



Summer School 2010

Revised: April 9, 2010

SP516: This is Your Brain on Prayer: Body, Mind and Soul in Dialogue

Rev. Dr. Mary Therese DesCamp

July 12-16, 2010. 9am - 12 noon

Course Overview and Description

There is a tremendous amount of popular literature about brain research and what it means for the practice of religion and spiritual disciplines. Two major problems for persons practicing Christianity are presented by this explosion of writing: first, much of what hits the best seller lists lacks a reasoned examination of the writer's own worldview. Materialist understandings of science dominate, and many of these are (at best) dismissive of religion and religious practice. Secondly, because of the Dalai Lama's wholehearted support of neuroscientific research, the primary area of analysis has been Buddhist mindfulness meditation. This research has been helpful but is not often directly applicable to common Christian prayer practices. A few scientists have done work on persons who engage in centering prayer, contemplative prayer, and speaking in tongues. But virtually no work has been done in embodied spiritual practice (labyrinth walking, physical labor), daily prayer, worship or social justice work; and very little of the work of cognitive linguistics has made its way into the discussion of how such practices might change and shape one's thinking.

This course will bring into dialogue the popular texts on brain research and religion with the classics of spiritual discipline, and both of these intellectual examinations will be illustrated by on-the-ground practice. Students will learn basic information about brain configuration and change; how thinking likely happens and how one can use one's mind to change one's brain and therefore change one's thinking; the difference between materialist and dualist views of the brain and mind and why this matters; and what may be happening inside our brains during specific prayer practices. Students will also explore how particular prayer and meditation practices work for them personally, and why social justice work needs the underpinning of daily practice, and spiritual practice needs the leaven of social justice.

Course goals include the introduction of students to an interdisciplinary discussion between applied brain research and the practice of Christian spiritual disciplines; helping students integrate their faith with reason, and their piety with the critical intellect by learning how—and experiencing the ways in which—prayer practices can change one's thinking, experience of the world, and behavior.

Course requirements and Evaluation

Basic Expectation of all students:

- a. Class attendance and preparation of all required reading and two optional readings, before class.
- b. Regular and active participation in class discussions.
- c. Active participation in spiritual practices unless otherwise arranged with instructor.
- d. Two short presentations on optional readings to the class.

1. Certificate in Theological Studies Credit

Expected of students registered for Certificate credit, in addition to basic expectations above.

- Submission of a five-page final paper articulating the student's application of the course teachings to their daily life. Evaluative criteria: understanding of course readings and

discussion, thoughtful reflection on issues of practice in the course of one's work and personal life, clear and concise writing.

2. MATS/MDiv

Competence Objectives—MATS/MDiv academic credit: By the end of this course, students will be able to:

- Identify three major issues in the discussion about neuroscience and religious practice;
- Show where and how Christian practice and the neurosciences point to similar findings, as well as points of difference;
- Identify and use four prayer practices that can change one's brain configuration, experience, and behavior;
- Articulate a personal statement about the relationship between spiritual practice and service.

Expected of students registered for MATS/MDiv academic credit [1.5 credit hours] in addition to basic expectation:

- Submission of a ten-twelve page final paper engaging the writings of one Christian mystic and a specific area of neuroscientific research that will be of practical use to student in daily life. Evaluative criteria: understanding of the course readings and selected research readings, thoughtful application of research to daily life, expressed in clear and concise writing.

3. ThM

Competence Objectives—ThM/DMin/PhD academic credit: By the end of this course, students will be able to:

- Understand the major issues in neuroscience research as it relates to Christian prayer practices;
- Demonstrate the ability to do sophisticated and close reading of popular books dealing with neuroscience;
- Know where to find, how to read, and how to critique research on neuroscience and prayer.
- Understand how to bring Christian mysticism into dialogue with contemporary neuroscience in a major research paper.

Expected of students registered for ThM/DMin/PhD academic credit [1.5 credit hours] in addition to basic expectation:

- Annotated bibliography of all materials read in connection with this course. List and briefly annotate all chapters, articles, and books read for class preparation and assignments. Evaluative criteria: depth of coverage, quality of annotations.
- Final paper of 20-25 pages. Student will facilitate dialogue between a specific mystic's writings on a Christian prayer practice and a body of research in neuroscience, neuropsychology, cognitive linguistics, or another discipline incorporating neuroscience in its research. Evaluative criteria: clear methodology, accurate understanding of scientific research and religious writings, cogent thesis and conclusions, all expressed in clear and concise writing.

