

## **PSY575 Neuroscience-Informed Counseling Reformed Theological Seminary**

Fall 2018  
2 Credit Hours

### **Instructor**

Dr. James Hurley, D. Phil., Ph. D.

#### **Contact Information**

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#### **Class meeting time**

TBA

#### **Office Hours**

By appointment or when in office

### **Course Description**

Recent developments in neuroscience and psychopharmacology have contributed greatly to the fields of psychology and counseling. They are also relevant to pastors as they deal with their flocks. Awareness of brain functioning has contributed information that helps clinicians better to understand long established counseling practices and has contributed to new approaches to old problems. Neuroscience for Counselors is designed to introduce you to foundational neuroscience material relevant to counseling, highlighting both the intrapersonal and interpersonal aspects of human development and ongoing functioning. The foundation that you build in this course will provide a framework within which you will learn about the counseling process.

### **Course Objectives**

Students will demonstrate:

- CO1 Awareness of the function and development of the human brain and the impact of biological and neurological mechanisms on mental health
- CO2 Awareness of applications of neuroscience information of particular relevance to counseling subjects such as fundamental counseling skills, attachment processes, trauma, self-regulation, and forgiveness process
- CO3 Ability to research a neuroscience topic relevant to counseling
- CO4 Awareness of the relationship of neuroscience to biblical teaching in a variety of areas

### **Methods of Instruction**

This course will be taught in the following formats: classroom instruction, video, class presentations, student work groups

## Assignments (Student Performance Evaluation Criteria)

Assignments in this course involve limited reading, a paper and a significant amount of video observation. It is easy to zone out watching video and thus to learn little. To reduce the probability of such a loss of learning opportunity, students will review video in dyads, discuss what they have viewed and prepare summaries of the materials viewed.

Select a partner. Your work is largely done in dyads. Select a partner to work with on the course assignments.

### A1, A3, A5, A8 DPS for Norden Video Series, Understanding the Brain, (25%)

Jeannette Norden is an outstanding, award-winning lecturer. Her course, Understanding the Brain, is for non-specialists and will introduce you to brain science. Her entire series consists of 36 lectures of 31 minutes each. While you are urged to view all of them, you are required to view only a (substantial) selection of them. There is a nice book/study guide that goes with the videos.

The Norden videos are available in the RTS library, on disc and for download. Sometimes, it is possible to rent unlimited access for a period of time. You may be able to save money by coordinating with fellow students to buy or to rent the series.

Your assignments do not require you to report on the entire series at one time. Your DPS due dates are coordinated with the course lectures. Please pay close attention to the course schedule that tells you which Norden lectures are to be included in which DPS and when each DPS is due. It is important that you interact with one another as you watch the videos. Interaction will greatly increase your grasp on the material. Your assignments are designed to promote discussion without adding too much detail burden for you.

NOTE: Assignment (A1) sets you up to do the take the brain test (Assignment A2; available in Canvas). Have a copy of the test with you as you move through the Norden lectures. Write out the answers to the brain test items as she lectures about them. If you do that, the brain test will be a piece of cake.

Norden Video Assignments (Be sure to put appropriate lectures on each DPS)

	<b>DPS</b>	<b>Norden Lectures</b>	<b>Material item</b>
A1	Norden DPS1	L01-L11	M3
A3	Norden DPS2	L12-L18	M4
A5	Norden DPS3	L20-L22, L25-L 28	M5
A8	Norden DPS4	L23, L30-L35	M6

Process for Norden DPS video watching

- DPS Form available in 'Files' folder on Canvas
- DPS instructions at the end of this syllabus
- Select a study partner.
- Watch Norden lecture videos for the DPS with a partner.
  - Use the following process for each lecture:
    - Watch a lecture.
      - As you watch the lecture, each partner should create at least three (3) DPS questions/comments (Q/C) for that lecture.
- Record your questions/comments on a DPS.
  - Source column: the assignment ID (e.g. A1, A2, etc.)
  - Location: 'L' plus the two-digit lecture number. (e.g. the third lecture in the series is L03)
  - Topic: A brief topic/subject characterizing the question

