

UNCP5569 Capstone: How We Decide, Fall 2017

Th 4:30-6:50PM, 217N Stokes Hall

Instructor: Jef Lamoureux, Senior Lecturer in Psychology

About the Capstone Program:

A Capstone seminar is an intensely personal experience for seniors. Yet it is just as intensely a shared experience with their peers and professor. The seminar is kept to about 15 students to promote that sharing. The format of the seminar combines a deep exploration of the self, with a disciplined academic exercise in substantive reading, writing, and discussion.

Each seminar prompts the student to look both backward and forward. It asks, "What have you made of your Boston College education? What has it made of you?" It also inquires, "How will you carry out the lifelong commitments you have begun to envision?" These questions go to the heart of the seniors' concerns. Thus Capstone seminars provide a place where students can ponder ultimate questions within a community of discourse.

The continuing success of the Capstone seminars demonstrates that the senior year is truly a "teachable moment." The seminars speak to the needs of that moment but also to the universal human need for reflection and spiritual development. The depth of this need may explain why students have made these among the most popular courses within the University.

We hope the Capstone seminars will equip students for their journeys as they leave Boston College, just as the Capstone program enriches the life of the University itself.

Course Goals for UNCP5569 How We Decide:

As with all Capstone Courses, the primary goals of this course are two-fold:

- to provide an opportunity to reflect on students' time and educational experiences at Boston College
- to consider the process of making long-term future commitments in four key areas:
 1. work & career
 2. relationships
 3. society
 4. spirituality

In order to respect the personal views and goals of individual students in the course, we will define *spirituality* broadly as the process of personal transformation based on meaningful, personal reflection and growth. Throughout the semester, we will consider how our basic decision-making processes may be defining the personal path we are taking in all domains of our life. Specifically, this course will approach the reflective capstone experience through the lenses of cognitive psychology and neuroscience, focusing on our current understanding of how the mind/brain functions as a way to help us understand the decisions we ourselves make. Non-

science majors should note that although we will discuss a fair bit about how the brain functions, no science background is required other than the ability to learn about how the brain and mind function. Indeed, many of the readings are more focused on the ways that people go about making decisions, without reference to the brain. Moreover, I will start the semester off with a general overview of how major brain areas contribute to our thoughts and emotions; thus no previous knowledge of neuroscience is required. As in all broadening experiences, our discussions will benefit greatly from a roster comprised of students with diverse backgrounds.

In summary... **this is the kind of course in which you will get out of it what you put into it.** Reflection is a deep part of the Jesuit tradition, and I hope that you have taken advantage of the many opportunities to participate in retreats and other activities during your time here at BC. If this is your first such opportunity, then I encourage you to embrace it! We will read a couple of really cool books and a few other chapters on decision making, brain function, and human cognition in general. The assessments are designed primarily to provide you with an opportunity to reflect on your own experiences, and gain a deeper understanding of yourself. If you just "go through the motions", you will not get much from this course. But if you really "buy in", I think we can all learn a lot. I look forward to working with you all.

Some Fun Quotes (hoping to provide you with a whimsical view of the kinds of topics we will consider more rigorously in this course)

"...we are far less rational in our decision making... [than we think we are]. Our irrational behaviors are neither random nor senseless – they are systematic and predictable. We all make the same types of mistakes over and over, because of the basic wiring of our brains."

— Dan Ariely, *Predictably Irrational: The Hidden Forces that Shape Our Decisions*

"Any man could, if he were so inclined, be the sculptor of his own brain."

— Santiago Ramón y Cajal, *Advice for a Young Investigator*

"Rabbit's clever," said Pooh thoughtfully.

"Yes," said Piglet, "Rabbit's clever."

"And he has Brain."

"Yes," said Piglet, "Rabbit has Brain."

There was a long silence.

"I suppose," said Pooh, "that that's why he never understands anything."

— A.A. Milne, *Winnie-the-Pooh*

Texts:

The readings center on how our cognitive abilities and brain function, influenced heavily by our evolutionary history, affects fundamental processes that may affect the decisions you make in life. Our basic perceptions and other cognitive processes may not be as accurate as you think, and our individual life experiences significantly alter these basic functions, effectively altering who we are. We will read selected chapters from a variety of current opinion related to how

people make decisions. (Don't worry! We aren't reading all of these books cover-to-cover!) I would like each of you to be "stakeholders" in our course. Thus, I will ask for your input on readings for the second half of the semester. Readings will be drawn from texts such as:

- *The Human Brain Book* by Rita Carter. DK Publishing, Inc, 2009.
- *Caveman Logic: The Persistence of Primitive Thinking in a Modern World* by Hank Davis. Prometheus Books, 2009.
- *Just Babies: The Origins of Good and Evil* by Paul Bloom. Broadway Books, 2014.
- *How We Decide* by Jonah Lehrer. Mariner Books, 2010.
- *Predictably Irrational, Revised and Expanded Edition: The Hidden Forces that Shape our Decisions* by Dan Ariely. Harper Perennial, 2010.
- *Consciousness and the Brain: Deciphering How the Brain Codes Our Thoughts* by Stanislas Dehaene. Penguin Books, 2014.
- *The Tell-Tale Brain: A Neuroscientist's Quest for What Makes Us Human* by VS Ramachandran. Norton, 2012.
- *Out of Our Heads: Why You are Not Your Brain, and Other Lessons from the Biology of Consciousness* by Alva Noe. Hill and Wang, 2010.
- Robert Lawrence Kuhn's "Closer to Truth: Cosmos, Consciousness, Meaning" [video series]
- *Adaptation to Life* by George E Valiant. Harvard University Press, 1998.
- *Who's In Charge? Free Will and the Science of the Brain* by Michael Gazzaniga. Ecco, 2011.

Course Structure and Requirements:

The course will function as a discussion-based seminar, with a heavy focus on continuous reflective writing.

- After the first couple class meetings, comprised of foundational overview of basic decision-making processes and brain function, students will be required to write a 2-4 page, guided reflection paper prior to each meeting that relates their own experiences to the concepts currently under consideration. Each week, three students will lead a discussion of the assigned reading, inviting sharing of ideas from other students' reflections. I will provide a prompt each week to assist students in organizing their reflections. A sample reflection prompt could read something like...
 - *Hank Davis suggests that our current cognitive processes reflect our species' evolutionary history. Please relate an example from your own life in which your "primitive thinking" may have led you to either a bad – or good! – decision. After describing the experience, consider other strategies you could employ in future similar situations. Possible situations rife with possibilities include social activities, choices in extra-curriculars, relationship decisions, instances of impulsivity or substantial planning, etc.*
- Students will also be required to complete a more comprehensive 12-15 page term paper to be described in more detail later. Generally, this paper will provide students an opportunity to more holistically reflect on their experiences at BC, and how these

experiences have shaped the personal priorities, motivation, and cognitive abilities that will impact important future decisions.

Grading:

Grades for the course will determined based on the following requirements:

Class Preparation & Participation:	20%
Leadership in Guided Discussions:	20%
Weekly Reflection Responses:	30%
Term Paper:	30%

Detailed Schedule of Topics & Assignments, Fall 2017:

Date	Topic/Assignment	Group Leaders
Aug 31	Introductions, course overview & planning	
Sep 7	Core functional neuroanatomy and perception Reading: Eagleman, Chs 1&2	
Sep 14	Brain/mind connections and disconnects Reading: Eagleman, Ch 3	Alpha
Sep 21	Implicit bias: Subconscious effects on decisions Reading: Eagleman, Ch 4	Beta
Sep 28	Cognitive modularity Reading: Eagleman, Ch 5	Gamma
Oct 5	Neuroscience and responsibility Reading: Eagleman, Ch 6	Delta
Oct 12	Systems I and II: Implicit & explicit processes redux Reading: Kahneman, Chs, 3, 6, 9	Epsilon
Oct 19	Availability heuristic, predictable numerical errors, and affective forecasting Reading: Kahneman, Chs, 12, 32, 38	Alpha
Oct 26	Risky decision making: How risk-tolerance influences your choices Reading: Hertwig & Erev (2009) review article	Beta
Nov 2	Moral decision making: Ethics and the brain Reading: 1) Bloom, "On Being Good" 2) Nagel, "You can't learn about morality from brain scans" 3) Greene, "Beyond point-and-shoot morality."	Gamma
Nov 9	Spiritual decision making, social justice Reading: 1) Nicolas, "Challenges to Jesuit higher education today" 2) 'The Red Book' (2009), Excerpts on <i>discernment</i> 3) <u>Any two</u> articles from 'C21 Spring Resources, 2016' - <i>articles chosen individually by each student</i>	Delta
Nov 16	Peer mentoring of first-year students (Pizza provided!)	Everyone
Nov 23	<i>No class meeting (Thanksgiving)</i>	
Nov 30	Social justice: Environmental effects on decision-making Reading: 1) Strickland, Ch 1 2) Garcia-Matthewson, "How poverty changes the brain"	Epsilon
Dec 7	The long view: What matters most? Reading: 1) Valiant, Ch 7 "On happiness" 2) Gilbert TED talk, "Why we make bad decisions" 3) Walldinger TED talk, "What makes a good life?"	Everyone