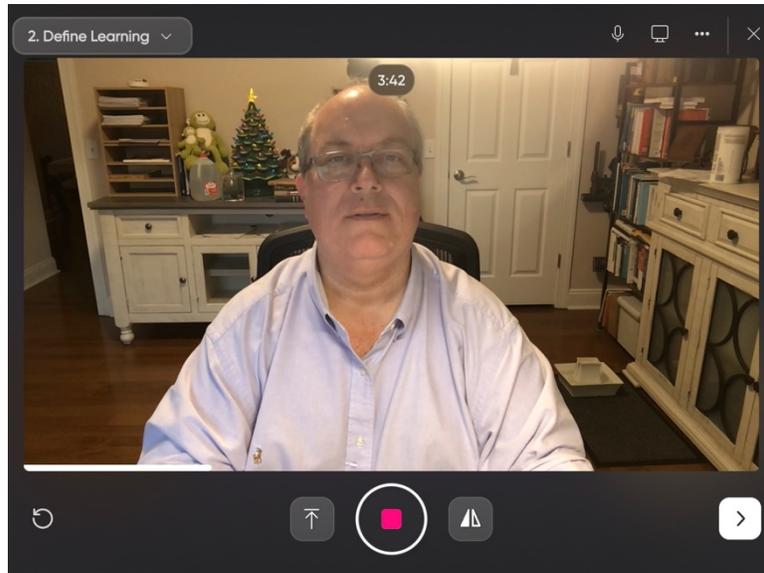


2. You will see what your camera sees with a round record button. When you click on the record button there will be a 3 – 2 – 1 countdown before recording starts.

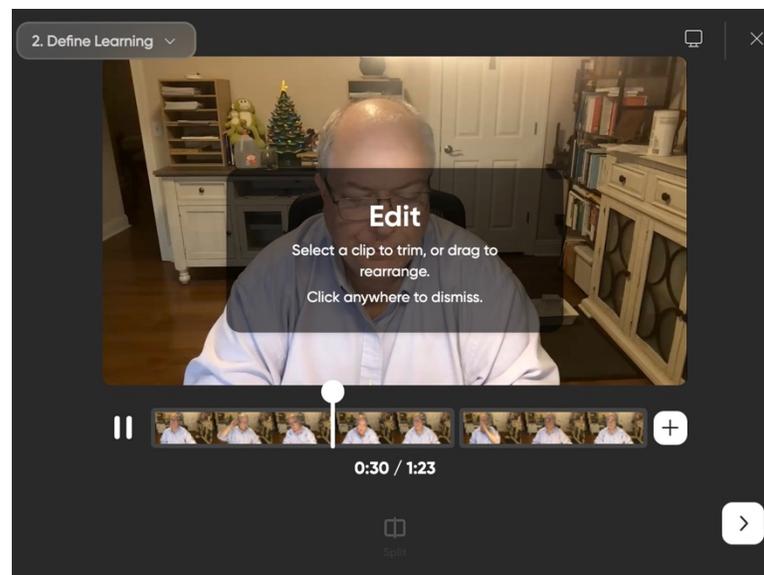


3. Once you have started recording you have a few options.

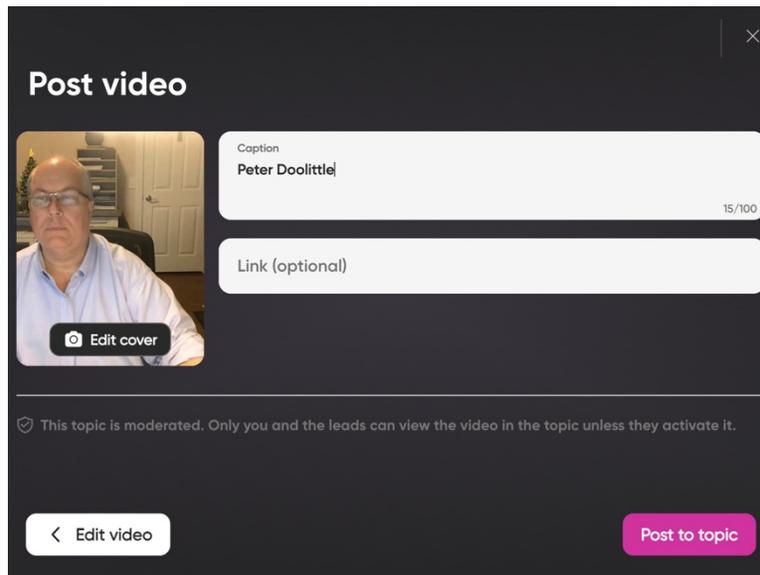
- a. There is a 5-minute countdown clock at the top center of the screen.
- b. You can start and stop your video by clicking on the center circle with the red box.
- c. You can restart by clicking on the circle arrow at the bottom left of the screen.
- d. When you like your recording, click on the arrow at the bottom right of the screen.
- e. If you just want to get out of this all together, click on the X at the top right of the screen.