- Question/Comment: Type your thoughtful question or comment.
- Discuss: Enter how many minutes were spent discussing the Lecture
- SSID6: The last six (6) digits of your Self-Service ID.
- Discuss the lecture and/or your Q/Cs for at least 5 minutes per lecture
- Be sure to include appropriate assigned lectures on each assignment DPS
- Submit your completed DPS to [hurleypapers@gmail.com](mailto:hurleypapers@gmail.com)
  - Label both your DPS file and the email as follows:  
PSY###\_YYYY\_A#\_SSID6, where ### is the course ID, YYYY is the year, A# is the assignment number, SSID6 is your Self-Service ID.  
e.g. PSY570\_2018\_A1\_123456
  - Be sure to check the due date on the course schedule.

### **A2: Brain Test - Required**

The BRAIN STRUCTURE TEST PREPARATION file is in the 'Files' folder for this course. The brain test is an acquaintance exam that prepares you for class. You are allowed to make one mistake. If you make more than that, you will have to repeat. You may repeat it three times. It is a requisite, but does not contribute to your grade. If you do not complete it by the due date (to be set on the first class day) or if you are not successful by the third try, there will be a 10% reduction in your final grade. This acquaintance will prepare the way for class discussions. The internet has many resources available to you. They are sufficient for the exam. Additionally, the relevant portions of the Siegel readings are helpful. The Norden videos will provide more than enough information for the test.

### **A3: Chapter summaries for Siegel, D. and Hartzell, M. Parenting from the Inside Out. 20%**

This is a very readable and useful parenting book that introduces readers to neuroscience as it applies to child development. You may want to use it yourself and/or to refer clients to it. Lecture content will further develop this material.

- This is a dyadic assignment. You may divide up the chapter summaries.
- Read the entire book: Siegel breaks his chapters into three sections: a narrative, a Spotlight on Science, and Questions for the reader. The 'Spotlight on Science' portion of each chapter is particularly valuable.
- Prepare a chapter summary of no more than one page for each chapter.
  - Include in your summary a few sentences on relation the material of the chapter to issues of relevance to Christian faith. Think carefully and be as specific as possible.
- Discussion: Spend at least 10 minutes per chapter discussing the material with your partner.
- Include on your title page an attestation that you have read the book and that you have discussed each chapter for at least 10 minutes.
- Combine your summaries into a single .doc file.
  - Label both your summary doc file and the email as follows:  
PSY###\_YYYY\_PIO\_SSID6\_SSID6, where ### is the course ID, YYYY is the year, SSID6 are the Self-Service IDs of the authors of the summaries
- Submit your email to [hurleypapers@gmail.com](mailto:hurleypapers@gmail.com)
- Be sure to check the due date on the course schedule.

### **A4, A6, A7, A9, A10, A11 Video and article summaries (25%)**

You have a significant number of video materials and articles for this course. Their due dates are clustered to parallel the course lectures. Be sure to check the course schedule for due dates. For each item, your task is to read the article or watch the video, to discuss it with your partner and to prepare a summary of no more than one page.

- This is a dyadic assignment. You may divide up the summaries.
- Read/watch the assigned item.
  - Make a few notes to guide your discussion with your partner.
- Discussion. Spend no less than 5 minutes discussing each item.
  - Prepare an item summary of no more than two pages. Include in your summary a few sentences on the relation the material of the chapter to issues of relevance to Christian faith. Think carefully and be as specific as possible.
- Include the Assignment ID and the title of the item at the top of each summary page
- Combine your summaries into a single .doc file.
  - Cover page. Add a cover page to the combined summaries which
    - 1. Has your SSID6 numbers
    - 2. Lists the items summarized by Material ID (M1, M2, M3, etc.) and the titles
    - 3. Attests that you have discussed each item for at least 5 minutes.
  - Label both your summary doc file and the email as follows:  
PSY###\_YYYY\_PIO\_SSID6\_SSID6, where ### is the course ID, YYYY is the year, SSID6 are the Self-Service IDs of the authors of the summaries  
e.g. PSY575\_2018\_PIO\_123456\_789012
- Submit your email to [hurleypapers@gmail.com](mailto:hurleypapers@gmail.com)
- Be sure to check the due date on the course schedule.

