



Instructor	<b>Dr. Amy Silvestri Hunter</b>
Office	<b>342 Jubilee Hall</b>
Phone	<b>(973) 275-2812 (voicemail available)</b>
E-mail	<b>amy.hunter@shu.edu</b>
Office hours	<b>Wednesdays 4:00-5:30, Thursdays 2:30-4:00, and by appointment</b>

### Course Description

This course will explore the intersection between religious experiences and neuropsychology. We will discuss what the fields of neuroscience and theology can learn from each other based on current research on the neurobiology of religious experiences.

### Course Objectives

Upon successful completion of this course, you should be able to:

- Articulate the basics of neuroscience, including the anatomy of the nervous system, synaptic transmission, and psychopharmacology
- Define “neurotheology”
- Describe the research on the brain structures, neurochemistry, and genetics implicated in religious experiences
- Explain how this knowledge can inform our understanding of religious experiences
- Explain how these findings can impact and be understood by different religious traditions, with a particular emphasis on Christianity
- Explain different viewpoints on the integration of neuroscience and theology
- Articulate your own perspective – informed by the work of others – on the appropriate relationship between neuroscience and theology

Some of these objectives will be assessed through exams, while others will be assessed through a variety of writing assignments (described below).

### Textbook and other readings (required):

- Consolmagno, G. (2008). *God's Mechanics: How Scientists and Engineers Make Sense of Religion*. San Francisco: Jossey-Bass.
- Jeeves, M. & Brown, W.S. (2009). *Neuroscience Psychology and Religion: Illusions, Delusions, and Realities about Human Nature*. West Conshohocken, PA: Templeton Foundation.
- Newberg, A. (2010). *Principles of Neurotheology*. Surrey, England: Ashgate.
- Newberg, A. & Waldman, M.R. (2009). *How God Changes Your Brain: Breakthrough Findings from a Leading Neuroscientist*. New York: Ballantine.

Other readings are listed in the course outline and will be placed on the course Blackboard site.

### Grading

**Exams:** There will be four exams administered throughout the semester. Make-up exams will only be given for compelling, documented reasons and must be taken within 48 hours of the scheduled exam. *Exams will count as 45% of your semester grade.*

**Writing Assignments:** Either a *reaction paper* or *discussion questions* will be due for each reading assignment, with the exception of the chapters in Pinel and Carlson (unit 1, Introduction to Neuroscience). The purpose of the writing assignments is to get you thinking more deeply about the course material and to facilitate class discussion.

*Reaction papers* should include a summary of the author’s main argument as well as your thoughtful and original analysis of and reaction to the reading. The *summary* portion of the *reaction paper* should be no more than 3 paragraphs in length and should explain the author’s main argument(s). Your *reaction* to the reading should be the lengthiest section of the paper (at least 3 but no more than 5 pages) and should include your response to the reading. It should include answers to some or all of the following questions: Does the author make a convincing argument? Why or why not? What evidence was provided to support that argument? What additional information would have been more persuasive? What questions are still unanswered? Does this information support or refute other class material? Has your understanding or thinking about the topic changed as a result of this reading? How does this reading relate to your own personal experiences?

*Discussion questions* (2 or 3 of them) should be substantive – that is, not simple yes/no questions or asking for definitions. The idea is to ask questions that will spark class discussion.

*Writing assignments will count as 30% of your semester grade.*

**Participation and attendance:** Your *participation, behavior during class, and attendance will be worth 10% of your semester grade.* Participation will be graded on a 5 point scale and will take into account both the frequency and the quality of participation. Participation points will be deducted for texting during class or non-class related computer use (e.g. e-mail, Facebook use, etc.) The remainder of this grade (5 points) will come from attendance, including lateness; class behavior, including respect for instructor and other students; and preparation for each class meeting. In order to earn all 5 points for this component I expect that you have no more than 1 absence (excused or not) and 1 lateness, you are almost always attentive to and respectful of the instructor and other students, and you are almost always prepared for class. If not, points will be deducted accordingly.