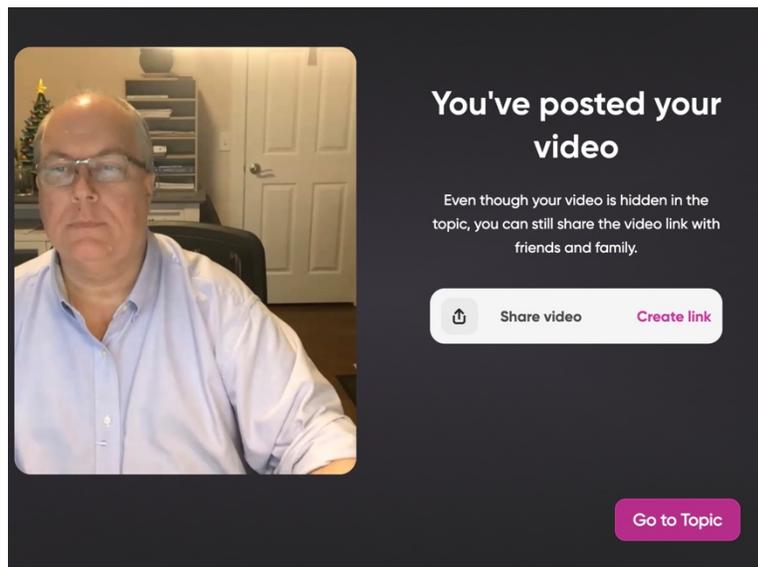
4. You can make edits as needed. Once you have your finished video, click on the arrow at the bottom right of the screen.



5. Once you're finished, you submit your video. **Please** put your full name in the Caption box. Feel free not to look so grumpy.



6. Once you submit your video, you will see a Success! notice and then click on Complete.



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WRITTEN EXPLANATIONS

Purpose: The purpose of this assignment is to provide you with the opportunity to clarify, communicate and make tangible their understanding of various ideas, concepts, and procedures that arise through reading chapters from the assigned textbook.

Rationale: Learning is an active endeavor involving the processing of knowledge and experience. This processing enhances learning when it involves (a) the retrieval of the new knowledge (not just re-experiencing the new knowledge), (b) the meaningful use of the new knowledge (not just a rote application of new knowledge), (c) the retrieval and use of the new knowledge over time (not just a one day or one week experience), and (d) the self-generation of understanding and use (not just a reception of ideas). Thus, written explanations are designed to motivate you to read a chapter and organize the ideas and concepts in a meaningful (to you) way in order to create and deliver the written explanation. This approach should result in significant learning.

Format: The Written Explanations should result in a clear, concise, and coherently organized explanation and application of the assigned reading, not to exceed 400 words (single spaced, double spaced between paragraphs). *The written explanation should focus on the readings indicated on the Tentative Course Calendar.* This discussion should include sufficient details and examples (your own examples, not examples from the reading) to make the concept under discussion clear to someone not familiar with the reading.

The content of each written explanation should reflect *your understanding* of the reading. **Do not try to “cover” everything in a reading so that the explanation is simply a content dump.** The written explanation should be constructed (a) to **explain** the reading to an audience that is unfamiliar with the concept(s), and (b) to **apply** the concept(s) to a current problem, issue, or situation. Both explanation and application are essential.

Grading of Written Explanations: Each written explanation is worth 100 pts and graded thusly:

- | | |
|--|--------|
| 1. Organization | 15 pts |
| a. are introductions and conclusions used effectively? | |
| b. do the expressed ideas follow a logical progression? | |
| c. are explanations and applications provided? | |
| 2. Clarity of Thought and Expression | 25 pts |
| a. are the ideas expressed well, well thought out, and integrated? | |
| b. are there clear and logical transitions between ideas/components? | |
| c. are correct grammar and syntax used? | |
| 3. Essential Content Explanation | 30 pts |
| a. does the explanation address the concepts addressed? | |
| b. does the explanation explain, rather than just list, the concepts in the reading? | |
| c. does the explanation include clear examples of the concepts addressed? | |
| 4. Essential Content Application | 30 pts |
| a. is a problem, issue, or situation explained clearly? | |
| b. are concepts from the reading used to address the cited problem? | |
| c. is the application thorough, meaningful, and appropriate? | |
-

Process: The written explanations should be submitted using the course website.