### **A12 Neuroscience presentation (30%)**

Each dyad will prepare and present a 15 minute presentation on a neuroscience topic related to counseling. Presentations will be made during the last two course meetings.

- Proposal. After selecting and exploring their topic, dyads should present a 'presentation proposal' to the course instructor (Upload on canvas). (Due date on course schedule)
  - The proposal should include
    - A clear statement of the topic
    - An annotated bibliography of at least 15 recent (last 8 years) scholarly articles/chapters/items relevant to the topic
    - A summary statement about the research findings and their relation to the counseling profession
  - The instructor will review the proposal and approve it or recommend modifications. If the instructor does not respond within one week of the due date, approval may be assumed.
- Class presentation. During portions of the last two classes, student dyads will make their presentations to the class.
  - Include a handout as a resource for your peers. (Orlando students: Upload your sheet to Canvas)
  - Prepare Power Point or other visuals to enhance your presentation. (Orlando students: Upload your materials to Canvas).
  - Due date: All presentations should be ready to go on the first presentation date on the Course Schedule. The order of presentation will be determined in class.

### **Required Materials**

M1	Atkinson, B. and Hurley, J. Executive Operating Systems in Canvas 'Files' folder
M2	Harvard Medical, Depression <a href="https://www.health.harvard.edu/mind-and-mood/what-causes-depression">https://www.health.harvard.edu/mind-and-mood/what-causes-depression</a>

M3	Norden, J. L01-L11 Understanding the brain, Video series, Lectures 1-11 Gross organization and development of the brain
M4	Norden, J. L12-L18 Visual, auditory and motor systems
M5	Norden, J. L20-L22, L25-L28 Language, limbic system, depression, reward system, emotions
M6	Norden, J. L23, L30-L35 Sexual dimorphism, sleep, self, Alzheimer's, stress
M7	Panksepp, J. Executive Operating Systems <a href="https://www.youtube.com/watch?v=65e2qScV_K8">https://www.youtube.com/watch?v=65e2qScV_K8</a>
M8	Ressler, K. Neuro of emotion <a href="https://www.youtube.com/watch?v=a9LjXHtLvIY">https://www.youtube.com/watch?v=a9LjXHtLvIY</a>
M9	Siegel, D. Avoidant Attachment <a href="https://www.youtube.com/watch?v=qgYJ82kQlyg&amp;index=4&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB">https://www.youtube.com/watch?v=qgYJ82kQlyg&amp;index=4&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB</a>
M10	Siegel, D. Disorganized attachment <a href="https://www.youtube.com/watch?v=rpQtPsubLzc&amp;index=2&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB">https://www.youtube.com/watch?v=rpQtPsubLzc&amp;index=2&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB</a>
M11	Siegel, D. Disorganized attachment in the making <a href="https://www.youtube.com/watch?v=zovtRq4e2E8&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB&amp;index=1">https://www.youtube.com/watch?v=zovtRq4e2E8&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB&amp;index=1</a>
M12	Siegel, D. Essence of Adolescence <a href="https://www.youtube.com/watch?v=GGZD8xxbzmU">https://www.youtube.com/watch?v=GGZD8xxbzmU</a>
M13	Siegel, D. Mindfulness and Neural Integration <a href="https://www.youtube.com/watch?v=LiyaSr5aeho">https://www.youtube.com/watch?v=LiyaSr5aeho</a>
M14	Siegel, D. Mirror Neurons <a href="https://www.youtube.com/watch?v=Tq1-ZxV9Dc4&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB&amp;index=7">https://www.youtube.com/watch?v=Tq1-ZxV9Dc4&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB&amp;index=7</a>
M15	Siegel, D. Optimal Attachment <a href="https://www.youtube.com/watch?v=_XjXv6zseA0&amp;index=5&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB">https://www.youtube.com/watch?v=_XjXv6zseA0&amp;index=5&amp;list=PLDCtwyPSjhINEz4xuzxt6Tdsnyt2vChiB</a>
M16	Siegel, D. Parenting from the Inside Out (2013)
M17	Siegel, D. Technology and how it affects the brain <a href="https://www.youtube.com/watch?v=31o_chpzQh8">https://www.youtube.com/watch?v=31o_chpzQh8</a>
M18	Siegel, D. What is the mind? <a href="https://www.youtube.com/watch?v=Ak5GCyBFY4E">https://www.youtube.com/watch?v=Ak5GCyBFY4E</a>
M19	Smith, K. and Greenberg, L. (2007) Internal Multiplicity in Emotion-Focused Psychotherapy, <i>Journal of Clinical Psychology</i> , 63, 175-186.
M20	Worthington, E. Overview/Introduction to REACH, <a href="http://www.eworthington-forgiveness.com/reach-forgiveness/">http://www.eworthington-forgiveness.com/reach-forgiveness/</a>
M21	Siegel, D. Ambivalent attachment <a href="https://www.youtube.com/watch?v=nGhZtUrpCuc">https://www.youtube.com/watch?v=nGhZtUrpCuc</a>