**Final paper:** A *final, integrative paper* will be due at the end of the semester. This paper will give you the opportunity to explore a topic in more depth; this can be a topic we have touched on during the semester or something related but not discussed. For this paper, you will locate, summarize, and critically evaluate at least 5 empirical articles on a topic of your choosing within the general topic of the neuropsychology of religious experience. The majority of your paper (approx. 8 pages) should be a summary of these sources with some critical analysis. The remainder of your paper should address the following questions: What is the overall state of knowledge on this topic? What questions still need to be addressed? What does this line of research tell us about the value of neuroscientific research in relationship to the nature of religious experiences?

There are 3 paper-related assignments: a description of two potential topics of interest to you, due *Nov. 1*; a literature search with at least 5 empirical articles, due *Nov. 17*, and the paper itself, due on *Monday Dec. 12* at 5pm.

The final paper should be at least 10 *full* pages in length (double-spaced; not including title page and references) and be in APA format. Papers can be submitted electronically or in hard copy. More details will be provided during the course of the semester. *The final paper (including related assignments) will count as 15% of your semester grade.*

**Final Course Grades:** Letter grades will be assigned according to the following scale:

Percent	Letter Grade	Percent	Letter Grade
94 and up	A	77-79.9	C+
90-93.9	A-	74-76.9	C
87-89.9	B+	70-73.9	C-
84-86.9	B	67-69.9	D+
80-83.9	B-	60-66.9	D
		59.9 and below	F

These cutoffs are firm. Please note that I do not round grades. Do not ask me to give you an extra assignment to raise your grade or to round up your grade – I will not do so under any circumstances.

## Strategies for Success

Based on my own teaching experiences and comments from students in prior semesters of this course, here are my top 5 strategies for your own success and the success of the class as a whole:

1. **Complete the assigned reading before class.** Particularly if you haven't taken a course in Biological Psychology or Human Neuroscience, much of the introductory material will likely be new to you. If you read the material before class you'll have a much better understanding of the initial lectures and help contribute to discussion later in the semester.
2. **Start thinking about the final paper early in the semester.** The final paper is an opportunity for you to choose a topic in the field that interests you and to delve into it more deeply, but it requires a good deal of planning ahead. You may find that your first (or even second) choice of topics isn't feasible, so leave yourself plenty of time for literature searching. If you need help, I'm happy to assist you - please ask!
3. **Be open minded and respectful of others' opinions.** Each of us has unique and personal experiences with religion. Some of you may have very strong religious beliefs (in a variety of faiths), while others may be atheists. Keep in mind that (1) not everyone has the same beliefs as you and (2) we can all learn from each other.
4. **Think of our class meetings as a chance for discussion among colleagues.** I will spend very little time lecturing this semester. My goal in this course is to help facilitate discussion, but I can't make good discussion happen single-handedly. This class works best when everyone is actively engaged and participating, thinking about and responding to others.
5. **Maintain a positive attitude.** As you've probably already figured out, this course is a lot of work. The discussion-based format is likely different from most classes you've taken. Some of the topics may take you a bit out of your comfort zone. However, I have worked hard to create a course that I believe is interesting, unique, thought-provoking, and worth the work. Maintaining a positive attitude will go a long way in enhancing everyone's experience this semester.

## Policies and Procedures

**University closure:** In the event that the University is closed, any exam or assignment scheduled for that date will be due at the next class meeting.

**Deadlines:** Assignments are due *at the start of class* on the date specified. Since the purpose of discussion questions is to enhance our class discussion and they are not useful after the discussion has taken place, I will not accept discussion questions late. I will accept other assignments late, but any other assignment submitted late will be penalized at a rate of 10% of the value of the paper per day and will not be accepted more than 48 hours late. You are welcome to e-mail assignments to me, but please remember that the due date and time remains the same. Please do **not** submit assignments via the digital dropbox in Blackboard.