Pragmatics:

- | | |
|------------------|---|
| 1. Be thoughtful | • think before you create. |
| 2. Be concise | • there is a lot to include in a short explanation. |
| 3. Be creative | • as long as the central tenets of the explanation are addressed. |
-

Timeline:

See the Syllabus.

Honor Code: The Graduate Honor Code will be strictly enforced on this assignment. Any suspected violations of the Honor Code will be promptly reported to the Honor System. Students are allowed to discuss with other students the nature of this assignment, their understanding of the readings, and the general concepts they will be discussing in the oral explanations. Students should not, however, share their completed explanations with other students in the class. Beyond that, the Honor Code's general principles of cheating, plagiarism, falsification, and sabotage are still applicable (see <http://ghs.grads.vt.edu/>).

EDEP 5114: LEARNING AND COGNITION

THEORY-TO-PRACTICE PAPERS

Purpose

The purpose of this assignment is to provide you with the opportunity to clarify, communicate and make tangible your understanding of various theories and their application to the realm of teaching and learning.

Rationale

Learning is an active endeavor involving the processing of knowledge and experience. This processing enhances learning when it involves (a) the retrieval of the new knowledge (not just re-experiencing the new knowledge), (b) the meaningful use of the new knowledge (not just a rote application of new knowledge), (c) the retrieval and use of the new knowledge over time (not just a one day or one week experience), and (d) the self-generation of understanding and use (not just a reception of ideas). Thus, theory-to-practice papers are designed to allow you to retrieve your understandings of specific theories (e.g., classical conditioning), organize this theoretical understanding into meaningful knowledge, apply the theory to a specific personal or real-world issue, and explain your knowledge and application to a lay audience through a two-page paper. This approach results in active learning.

Format

Each theory-to-practice paper should result in a clear, concise, and coherently organized explanation and application, not to exceed 1 page (0.5 inch margins, Times New Roman font, 11 point font size, single spaced, double spaced between paragraphs). **Do not try to “cover” everything in relation to the theory so that the explanation and application are simply a content dump.** Each paper should be constructed (a) to **explain** the theory to an audience that is unfamiliar with the theory, and (b) to **apply** the theory to a current problem, issue, or situation. Both explanation and application are essential.

Grading of the Oral Explanations

Each theory-to-practice paper is worth 200 pts and graded thusly:

1. Organization	20 pts
a. are introductions and conclusions used effectively?	
b. do the expressed ideas follow a logical progression?	
c. are explanations and applications provided?	
2. Clarity of Thought and Expression	20 pts
a. are the ideas expressed well, well thought out, and integrated?	
b. are there clear and logical transitions between ideas/components?	
c. are correct grammar and syntax used?	
3. Essential Content Explanation	80 pts
a. does the explanation address the concepts read?	
b. does the explanation explain, rather than just list, the concepts in the reading?	
c. does the explanation include clear examples of the concepts addressed?	
4. Essential Content Application	80 pts
a. is a problem, issue, or situation explained clearly?	
b. are concepts from the texts and class used to address the cited problem?	
c. is the application thorough, meaningful, and appropriate?	

Topics

1. Classical Conditioning
2. Operant Conditioning
3. Social Cognitive Theory
4. Information Processing Theory
5. All Theories Combined

(Note: This final paper will simply be the combination of all four papers with a cover page).

Pragmatics

- | | |
|------------------|---|
| 1. Be thoughtful | • think before you create. |
| 2. Be concise | • there is a lot to include in a short explanation. |
| 3. Be creative | • as long as the central tenets of the explanation are addressed. |
-

Timeline

See the Syllabus.

Honor Code

The Graduate Honor Code will be strictly enforced on this assignment. Any suspected violations of the Honor Code will be promptly reported to the Honor System. Students are allowed to discuss with other students the nature of this assignment, their understanding of the readings, and the general concepts they will be discussing in the oral explanations. Students should not, however, share their completed explanations with other students in the class. Beyond that, the Honor Code's general principles of cheating, plagiarism, falsification, and sabotage are still applicable (see <http://ghs.grads.vt.edu/>).

EDEP 5114: LEARNING AND COGNITION

IN-CLASS DAILY PRIMING

Purpose

The purpose of this assignment is to provide students with the opportunity to revisit course content extracted from the readings just as class is beginning in order to facilitate in-class meaning making.