## Course Schedule

	Date	Topic	Reading Due	Assignments Due	CACREP 2016 Standards
L1	8/27	Introduction Scripture and relational aspects of communication Slides 1-13	M3 Norden L01-L11 Gross organization and development of the brain	A1 Norden DPS1 A2 Brain Test	2.F.2.d 2.F.2.e 2.F.2.g
	9/3	Labor Day – NO CLASS			
L2	9/10	Brain structure 14-23 Memory and learning Slides 24-28	M4 Norden L12-L18 Visual, auditory and motor systems M16 Siegel PIO M18 Siegel What is mind? M19 Smith, K. and Greenberg, L. (2007) Internal Multiplicity	A3 Norden DPS2 A4 Summaries M11, M13, M14	2.F.3.b 2.F.3.e 2.F.3.f
L3	9/17	‘Emotion’ (Preparing for EOS) 29-40 ‘Communication’ and non-word communication Executive Operating Systems	M5 Norden L20-L22, L25-L28 Language, limbic system, depression, reward system, emotions M7 Panksepp Executive Operating Systems M3 Ressler Neuro of emotion M13 Siegel Mindfulness and Neural Integration M17 Siegel Technology and how it affects the brain	A5 Norden DPS3 A6 Summaries M7, M8, M13, M17	2.F.3.b 2.f.3.e 5.C.2.g
L4	9/24	Attachment process 67-77	M9, M10, M11, M15 Siegel Attachment videos	A7 Summary M9-M10, M11, M15 A12 Presentation Proposal	2.F.3.b 2.F.3.e 5.C.2.g
	10/1	Reading Week NO CLASS			
L5	10/8	Stress, Depression, Anxiety Forgiveness in biblical and neuroscience perspective	M6 Norden, L23, L30-L35 Sexual dimorphism, sleep, self, Alzheimer’s, stress M2 Harvard Depression M20 Worthington Reach Model	A8 Norden DPS4 A9 Summary M2 A10 Summary M20	2.F.2.d 2.F.2.g 2.F.3.b 2.F.3.e 5.C.2.g
L6	10/15	Student neuroscience presentations 1		A12 Neuroscience Presentation	2.F.3.e 5.C.2.g
L7	10/22	Student neuroscience presentations 2	M12 Siegel on Adolescence	A11 Summary M12	
L8	10/29	Catch up/Wrap up			
		NO MORE CLASSES			

## Summary Student Learning Outcome Table

The table below shows how the objectives of this course will be met, both by work assigned and evaluation method used. Details about specific course objectives, assignments, and evaluation methods can be found in later sections of this syllabus.