**Etiquette:** Please make every attempt to **be on time** for class. Arriving late is disruptive to me and to your fellow students and is particularly problematic in a discussion-based class such as this one. Please plan ahead for the inevitable traffic and parking problems. I understand that lateness is sometimes unavoidable; if you are late, please enter the room quietly and take the first available seat.

Please **turn off all cell phones** before the start of class.

When you **send me an e-mail**, please give me specific information in the subject line, such as "exam 2" or "writing assignment question." I receive quite a bit of spam, and I will delete e-mails with no subject line or subject lines such as "important" or "help."

If you would rather be talking to your friends, working on an assignment for another class, facebooking, texting, etc. than attending class, **DO NOT** come to class. These behaviors are disruptive, disrespectful, and unacceptable. They are rude both to your fellow students and me and will not be tolerated. I will not hesitate to call attention to any student who demonstrates any of these behaviors during class.

**Computer use:** I understand that many students prefer to read articles on their laptops instead of printing them out. However, I have found that it is very tempting to use one's laptop for other, non class-related purposes. If you choose to use your laptop during class, I expect that you will use it only for class-related purposes. Using your computer during class for other purposes (IM, Facebooking, playing games, etc.) is rude and distracting to myself and to others sitting near you. The success of this class depends heavily on discussion and active engagement with other students, and focusing on your computer screen instead of others impedes your ability to engage with others. Points will be deducted from your participation grade for non-class related computer use. In addition, I have instituted a "3 strikes and you're out" policy for this class. This means that the first two times I notice students using their computers for non-class purposes, I will remind you all about the policy and students involved will be docked participation points. After the third such incident, **all students** will be prohibited from using laptops in the classroom for the remainder of the semester unless we are working on a specific exercise that requires computer use. Therefore, if it is important to you to use your laptop for reviewing course readings or for note-taking, it is to your benefit to (1) use your laptop for that purpose only and (2) encourage your classmates to do the same. I reserve the right to check your laptop screen at any time.

**Blackboard page:** I will post some course readings, reminders of upcoming exams, and your grades on Blackboard. Please check the page regularly for announcements, updates, etc.

**Incompletes:** In accordance with University and Department policy, incompletes will only be given in circumstances where a student has completed most of the assigned coursework but is faced with some unforeseen and documented circumstance that prevents him/her from completing the course requirements during the semester. Incomplete grades not resolved within one academic year will convert to a grade of F. I cannot and will not give an **incomplete** for poor course performance; you are responsible for seeking help if you need it and for being aware of withdrawal deadlines.

### **Psychology Department Policy on Academic Honesty**

**I. Statement** – The Department of Psychology will not tolerate any form of academic dishonesty. Infractions will be appropriately penalized; students should understand that suspension or expulsion from the University is a possible result.

**II. Definitions** – "Academic dishonesty" shall be understood to encompass at least the following:

*Cheating* – whether on tests or on other course assignments, whether by the giving, receiving or taking of information. Additionally, turning in the same paper for two different assignments is cheating.

*Plagiarism* – stealing and/or passing off as one's own the ideas or words of another; using without crediting the source. Includes (1) copying of text/research/assignments; (2) using someone else's papers/research/assignments without permission and citation; (3) representing as one's own work what is really the work of another person. This includes downloading from web sources. Students are responsible for understanding proper crediting procedures; unintentional plagiarism is still academic dishonesty.

### **III. Penalties**

1. A student determined to be cheating on any test or who plagiarizes on a course assignment will be appropriately penalized at the discretion of the instructor. This may include receiving a zero on the assignment or "F" for the course.

2. Notice that a student has cheated or plagiarized will be sent to the department of the student's major. All cases of plagiarism resulting in an "F" for the course will be reported to the Dean. This can result in a recommendation to the Dean for suspension or expulsion from the university.

3. If the chair of the Psychology department finds that a student who has declared a major or minor in Psychology or is a graduate student in Psychology has been found to have committed acts of academic dishonesty in more than one Psychology course, the student is expelled from the Psychology program after due notice of the discovery. After one year, the department may rescind the expulsion upon the application of the

student provided the student evinces a genuine, informed, and vigorous commitment to academic integrity to the satisfaction of the department's Academic Integrity Committee.

