

TEACHERS COLLEGE
COLUMBIA UNIVERSITY

CCPX 4199.001

**Awareness, Attention, and Consciousness:
A Psychological Overview**

Spring 2020

Class Schedule: Tuesdays 3:00-4:40 PM

Class Dates: January 28, 2020 – May 12, 2020

Classroom: GDH 539

Prerequisites: None

Credits: 3

Instructor: Dr. Theodore Dimon

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Course Description

This course examines diverse psychological approaches to awareness and its relation to attention and consciousness. It examines contemporary research on the subject, tracing the evolution of various current approaches and theories, as well as more traditional contemplative approaches to the subject. The course aims to provide students with a broad background to the subject so that they are subsequently able to examine different approaches critically and apply relevant elements to their own work. Since the popularization of mindfulness following groundbreaking work in the 1980s, broad and diverse awareness techniques have been developed to promote healthy



living and to improve learning capability. Nevertheless, most prescribers and practitioners are unaware of the psychological basis for the awareness techniques they are advocating, relying on studies that show clinical trial results without any causal explanation and understanding of the basis that these techniques are founded upon.

In this course, Dr. Dimon examines awareness in its broader context and in its relationship to attention and consciousness. The course will consider the psychology of awareness and perception in relation to Eastern and Western philosophy, and how these approaches have influenced current research and applications. It will consider how awareness exists on a continuum with other faculties such as thinking and deliberation, as well as with consciousness and attention. Finally, the course will look at theories of development of awareness throughout the lifespan, and their application to diverse areas of education such as health and child development.

This is a multi-disciplinary course that draws on psychology, anatomy, biology, educational theory, philosophy, and contemplative traditions. The course will be of interest to students in psychology, human development, health and education, and teachers working with students of all ages.

Course Objectives

Upon completion of this course, students will have a basic intellectual overview of the psychological context of awareness and its relation to consciousness, attention and mindfulness, an informed and critical approach to current theories in the field and how they can be applied to the fields of health and education. Students will have acquired an understanding and appreciation of the subject as a basis on which to make decisions regarding its usefulness in various fields.

Course Outline

Course topics: contemporary theory and cognitive neuroscience on attention, mindfulness, and working memory; cognitive remediation; challenges to generalizability of learning effects of remediation; executive functions; esoteric Eastern and Western models of awareness and attention; and proprioception and its role in awareness.

Course Requirements/Grading

Attendance

The course consists of lectures, discussions, experiential activities, and student presentations. Participation is paramount. Additionally, the experiential component of this course can only be



learned by attending the course; Therefore, *attendance is critical*. We are, however, aware that sometimes circumstances occur where it may be necessary for a student to miss a class. In this case it is requested that the student inform Dr. Dimon of the absence, and the reason for it, in advance of the class, or as early as possible. If you have to miss a class, please get notes from another student. Don't wait until you miss a class to connect with other students!

Requirements

All course requirements and assignments are available on TC Canvas. Students are required to consult the site regularly to download documents and files, and to write and upload assignments. It is the responsibility of each individual student to stay updated on course requirements and information which may be posted to Canvas during the duration of the course. Please check Canvas frequently for course updates. No cell phones in class, please.

Assessment

Students will be evaluated on the following components:

Reflection papers (x4)

Students will be required to upload four reflection papers concerning the course material, home study, and readings. Each reflection paper is worth a total of 8 points and is expected to be: 3-4 pages, double spaced (2pts); well written, structured, clear, grammatically correct (2pts); reflective without being too personal; and relevant to course content and demonstrative of thoughtful and creative consideration of the topic being discussed (2pts). To this end, the reflection papers must include 3-5 citations of course readings (2pts). Papers should be uploaded to Canvas in a document-compatible format.

Reflection Paper #1 is due Friday, 2/7

Reflection Paper #2 is due Friday, 3/6

Reflection Paper #3 is due Friday, 3/27

Reflection Paper #4 is due Friday, 4/10

Research article presentation

The purpose of this assignment is to present a research article in your field of study or area of interest. You will select an empirical research study (not a literature review) that is sourced from your field of study and applies to a topic addressed in this course. Presentations will be 8-10 minutes and structured to address the following five elements: (1) State the title, author(s), and field of study, 1pt; (2) Describe the background and purpose of the study, 2pts; (3) Describe the research design and procedures used in the study, 2pts; (4) Describe the results of the study, 2pts; (5) Explain how the research article relates to a specific topic addressed in this course, 3pts. This presentation is informal and you are not expected to prepare slides. Please submit your research



article to Canvas assignments on or before the day of your presentation. The research articles will be accessible to all students through Canvas and may be used for the Final Presentation.