PREPARATORY WORK: View the following Google Tech Talks:

- "Transform Your Mind, Change Your Brain," Richard Davidson.
<http://www.youtube.com/watch?v=7tRdDqXgsJ0>
- "Mindsight: The New Science of the Mind," Daniel J. Siegel.
<http://www.youtube.com/watch?v=Gr4Od7kqDT8&feature=channel>

Course Outline

Monday: The Brain, The Research, and the Debate.

Introduction to the debate on mind and consciousness. Introduction to brain structure and functions. Religious Spiritual Mystical Experiences (RSME's).

In-class practice: Lectio Divino. Discussion.

Reading for Monday class: Broks, "Right This Way, Smiles a Mermaid." Selections from Beauregard and O'Leary, *The Spiritual Brain*.

Tuesday: The Fascination Begins in the Mouth: Mary Gordon, Evagrius, and Neuroplasticity.

Neuroplasticity, cognitive frames, and repetitive prayer. Targeted and untargeted behavior.

In-class practice: Repetitive prayer. Discussion.

Reading for Tuesday class: Mary Gordon, *The Fascination Begins in the Mouth*. Selections from Evagrius Ponticus and John Cassian. "Frames," Sweetser.

Wednesday: Meditation, Me, and You.

Meditation and research; adepts and deficiency; blood flow vs. structure.

Frames in practice.

In-class practice: Christian mantra meditation. Discussion.

Reading for Wednesday class: Selections from Siegel, *The Mindful Brain*. Selection from Lewis, Amini, Lannon, *A General Theory of Love*.

Thursday: Embodied Practice: Music, Labor and Labyrinth.

Rhythm, the viscera's neural nets and intuition, physical constraint as release.

In-class practice: Labyrinth walk. Discussion.

Reading for Thursday class: Selections from Levine, *This is Your Brain on Music*. Selections, Br. Lawrence, *The Practice of the Presence of God*.

Friday: Frames, Forgiveness, εὐχαριστία.

Unconscious framing in Buddhist and Christian forgiveness practices. Ritual, resiliency, and sacrament.

In-class practice: Forgiveness meditation and Eucharist. Discussion.

Reading for Friday class: Selections from Keating, *Open Mind, Open Heart* and the *Big Book of Alcoholics Anonymous*. View information on metta meditation (citation below).

REMINDER: Students please make your own arrangements for acquisition of the summer school required texts through your **local bookstores**. Online bookstores such as Indigo.ca or Amazon.ca might have competitive prices with fast shipping to your neighbourhood. VST will NOT be pre-ordering titles.

READINGS

Required Reading: 'Required books and readings, as available, will be on reserve in the Library'

"Right This Way, Smiles a Mermaid," Paul Broks, *Into the Silent Land: Travels in Neuropsychology*. Atlantic Books, 2003.

The Spiritual Brain: A Neuroscientist's Case for the Existence of the Soul, Mario Beauregard and Denyse O'Leary. Harper One, 2007. **Chapters 1, 5-7. ThM/DMin/PhD: Read all.**

The Fascination Begins in the Mouth, Mary Gordon. Kore Press, 1998. (Online: <http://www.nytimes.com/1993/06/13/books/the-deadly-sins-anger-the-fascination-begins-in-the-mouth.html?pagewanted=1>)

The Praktikos & Chapters on Prayer, Evagrius Ponticus. Cistercian Publications, 1981. **Chapters 11, 42.** (Online: http://www.ldysinger.com/Evagrius/01_Prak/00a_start.htm)

“Eighth Book: The Spirit of Anger,” *The Institutes*, John Cassian, translated and annotated by Boniface Ramsey. Newman Press, 2000.
(Online: <http://www.osb.org/lectio/cassian/inst/inst8.html - 8.0>)

“Frames,” Eve Sweetser, chapter for forthcoming book on biblical interpretation and cognitive linguistics by DesCamp, Howe and Sweetser.