4. All department or instructor actions resulting from suspected violations of this policy will be taken in accordance with the student's due process rights. Nothing in this policy statement shall be construed to preclude the department from taking appropriate disciplinary action against forms of academic dishonesty not stipulated here.

In this course, cheating includes, but is not limited to, the following behaviors:

- Copying, attempting to copy, and/or aiding another in the copying of answers from exams or assignments.
- Use of notes of any kind during an exam unless given express permission to do so by the instructor.
- Collaborating on writing assignments. Students may discuss writing assignments, but the work that each student turns in must be his/her own original work.
- Submitting an assignment for this class that you wrote and/or submitted for a different class. All work must be original for this class.
- Plagiarism of writing assignments. **Please read carefully the definition of plagiarism below** – you are responsible for making sure that all your work conforms to this definition. If you have any questions about what constitutes plagiarism, please ask me before an assignment is due.

The penalty for a first offense of cheating of any kind will be, at minimum, a zero on the exam or assignment. The penalty for a second offense will be an automatic F in the course. As per Psychology department policy, any instance of cheating will be reported to the department chairperson.

**Plagiarism**, the act of taking ideas, writing, etc. from another and passing them off as one's own, will not be tolerated. Plagiarism includes quoting or even paraphrasing without citation, as well as substituting synonyms into someone else's text and then retyping it or simply rearranging the order of words. It also includes using another's work without appropriate citation and quoting without appropriate citation – that is, *quoting without placing the quoted material in quotation marks* and/or without a citation at the end of the sentence. Follow the four-word rule: if 4 or more words in a row are the same as the original source, it's plagiarism. If you have any questions about what constitutes plagiarism, please ask me before an assignment is due. *I take plagiarism very seriously*, and I expect that you will as well.

**Disability Services Statement:** It is the policy and practice of Seton Hall University to promote inclusive learning environments. If you have a documented disability you may be eligible for reasonable accommodations in compliance with University policy, the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, and/or the New Jersey Law against Discrimination. Please note, students are not permitted to negotiate accommodations directly with professors. To request accommodations or assistance, please self-identify with the Office for Disability Support Services (DSS), Duffy Hall, Room 67 at the beginning of the semester. For more information or to register for services, contact DSS at (973) 313-6003 or by e-mail at [DSS@shu.edu](mailto:DSS@shu.edu).

**American Psychological Association (APA) National Curricular Objectives:** The APA recommends that Psychology course offerings in departments across the country address specific curricular objectives, with the overarching goal that a student majoring in Psychology will have each item covered in at least one course during their undergraduate career. Below is the list of the goals recommended by the APA; the curricular objectives addressed by this course are checked. By evaluating this information for each of your Psychology courses, you will be able to see how your undergraduate courses complement each other and gain perspective on the information and skills you are acquiring as a Psychology student.

<b>Goal 1. Theory and Content</b>
-----------------------------------

- |   |   |
|---|---|
| 1.1 Describe the nature of psychology as a discipline                                     |   |
| 1.2 Use the concepts, language, and major theories to account for psychological phenomena | ✓ |
| 1.3 Explain major perspectives of psychology  |   |

- 1.4 Demonstrate knowledge representing depth and breadth in specific content areas, including:
- (a) learning and cognition ✓
  - (b) individual differences, psychometrics, and social processes ✓
  - (c) biological bases of behavior ✓
  - (d) developmental changes across the lifespan
  - (e) history of psychology
  - (f) relevant levels of analysis ✓
  - (g) overarching themes, persistent questions, or enduring conflicts ✓
  - (h) relevant ethical issues ✓

**Goal 2. Research Methods in Psychology**

- 2.1 Describe the basic characteristics of the science of psychology ✓
- 2.2 Explain different research methods used by psychologists ✓
- 2.3 Evaluate the appropriateness of conclusions drawn from research ✓
- 2.4 Design and conduct basic studies using appropriate methods
- 2.5 Follow the APA Code of Ethics in the treatment of participants
- 2.6 Generalize research conclusions appropriately ✓