## Student Learning Outcome Table

The table below shows how the objectives of this course will be met by readings, lectures and assignments used. Details about specific course objectives, assignments, and evaluation methods can be found in previous sections of this syllabus.

Course Objective	Reading(s)*	Lecture(s)	Assignment(s)	CACREP Standard(s)
CO1 Brain function	M3-M6, M19	L2-4	A1, A2, A3, A5, A8	2.F.3.b 2.F.3.e 2.F.3.f
CO2 Neuroscience and Counseling Issues	M1, M2, M7-M18	L2-5	A4, A6, A7, A9, A10, A11	2.F.2.d 2.F.2.g 2.F.3.b 2.F.3.e 5.C.2.g
CO3 Explore relevant neuroscience research		L6, L7	A12	2.F.2.d 2.F.3.b 5.C.2.g
CO4 Neuroscience and biblical teaching	M20	L1, L5	A12	2.F.2.d 2.F.2.e 2.F.2.g

## Policies and Important Information

All written work must conform to American Psychological Association (APA) style. If a student does not have a copy of the APA manual, one should be purchased, or students may use one of the many APA style websites available online (e.g. <https://owl.english.purdue.edu/owl/resource/560/01/>). Materials should be in 12 pt. Times New Roman font and double spaced. Assessment will include how well students represent their thoughts on paper, craftsmanship in writing, and organization of all written work.

**Access to Research Database.** RTS provides Jackson MFTC students access to the Ebscohost Psychology & Behavioral Science Collection of full text journal articles. You can access this collection from computers in the library, or from your home computer by following the link below and logging in with a username and password to be provided in class.

<http://search.ebscohost.com/>

**Submission of work.** Written assignments are to be emailed to the instructor for this course by 11:59 PM on the date due. Keep a digital copy of your work. Hard copy assignments must be turned in to the MAC office by 4:00 PM on the date due.

**Late work.** All assignments are due as scheduled regardless of attendance, unless prior arrangements are made with the instructor. Assignments turned in late will be deducted 1/3 letter grade for each late day.

**Anonymity.** All written assignments and exams should be identified by the last six digits of your Self-Service id number and NOT by your name. Anonymity permits more objectivity in grading.

**Return of work.** All work returned to students will be available in the MAC Office. Any work not collected by the first full week of the next semester or term will be shredded.

### Grading Scale:

A 12 (97-100)	B- 8 (86-87)	D+ 4 (75-77)
A- 11 (94-96)	C+ 7 (83-85)	D 3 (72-74)
B+ 10 (91-93)	C 6 (80-82)	D- 2 (70-71)
B 9 (88-90)	C- 5 (78-79)	F 0 (Below 70)

### Attendance Policy:

Regular attendance is expected and required. Excessive absences (more than 3 class meetings) will result in the loss of points equal to one letter grade per absence. If serious illness or an emergency prevents a student from attending any class, please notify the instructor before the class begins. It is the responsibility of the student to obtain any materials handed out or presented during the missed class from a classmate.

### Class Participation:

Students are expected to participate in all components of the class and will be evaluated on the quality and quantity of discussion. Each student is expected to read all of the assigned materials in advance for each class and have prepared written comments and questions for class discussion. Contributions should reflect knowledge of the reading assignments or other sources.

### Submitting assignments

**Where to submit your work:** All written work is to be submitted digitally to [hurleypapers@gmail.com](mailto:hurleypapers@gmail.com). NEVER, EVER give materials directly to Dr. Hurley. If an item is to be handed in, hand it in at the office. ALWAYS keep a physical or digital copy.

**Anonymity:** All written assignments and exams should be identified by the last five digits of your Self-Service ID number (SSID5) in the top header of each page and NOT by your name. Anonymity permits more objectivity in grading.

**Text formatting:** Items should be in Times New Roman Font, 12 points, double spaced. (APA requirement)

**Submission time and date:** Items are due **by** midnight of the due date. The date stamp on the email will be considered the submission time and date of the item.

**Document format:** Submit your materials as .doc or .docx files. Insert graphics as .jpg files inserted in your .doc files, as indicate below.