The Mindful Brain: Reflection and Attunement in the Cultivation of Well-Being, Daniel J. Siegel. W.W. Norton, 2007. **Chapters 1 and 2. ThM/DMin/PhD: Read all.**

A General Theory of Love, Thomas Lewis, M.D., Fari Amini, M.D., and Richard Lannon, M.D. Vintage Press, 2001. **Chapter 7. ThM/DMin/PhD: Read all.**

This is Your Brain on Music: The Science of a Human Obsession, Daniel J. Levitin. Penguin Group, 2006. **Chapters 5 and 6.**

The Practice of the Presence of God, Brother Lawrence (translated by Robert J. Edmonson). Paraclete Press, 1985. **Spiritual Maxims.**

Open Mind, Open Heart: The Contemplative Dimension of the Gospel, Twentieth Anniversary Edition, Thomas Keating. Continuum International Publishing, 2007. **Chapters 1-3.**

Metta Meditation http://www.buddhanet.net/metta_in.htm

“Freedom from Bondage,” *The Big Book of Alcoholics Anonymous*, Fourth Edition. (Online: http://www.aa.org/bigbookonline/en_theylostnearlyall14.pdf)

Optional Readings:

Don't Think of an Elephant, George Lakoff. Chelsea Green, 2004. **Cognitive Framing.**

The Way We Think: Conceptual Blending and the Mind's Hidden Complexities, Gilles Fauconnier and Mark Turner. Basic Books, 2002. **Major theory in cognitive linguistics.**

Why God Won't Go Away: Brain Science and the Biology of Belief. Newberg, D'Aquili, Rause. Ballantine Books, 2002. **Popular exposition of contemporary neuroscience without much baggage.**

Moment of Christ, John Main OSB. Continuum, 1998. **(Christian meditation)**

Sadhana, A Way to God: Christian Exercises in Eastern Form, Anthony de Mello. Doubleday, 1978.

See also the ton of books on Jesus and Buddha, anything by Bede Griffiths, etc.

Other Resources:

A very limited list of scientific studies:

“Mindfulness: Theoretical foundations and evidence for its salutary effects,” K. W. Brown et al, *Psychological Inquiry*, 2007. **OR ANY of the thousands of research articles published on mindfulness based stress reduction, mindfulness cognitive therapy, etc.**

“Promoting resilience in children and youth,” Mark Greenberg. *Annals of the New York Academy of Sciences*, 2007.

“Neural Basis of Conscious and Voluntary Self-Regulation of Emotion,” M. Beauregard, in M. Beauregard, ed., *Consciousness, Emotional Self-Regulation and the Brain*. John Benjamins, 2004.

“Neural Correlates of a Mystical Experience in Carmelite Nuns,” M. Beauregard and V. Paquette, *Neuroscience Letters* 405, 2006.

“Changes in EEG and Autonomic Nervous Activity During Meditation and Their Association with Personality Traits,” T. Takahashi et al, *International Journal of Psychophysiology* 55.2, 2005.

“Meditation states and traits: EEG, ERP, and neuro-imaging studies,” B.R. Cahn and J. Polich, *Psychological Bulletin* 132, 2006.

The neuroscience of human relationships: Attachment and the developing social brain, L.J. Cozolino. W.W. Norton, 2006.

“Attachment as psychobiological attunement: being on the same wavelength,” T. Field, in “Meditation and the neuroscience of consciousness,” A. Lutz et al, in *The Cambridge handbook of consciousness*, Cambridge University Press, 2007.

“The development of effortful control,” M. K. Rothbart and R. M. Rueda, in *Developing individuality in the human brain: A tribute to Michael I Posner*. American Psychological Association, 2005.

Mysticism—a very limited list!

The Silent Cry: Mysticism and Resistance, Dorothee Soelle (translated by Barbara and Martin Rumscheidt). Augsburg Fortress Press, 2001.

The Cloud of Unknowing. Harper One, 2004.

The Rule of St. Benedict, St. Benedict (translated by Cardinal Gasquet). Dover Publications, 2007.

A Spirituality of Resistance: Finding a Peaceful Heart and Protecting the Earth, Roger Gottlieb. Rowman and Littlefield, 2003.

Interior Castle, Teresa of Avila. Commentary by Dennis Billy, C.Ss.R. Ave Maria Press, 2007.
Disciplines of the Spirit, Howard Thurman. Friends United Press, 1963.

Acedia & Me: A Marriage, Monks, and a Writer's Life, Kathleen Norris. Riverhead Press, 2008.

See also the offerings on the brain at Google Tech Talks—many of them very cutting edge research presentations.

- **Attendance (10%)**

It is impossible, given the compact time in which the material is presented, for a student to grasp the course content unless attendance is regular. Missing even one course sessions will result in significant impact on final grade.