Final presentation

Students will be required to give a final presentation on a topic drawn from class lectures. Please do not use Wikipedia as a reference in your presentation. Final Presentation includes two parts: Abstract (10pts) and Presentation (20pts). The purpose of your abstract is to frame the content for a 14-minute presentation. Your abstract must contain the following elements that you will also discuss in your final presentation: (1) topic/context, (2) problem/question, (3) purpose/main idea, and (4) significance. Students are strongly discouraged to discuss final presentation topics with Dr. Dimon, and a sample abstract is available on Canvas.

Discussion questions (x4)

Students must generate at least two questions in response to weekly readings for 4 classes (listed below). Select questions will be incorporated into classroom discussion and should be posted on Canvas by Monday at 5:00pm in preparation for Tuesday's class. Please limit posts to 175 words.

- Discussion Questions for lecture 2 are due Monday 2/3
- Discussion Questions for lecture 4 are due Monday, 2/17
- Discussion Questions for lecture 6 are due Monday, 3/2
- Discussion Questions for lecture 12 are due Monday, 4/20

In-class participation

A measure of student attendance and engagement, including participation in weekly in-class discussion groups. Participation denotes the ability to convey an idea orally, analyze and interact with ideas expressed in the assigned readings, and demands preparation.

Grades will be based on the following point system:

Reflection papers (x4):	40 points
Final presentation:	30 points
Discussion questions (x4):	10 points
In-class participation:	10 points
Research article presentation:	10 points
	100 points

Academic Honesty



You are required to do your own work on all class assignments. Plagiarism in any form is unacceptable. If you are unclear as to whether something constitutes plagiarism, please discuss it with Dr. Dimon before handing in your work. Use of personal computers in class is allowed only for taking notes. Please refrain from communicating electronically during class; if you have exceptional circumstances which make this difficult, please talk to Dr. Dimon in advance.

Course Overview:

January 28, 2020

Lecture One: Overview of Attention, Consciousness, and Learning to be Aware

Western philosophical antecedents: from Aristotle and Descartes to materialism

Why we are conscious?

What is attention?

Attention from a neuroscience standpoint

Developmental problems of attention

Eastern philosophy and states of attention

Role of mindfulness practice in education

Body and attention

Models of attention and the role of attention in learning

February 4, 2020

Lecture 2: What Is Consciousness?

Consciousness and the mind/body problem

What does it mean to be conscious of something?

Inattention games

The brain and neuroimaging

Language recognition: unconscious versus conscious processing

Consciousness and global neural activity

Readings:

James, William, "The Stream of Thought," in Principles of Psychology, Vols. One and Two, Henry Holt and Co., New York, 1980, Chapter 9.

February 11, 2020



Lecture 3: Consciousness and the Brain

Consciousness and complex nervous systems

William James and the different states of consciousness

Antonio Damasio and the concept of consciousness

Core consciousness v. extended consciousness

The basis of consciousness in homeostasis and somatic self-regulation

The relation of consciousness to attention

Readings:

Damasio, Antonio R., *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*, Harcourt Brace and Co., New York, 1999.

February 18, 2020

Lecture 4: What Is Attention?

William James and the spotlight or “filter” model of attention

The “gatekeeper” model of attention

Bottom-up/top-down and network models of attention

Neuroimaging and the neural correlates of attention

Focal awareness and the peripheral field

Readings:

James, William, *Principles of Psychology*, Vols. One and Two, Henry Holt and Co., New York, 1980. Chapter 11, “Attention.”

Posner, Michael I., and Petersen, Steven E., “The Attention System of the Human Brain,” *Annual Review of Neuroscience*, 1990. 13: 25-42.

Moray, Neville, “Attention in Dichotic Listening: Affective Cues and the Influence of Instructions,” *Quarterly Journal of Experimental Psychology*, Vol 11, Issue 1, pp. 56-60 (1959).

*Optional reading: Treisman, Anne and Gelade, Garry, “A Feature-Integration Theory of Attention,” *Cognitive Psychology* 12, 97-136 (1980).

February 25, 2020

Lecture 5: Attention and Mindfulness Practice

The executive or supervisory functions

Defining mindfulness: monitoring and accepting

The practice of mindfulness



The effects of mindfulness
Brain training v. mindfulness meditation
Kinesthetic and perceptual awareness
Mindfulness and expanding the field of awareness

Readings:

Diamond, Adele, “Executive Functions,” Annual Review of Psychology, 2013. 64: 135-168.

Rabipour, Sheida and Raz, Amir, “Training the brain: Fact and fad in cognitive and behavioral remediation,” Brain and Cognition 79 (2012), 159-179.

Corbetta, Maurizio and Shulman, Gordon L, “Control of goal-directed and stimulus-driven attention in the brain,” Neuroscience, Vol. 3, March 2002.