**Goal 3. Critical Thinking Skills in Psychology**

- 3.1 Use critical thinking effectively ✓
- 3.2 Engage in creative thinking
- 3.3 Use reasoning in arguments and persuasive appeals
- 3.4 Approach problems effectively

**Goal 4. Application of Psychology**

- 4.1 Describe major applied areas of psychology
- 4.2 Identify appropriate psychology applications in solving problems ✓
- 4.3 Articulate the use of psychological principles in social issues and public policy
- 4.4 Apply psychology to everyday life ✓
- 4.5 Recognize ethical complexities in psychological application ✓

**Goal 5. Values in Psychology**

- 5.1 Recognize the need for ethical behavior in science and practice
- 5.2 Demonstrate reasonable skepticism and curiosity ✓
- 5.3 Seek and evaluate scientific evidence ✓
- 5.4 Tolerate ambiguity and recognize the complexity of psychological explanations ✓
- 5.5 Recognize and respect human diversity ✓
- 5.6 Assess and justify engagement in civic, social, and global life
- 5.7 Understand limitations of their knowledge and skill ✓

**Goal 6. Information and Technological Literacy**

- 6.1 Demonstrate information competence at each of the following stages:
  - (a) Formulate a researchable topic ✓
  - (b) Locate and choose relevant resources ✓
  - (c) Use selected sources after evaluating their suitability ✓
  - (d) Read and accurately summarize general scientific literature ✓
- 6.2 Use appropriate software to produce understandable reports ✓
- 6.3 Use information and technology ethically and responsibly ✓
- 6.4 Demonstrate these computer skills:
  - (a) Basic word processing, database, e-mail, spreadsheet, and data analysis programs ✓
  - (b) Search the internet for high quality information ✓
  - (c) Use proper etiquette and security when communicating through e-mail ✓

**Goal 7. Communication Skills**

- 7.1 Demonstrate effective writing skills in various formats for various purposes ✓
- 7.2 Demonstrate effective oral communication skills in various formats for various purposes
- 7.3 Exhibit quantitative literacy
- 7.4 Demonstrate effective interpersonal communication skills
- 7.5 Exhibit the ability to collaborate effectively

**Goal 8. Sociocultural and International Awareness**

- 8.1 Interact effectively and sensitively with people from diverse backgrounds & cultural perspectives
- 8.2 Examine the sociocultural and international contexts that influence individual differences ✓

- 8.3 Explain how individual differences influence beliefs, values, and interactions ✓
- 8.4 Understand how privilege, power, & oppression may affect prejudice, discrimination, and inequity
- 8.5 Recognize prejudicial attitudes and discriminatory behaviors

**Goal 9. Personal Development**

- 9.1 Reflect on their experiences and find meaning
- 9.2 Apply psychological principles to promote personal development
- 9.3 Enact self-management strategies that maximize healthy outcomes
- 9.4 Display high standards of personal integrity with others

**Goal 10. Career Planning and Development**

- 10.1 Apply knowledge of psychology to formulating career choices
- 10.2 Identify the types of academic experience and performance that will facilitate entry
- 10.3 Describe preferred career paths based on accurate self-assessment
- 10.4 Identify and develop skills and experiences relevant to achieving selected career goals
- 10.5 Demonstrate an understanding of the importance of lifelong learning and personal flexibility to sustain personal and professional development