Rationale

Exposure to and the processing of information – text, images, concepts, and contexts – can positively influence the readiness of associated or related information. This positive influence is termed *priming*. Priming occurs through the spread of cognitive activation from the original information to the related information and occurs whether the individual is aware of the association, or not. In the case of the In-Class Daily Primings, the questions that students answer at the beginning of the class will be based on concepts from the readings, thus priming the subsequent use of the readings for in-class activities and increased meaning making.

Format

The In-Class Daily Priming will consist of 5 multiple-choice questions for each reading. The multiple-choice questions will range from term definitions to concept relationships. These questions will be available online, will be completed during the first 15 minutes of class, and are open notes/readings.

Grading

Each In-Class Priming consists of 5 multiple-choice questions per reading and each question is worth 6 points, thus the priming for each reading is worth 30 points.

Pragmatics

The questions will be straightforward if you have read the article, chapter, or book closely. The questions will focus on main ideas, not small details. The main reason for the questions is to prime your memories of the readings, not to stump you or determine what you do not remember from the texts. Also, several of the readings will address unfamiliar ideas, so deep knowledge of the readings will not be assumed.

Honor Code

The Graduate Honor Code will be strictly enforced on this assignment. Any suspected violations of the Honor Code will be promptly reported to the Honor System. Students are allowed to use course readings in completing primings, but no other sources are allowed. Beyond that, the Honor Code general principles of cheating, plagiarism, falsification, and academic sabotage are still applicable (see <http://graduateschool.vt.edu/>).

EDEP 5114: LEARNING AND COGNITION

POST-CLASS EVALUATIONS

Purpose

The Post-Class Evaluation assignment is designed to allow students to reflect on the class and (a) evaluate their current level of understanding of the concepts addressed, (b) assess the effectiveness of the instructor's ability to foster learning, and (c) reflect on their understanding of the concepts addressed.

Rationale

Learning is an active endeavor involving the processing of knowledge and experience. This processing enhances learning when it involves (a) the retrieval of the new knowledge (not just re-experiencing the new knowledge), (b) the meaningful use of the new knowledge (not just a rote application of new knowledge), (c) the retrieval and use of the new knowledge over time (not just a one day or one week experience), and (d) the self-generation of understanding and use (not just a reception of ideas). Thus, oral explanations are designed to require you to read a chapter and organize the ideas and concepts in a meaningful (to you) way in order to create and deliver the oral explanation. This approach results in active learning.

In addition, the Post-Class Evaluations provide formative feedback to the instructor. This formative feedback allows the instructor to better understand which aspects of class worked well in fostering learning, and which did not. This feedback can then be used to inform the instructor as to which concepts need to be revisited, and how to better create future classes.

Format

Students will provide a short evaluation of each class. Each student should complete a class evaluation within **48 hours** of the completion of each class using the online utility provided on the course web site. **Please note all evaluations are anonymous.**

Grading

Each Class Evaluation is worth 30 pts.

Timeline

See Syllabus

Honor Code

The Graduate Honor Code will be strictly enforced on this assignment. Any suspected violations of the Honor Code will be promptly reported to the Honor System. Students are allowed to discuss with other students the nature of this assignment, their understanding of their own observations, and the general concepts he or she will be discussing. Students should not, however, share their completed responses with other students in the class. Beyond that, the Honor Code general principles of cheating, plagiarism, falsification, and academic sabotage are still applicable (see <http://graduateschool.vt.edu/>).

Evaluations

Directions: Following class, please complete the following class evaluation. **This evaluation is anonymous**, so please share what you think and feel. The goal of the daily evaluations is to improve the course by informing the instructor what is working and what is not, and what you like and what you do not like.

Complete Evaluation

Directions: Please answer the following questions based on the previous class. Your feedback will be used to modify next week's class so that concepts are clear and topics addressed are relevant. **All evaluations are anonymous.**

1. Please consider the instruction used in the last class. To what degree do you agree or disagree with the following statements? Your responses will help to make the class a better learning experience.

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Somewhat Disagree
- 4 = Somewhat Agree
- 5 = Agree
- 6 = Strongly Agree

Item	Statement	Disagree			Agree		
		1	2	3	4	5	6
a.	The <i>introduction</i> provided organization and context to the lesson.	<input type="radio"/>					
b.	The activities engaged students in <i>cognitively</i> constructing knowledge.	<input type="radio"/>					
c.	The activities engaged students in <i>socially</i> constructing knowledge.	<input type="radio"/>					
d.	The <i>closure</i> stressed the essential aspects of the lesson.	<input type="radio"/>					
e.	Overall , the class was well constructed and executed.	<input type="radio"/>					

2. What aspects of the content addressed in class are still confusing?

3. What elements of the instruction were particularly effective in stimulating learning?

4. Other comments/thoughts?

Submit