Morrison, Alexandra B. and Jha, Amishi P., ‘Mindfulness, Attention, and Working Memory,’ Handbook of Mindfulness and Self-Regulation, Springer-Science, New York, 2015.

March 3, 2020

Lecture 6: Attention Practice and Remediation in Clinical Situations

ADHD and developmental problems of attention
ADHD and the brain
Stress and trauma; anxiety and depression; addiction
Comparison of remediation methods:
Brain training Mindfulness practice
MBSR and stress-education techniques
The role of cognitive remediation in psychotherapy

Readings:

“Magnetic Resonance Spectroscopy of Developing Brain,” Sajja, Balasrinivasa and Narayana, Ponnada, Handbook of Developmental Cognitive Neuroscience, Eds., Charles A. Nelson, Monica Luciana Collins, Cambridge, MA, MIT Press, 2008.

“Functional MRI methods in developmental cognitive neuroscience,” Thomas, Kathleen and Tseng, A, Handbook of Developmental Cognitive Neuroscience, Eds., Charles A. Nelson, Monica Luciana Collins, Cambridge, MA, MIT Press, 2008.

Tang, Yi-Yuan and Posner, Michael, “Mindfulness and Training Attention,” Handbook of Mindfulness and Self-Regulation, Springer-Science, New York, 2015.



Lindsay, Emily and Creswell, J. David, “Mechanisms of mindfulness training: Monitor and Acceptance Theory (MAT),” *Clinical Psychology Review* 51 (2017), 48-59.

March 10, 2020

Lecture 7: Eastern Philosophy and Its Relation to Current Mindfulness Practice

Basics of Eastern psychology in relation to meditation practice

Purposes of meditation:

Quiescence and one-pointed meditation

Meditative states

The relation of breathing and meditation

Readings:

Hesse, Hermann, Siddhartha, Dover Publications, Mineola, NY, 1999.

March 24, 2020

Lecture 8: Somatic Awareness and Self-Regulation

Kinesthetic awareness and F. M. Alexander’s theories

Posture, tone, autonomic functions, and their relation to states of attention

Proprioception and self-regulation

Kinesthetic attention and the concept of ‘non-doing’

Readings:

Alexander, F. Matthias, “The Evolution of a Technique,” from *The Use of the Self*, Orion Books, London, 2001.

Dimon, Theodore, Chapter 1 “The Postural Neuromuscular Reflex System and How It Works,” from *Neurodynamics: The Art of Mindfulness in Action*, North Atlantic Books, Berkeley, CA, 2015, p. 3-49.

Dimon, Theodore, “Ideomotor Action,” from Chapter 3 of *Neurodynamics: The Art of Mindfulness in Action*, North Atlantic Books, Berkeley, CA, 2015, p. 103-113.

March 31, 2020

Lecture 9: The Body in Action



William James and ideomotor action
John Dewey and the problem of habit
Elements of psychophysical education: motor function, behavior, and attention
The muscular system as a foundation for kinesthetic awareness
Biofeedback and muscle tone

Readings:

James, William, "Will," in Principles of Psychology, Vols. One and Two, Henry Holt and Co., New York, 1980, Chapter 26.

Dewey, John, Human Nature and Conduct, Henry Holt and Co., New York, 1922, pp. 14-125.

April 7, 2020

Lecture 10: Martial Arts and Awareness in Action

Readings:

Herrigel, Eugen, Zen and the Art of Archery, Random House, New York, 1981.

Lowry, Dave, Autumn Lightning: The Education of an American Samurai, Shambhala, 2001, pp. 3-58.

April 14, 2020

Lecture 11: Mindfulness in Schools

Relevant research on the subject

Models of mindfulness in the classroom and what mindfulness in the classroom looks like

Reading:

Schonert-Reichl, K.A., Oberle, E., Lawlor, M.S., Abbott, D., Thomson, K., Oberlander, T.F., & Diamond, A. (2015). Enhancing cognitive and social-emotional development through a simple-to-administer mindfulness-based school program for elementary school children: a randomized controlled trial. Dev. Psychol. 51(1):52-66.

Lawlor, M.S., Schonert-Reichl, K.A., Gadermann, A.M., & Zumbo, B.D. (2014). A validation study of the mindful attention awareness scale adapted for children. Mindfulness, 6(6): 730-741.



Saltzman, A., & Goldin, P. (2008). Mindful-based stress reduction for school-aged children. In L.A. Greco, & Hayes, H.C. (Eds.), *Acceptance & mindfulness treatments for children & adolescents: A practitioner's guide* (139-162). Reno, NV: Context Press.

April 21, 2020

Lecture 12: Attention and the Developing Child

Stages of attention in the developing child
The psychology of attention in children
Awareness in learning
Psychophysical functioning and the developing child

Reading:

Rochat, Philippe. "Emerging Self-Concept." *The Wiley-Blackwell Handbook of Infant Development*, vol. 1, 2010, pp. 320–344.