- **Required readings (20%)**

Students are expected to read the assigned texts carefully enough to discuss them critically in class.

- **Regular and Active Participation in the Class Sessions (25%)**

This includes discussion of assigned texts and spiritual practices. The instructor will set out guidelines for these reflections in order to assure emotional safety and confidentiality for participants.

It is recognized that some practices may be uncomfortable for some persons; students will be asked to take responsibility for making their own decisions about participation. Any ongoing difficulty engaging in the practices should be discussed with instructor.

- **One short presentation (15%)**

Students taking the course for credit will present a short summary to the class of the optional reading that the student has selected (selection to be made in discussion with the instructor).

- **Final paper (30%)*** ****

Topic of the final paper will be decided in consultation with the instructor. Length and general topic suggested above; double-spaced, 12 point font.

A note on academic papers:

Sources must be referenced accurately and according to standard academic practice in order to avoid the problem of plagiarism. Plagiarism is considered a serious academic offense and will result in a failing grade for the paper. If you have any questions about adequate citation or how to avoid plagiarism, please don't hesitate to speak to the instructor before submitting a paper. The few paragraphs below are included in order to help students easily identify what **is** and what **is not** plagiarism.

“Double dipping” (submitting the same paper for more than one course) is likewise not allowed as this would mean receiving double academic credit for the same work.

ALL BASIC DEGREE PAPERS (Certificate, Diploma, MATS, MDiv) ARE DUE THE FINAL DAY OF SUMMER TERM, AUGUST 31, 2010, AND SHOULD BE SUBMITTED TO THE COURSE INSTRUCTOR AT descamp@heartsrest.com, or Box 452, New Denver, BC, Canada, V0G 1S0.

ALL ADVANCED DEGREE PAPERS (ThD, DMin, PhD) ARE DUE BY SEPTEMBER 30, 2010, AND SHOULD BE SUBMITTED TO THE COURSE INSTRUCTOR AT descamp@heartsrest.com, or Box 452, New Denver, BC, Canada, V0G 1S0.

Regarding PLAGIARISM:

In North America, one of the important markers of high academic standards is proper attribution (giving credit) for someone else's ideas, thoughts, words, or methods of scholarship. Proper credit should be given in both oral and written contexts.

Proper credit is:

- When you use an actual sentence from a published article or unpublished essay, you must put the sentence in quote marks and give a footnote or citation to indicate who said it. The citation should include full bibliographic information. (For further information about correct citation form, see Kate Turabian, *A Manual for Writers of Term Papers, Theses and Dissertations.*)
- When you paraphrase or summarize another person's ideas, you must give a footnote or citation to indicate whose ideas they are and where you got them. (Or, in lecturing, make clear from whose ideas you are drawing.)
- When you adopt a significant idea from someone else's work, you must give a footnote or citation to

indicate where you got the idea.

- When you use a method developed by someone else, you must give a footnote or citation to indicate the source of the method.

When you fail to do this, it is considered **plagiarism**. Plagiarism can apply both to students and to faculty. Plagiarism is using someone else's ideas, thoughts, words, or methods of scholarship *as if they were your own* and *without giving proper credit to that person*. Plagiarism is considered wrong because (1) it is 'stealing' another person's ideas, methods, etc., and (2) it is 'lying' – representing something as your own when it is not yours. At graduate-level institutions, plagiarism is considered a serious offense.

- Plagiarism includes failing to give citations in the examples above.
- Plagiarism also includes copying another student's essay.

It is *not* plagiarism when you indicate clearly that you are summarizing someone else's views in order to provide the context for an assessment or critique of those views, or to incorporate them into a larger project. In this case, you must indicate clearly that you are giving the views of someone else – e.g. by starting with "so-and-so argues that...." It is also *not* plagiarism to use a well-established idea that has been developed in multiple sources – e.g. to claim that God can be called "woman" as well as man is now sufficiently well established that it needs no attribution.

Some phrases – e. g. "the personal is political" – are in such wide usage that sometimes we do not know where they originated; in such cases, it is acceptable to use them without attribution. However, the best scholarship will make every effort to give attribution where possible (e.g. to note that this phrase came from Robin Morgan).

Rev. Mary Therese DesCamp, PhD, teaches, writes, and leads retreats on cognition, contemplative prayer, and developing a personal prayer practice.