**COURSE OUTLINE (all dates are approximate and are subject to change)**

	Date	Reading Due	Assignment Due (RP = reaction paper; DQ = discussion questions)
<b>Unit 1</b>	<b>Introduction to neuroscience, neurotheology</b>		
	<i>Part 1: Introduction to Neuroscience:</i> Some basics on the neurobiology of behavior		
	<b>8/30</b>	Pinel, <i>Biopsychology</i> -Chapter 2: Evolution, Genetics, and Experience	
	<b>9/1</b>	Pinel, <i>Biopsychology</i> -Chapter 3: The Anatomy of the Nervous System	<b>Bring lecture outline (posted on Bb)</b>
	<b>9/6</b>	Carlson, <i>Foundations of Behavioral Neuroscience</i> -Chapter 4: Psychopharmacology	<b>Bring lecture outline</b>
	<i>Part 2: Introduction to Neurotheology:</i> What is “neurotheology”? What religious experiences have been investigated with respect to neurological functioning?		
	<b>9/8</b>	-Wikipedia entry on “neurotheology” Newberg, <i>Principles of Neurotheology</i> -Chapter 1: The Case for a Principia Neurotheologica	<b>DQ for Newberg ch. 1</b>
	<b>9/13</b>	Newberg, <i>Principles of Neurotheology</i> -Chapter 2: Definitions in Neurotheology	<b>DQ</b>
	<b>9/15</b>	Newberg, <i>Principles of Neurotheology</i> -Chapter 3: The Principles of Interaction Between Neuroscience and Theology	<b>DQ</b>
	<b>9/20</b>	Newberg, <i>Principles of Neurotheology</i> -Chapter 6: Principles Relating to the Methods of Neurotheological Research	<b>DQ</b>
	<b>9/22</b>	<b>EXAM 1</b>	
<b>Unit 2</b>	<b>The neuroscience of religious and spiritual experiences</b>		
	<i>Part 1: Brain Structures and Religious Experience:</i> What brain structures are activated during religious/spiritual experiences? How does the pattern of activation change based on how we conceptualize God? How does knowledge of the involved brain structures inform our understanding of religious experience?		
	<b>9/27</b>	Newberg & Waldman, <i>How God Changes Your Brain</i> -Ch. 3: What Does God Do to Your Brain? -Ch. 6: Does God Have a Heart? -Ch. 7: What Happens When God Gets Mad?	<b>RP for one chapter, DQ for the other 2 chapters</b>

<b>9/29</b>	Persinger, M.A. & Healey, F. (2002). Experimental facilitation of the sensed presence: possible intercalation between the hemispheres induced by complex magnetic fields. <i>The Journal of Nervous and Mental Disease</i> , 190 (8), 533-541. doi: 10.1097/01.NMD.0000026653.84018.B0 Granqvist, P., Fredrikson, M., Unge, P., Hagenfeld, A., Valind, S., Larhammar, D., & Larsson, M. (2005). Sensed presence and mystical experiences are predicted by suggestibility, not by the application of transcranial weak complex magnetic fields. <i>Neuroscience Letters</i> , 379, 1-6. doi: 10.1016/j.neulet.2004.10.057	<b>DQ</b>
<b>10/4</b>	Newberg & d'Aquili, <i>Why God Won't Go Away</i> -Ch. 6: Mysticism: the Biology of Transcendence	<b>DQ</b>
<b>10/6</b>	Newberg, <i>Principles of Neurotheology</i> -Ch. 7: Physiological and Phenomenological Correlates of Spiritual Practices	<b>RP</b>
<b>10/11</b>	<b>Fall Break!</b>	
<b>10/13</b>	McNamara, <i>The Neuroscience of Religious Experience</i> -Ch. 5: Neurology of Religious Experiences	<b>DQ</b>
<b>10/18</b>	<b>EXAM 2</b>	
<i>Part 2: Neurochemistry and Religious Experience: What neurotransmitters are involved in religious/spiritual experiences? What happens when those neurotransmitters are manipulated with drugs? Is a spiritual experience induced by drugs (or any other alteration of brain function) any less valuable than one which occurs spontaneously? How can our pre-existing beliefs about religion influence our interpretation of our response to psychoactive substances? How does this research help us to understand religions in which psychoactive substances are consumed as part of the religious ritual?</i>		
<b>10/20</b>	Hamer, <i>The God Gene</i> -Ch. 5: Monoamines and Mysticism McNamara, <i>The Neuroscience of Religious Experience</i> -Ch. 6: Neurochemistry of Religiosity	<b>DQ for each chapter separately</b>
<b>10/25, 27</b>	Griffiths, R.R., Richards, W.A, Johnson, M., McCann, U., & Jesse, R. (2008). Mystical-type experiences occasioned by psilocybin mediate the attribution of personal meaning and spiritual significance 14 months later. <i>Journal of Psychopharmacology</i> , 22(6), 621-32. doi: doi: 10.1177/0269881108094300 Griffiths, R.R., Richards, W.A., McCann, U., & Jesse, R. (2006). Psilocybin can occasion mystical-type experiences having substantial and sustained personal meaning and spiritual significance. <i>Psychopharmacology</i> , 187, 268-283. doi: 10.1007/s00213-006-0457-5	<b>RP for both articles combined (due on 10/27)</b>
<b>11/1</b>	Hamer, <i>The God Gene</i> -Ch. 2: Self-Transcendence	<b>DQ Paper topics</b>
<b>11/3</b>	Borg, J., Andree, B., Soderstrom, H., & Farde, L. (2003). The serotonin system and spiritual experiences. <i>American Journal of Psychiatry</i> , 160(11), 1965-1969. Kapogiannis, D., Barbey, A.K., Su, M., Zamboni, G., Krueger, F., & Grafman, J. (2009). Cognitive and neural foundations of religious belief. <i>Proceedings of the National Academy of Sciences</i> , 106(12), 4876-4881. doi: 10.1073/pnas.0811717106 (Please be sure to also read the supplementary material online for this article.)	<b>DQ for both articles combined</b>
<b>11/8</b>	<b>EXAM 3</b>	