*Optional: James, William, "The Consciousness of Self," in *Principles of Psychology*, Vols. One and Two, Henry Holt and Co., New York, 1980, Chapter 10.

Classes 13,14, & 15 (April 28, May 5, & May 12) will be devoted to student presentations and discussions on the topics presented in class, and to further application of the practical work.

POLICIES AND PROCEDURES

Classroom Internet and Cell Phone Etiquette

Computers are allowed in the class for note-taking purposes. As a courtesy to your classmates and to facilitate an academic environment, please turn off your cell phone during class.

Accommodations

The College will make reasonable accommodations for persons with documented disabilities. Students are encouraged to contact the Office of Access and Services for Individuals with Disabilities (OASID) for information about registration. You can reach OASID by email at oasid@tc.columbia.edu, stop by 163 Thorndike Hall or call 212-678-3689. Services are available only to students who have registered and submit appropriate documentation. As your instructor, I am happy to discuss specific needs with you as well. Please report any access related concerns about instructional material to OASID and to me as your instructor.



Teachers College Policy on ‘Incompletes’

The grade of Incomplete is to be assigned only when the course attendance requirement has been met but, for reasons satisfactory to the instructor, the granting of a final grade has been postponed as certain course assignments are outstanding. If the outstanding assignments are completed within one calendar year from the date of the close of term in which the grade of Incomplete was received and a final grade submitted, the final grade will be recorded on the permanent transcript, replacing the grade of Incomplete, with a transcript notation indicating the date that the grade of Incomplete was replaced by a final grade. If the outstanding work is not completed within one calendar year from the date of the close of term in which the grade of Incomplete was received, the grade will remain as a permanent Incomplete on the transcript. In such instances, if the course is a required course or part of an approved program of study, students will be required to re-enroll in the course including repayment of all tuition and fee charges for the new registration and satisfactorily complete all course requirements. If the required course is not offered in subsequent terms, the student should speak with the faculty advisor or Program Coordinator about their options for fulfilling the degree requirement. Doctoral students with six or more credits with grades of Incomplete included on their program of study will not be allowed to sit for the certification exam.

Columbia University Network ID (UNI) and Teachers College Gmail account

Teachers College students have the responsibility of activating their Columbia University Network ID (UNI) and their TC Gmail address, which includes a free email account. As official communications from the College – e.g., information on graduation, announcements of closing due to severe storm, flu epidemic, transportation disruption, etc. – will be sent to the student’s TC Gmail account, students are responsible for either reading email there, or, for utilizing the mail forwarding option to forward mail from their TC account to an email address which they will monitor.

Religious Observance Policy

It is the policy of Teachers College to respect its members’ observance of their major religious holidays. Where academic scheduling conflicts prove unavoidable, students will not be penalized for absences due to religious reasons, and course instructors will work with students on alternative means for satisfying academic requirements. If students and instructors cannot reach a suitable arrangement, they should consult the appropriate Program Director or Department Chair. If necessary, students or instructors may take the matter to the Office of the Provost for additional appeal.

Sexual Harassment and Violence Reporting

Teachers College is committed to maintaining a safe environment for students. Because of this commitment and because of federal and state regulations, we must advise you that if you tell any



of your instructors about sexual harassment or gender-based misconduct involving a member of the campus community, your instructor is required to report this information to the Title IX Coordinator, Janice Robinson. She will treat this information as private, but will need to follow up with you and possibly look into the matter. The Ombuds officer for Gender-Based Misconduct is a confidential resource available for students, staff and faculty. “Gender-based misconduct” includes sexual assault, stalking, sexual harassment, dating violence, domestic violence, sexual exploitation, and gender-based harassment. For more information, see <http://www.tc.columbia.edu/titleix>.

Teachers College Statement on Academic Integrity and Plagiarism

Plagiarism, as defined by the Teachers College Student Handbook, is the using of ideas, data, or language of another without specific or proper acknowledgement. Utilizing the same work for multiple assignments in the same or different classes also qualifies as plagiarism. In cases where a faculty member suspects a student of cheating or plagiarism, the Handbook outlines the following procedure: (1) the instructor shall apprise the student of this suspicion and refer the student to the **Guide to Student Rights and Responsibilities** section of the Student Handbook; (2) the instructor shall give such student the opportunity to meet with him or her to discuss the validity of the charges and the possible institutional responses to the charges; (3) if after discussion with the student, the instructor still considers that the charges should be brought against the student, and that sanctions beyond those which they may apply are warranted, the instructor shall send complete details of the charges to the Vice Provost. In that event, the due procedures described in the Student Conduct Code shall apply.