<b>Unit 3</b>	<b>Integrating neuroscience and theology</b>	
	<i>Part 1: Successfully integrating science with Catholicism</i>	
<b>11/10</b>	Consolmagno, <i>God's Mechanics: How Scientists and Engineers Make Sense of Religion</i> Part 1: Why would a techie believe in God? <b>OR</b> Part 2: Why would a techie join an organized religion?	<b>DQ</b>
<b>11/15</b>	Consolmagno, <i>God's Mechanics: How Scientists and Engineers Make Sense of Religion</i> Part 4: Why would a techie be a Christian? <b>OR</b> Part 5: The confession of a Vatican techie	<b>RP</b>
	<i>Part 2: Alternate interpretations of neuroscientific findings</i>	
<b>11/17</b>	Newberg & d'Aquili, <i>Why God Won't Go Away</i> -Chapter 9: Why God Won't Go Away: The Metaphor of God and the Mythology of Science -Epilogue: So Just What is Neurotheology Anyway?	<b>DQ for both chapters combined</b> <b>Literature search</b>
<b>11/22</b>	Alper, <i>The God Part of the Brain</i> -Chapter 19: The Logic of God: A New "Spiritual" Paradigm -Chapter 20: What, if anything, is to be gained from a scientific interpretation of human spirituality and God?	<b>RP for both chapters combined</b>
<b>11/24</b>	<b>Thanksgiving Break</b>	
	<i>Part 3: "Emergence": Can we use our religious experiences to interpret our neuronal activity? Can we use neurological findings to understand the concept of <i>imago dei</i>?</i>	
<b>11/29</b>	Jeeves & Brown, <i>Neuroscience Psychology and Religion</i> -Chapter 2: Warfare versus Partnership -Chapter 8: Science, Religion, and Human Nature	<b>DQ for both chapters combined</b>
<b>12/1</b>	Jeeves & Brown, <i>Neuroscience Psychology and Religion</i> -Chapter 9: Getting our Bearings: Looking Back and Looking Forward	<b>DQ</b>
<b>12/6</b>	Newberg, <i>Principles of Neurotheology</i> -Ch. 9: Reflections on Major Topics of Theology	<b>RP</b>
<b>12/8</b>	No class (classes cancelled 1:00-2:00)	
<b>12/12</b>	<b>Final paper due, 5pm</b>	
<b>12/19, 8:00am</b>	<b>EXAM 4 (during finals week)</b>	