**Scanning items:** Some items may be in graphic form rather than text. Scan them; save them as jpg files; insert them into your submitted document. If you have a problem achieving a scan or inserting it into your document, chat with someone. Many smart phone apps can do the scan for you.

**Naming emails and files:** Each submission must have the assigned assignment ID on the email title **and** on the attached assignment. Please match the capitalization and underscores of the assignment name **exactly**

as they are stated in the syllabus. That will ensure that I know you have submitted it and it will allow the items to sort properly in the computer.

**Assignment IDs:** Assignment IDs have the form: Course\_Year\_Item\_SSID5\_SSID5. For instance:

1PSY564\_2017\_Paper\_12345\_56789. 'Year' means the four digits of the year, e.g. 2019. SSID5 means the last 5 digits of a Self-Service ID. If there are multiple authors, list all SSID5s at the end of the assignment ID, separated by an underscore.

**Late work:** A **Due date** represents the final date on which the item is acceptable. Schedule your time so that your work will be complete before the due date. In the professional world of mental health, deadlines are not suggestions. Late work will automatically receive a 'D-' grade. After one day, the work will be assigned an 'F'. Exceptions must be arranged beforehand with the professor.

### **Grading**

In general, I use a 12 point scale for/instead of letter grades (A=12, A-=11, B+=10...). This saves entering decimal points.

When you have non-normed exams with many possible points, the top score will be assigned full marks and other scores will receive marks proportional to that. This means, for example, that if the top score is 90%, it will receive full marks and 45% will receive half of the available credit. If the top score is an outlier, a lesser score may be set as the threshold for full marks. This method benefits students.

### Documentation/Preparation Sheets (DPS)

Research by Wallace Carr (former RTS prof) clearly indicated the high learning value of prepared-students engaging in discussion of course materials. This method of learning was superior to reading alone, to reading combined with note taking and to discussion without preparation. The DPS exercise is intended to facilitate (force) learning by preparation and discussion. Much of the material from your courses will come into your actual counseling. Your DPS discussions will help you gain the ability effectively to verbalize the material.

In order to document that you have read the materials and to ensure that your professor has an idea of questions that arise for you (thus making it MUCH more likely they will be answered in lecture/discussion times), you are assigned to complete Documentation/Preparation Sheets (DPS: Available online in the course 'Files' Section of Canvas) on which you will record questions and comments on readings and video by recording the source read or viewed, the location within the item and your question or comment. This is perhaps tedious, but it will ensure that you engage with the material and that your professor is informed.

DPS Spreadsheet columns.

- 'Source': Each course assignment has an assignment identifier before it (A1, A2, A3...). Place the assignment ID in the source column.
- 'Location': For books, page number. For videos, the lecture or session number.
- 'Topic': A phrase identifying the topic of your question or comment.
- 'Question/Comment': A thoughtful question or comment (Q/C) arising from your reading/viewing the assigned material.
- 'SSID6': The last six (6) digits of your Self-Service ID (SSID).

How many questions/comments (Q/C)?

- Each assignment will specify a minimum number of Q/C items. You may exceed the minimum!

Discussing the questions on your DPS.

When you and your study partner(s) have completed viewing a video or reading resource, you will have a discussion assignment intended to help you gain mastery and learn from one another

- Meet together in the manner specified in the assignment to discuss the questions/comments on your DPSs.
- Your syllabus may or may not ask you to document the discussion. If it does,
  - Note the start and stop times for the discussions.
  - Your syllabus will tell you what to put in the 'Source' column. You will then enter the number of minutes of the discussion in the 'Location' column and the start time, stop time and your partners' names in the 'Question/Comment' column. As usual, your SSID6 will go in the SSID6 column.

If you have NOT completed some items in the assignment.

If you have not completed part of the assignment by the group discussion, identify explicitly what you have missed on the DPS as follows:

- Source: The item identifier (e.g. A21)
- Location: Leave blank
- Topic: 'NOT DONE'
- Question/Comment: Blank
- SSID6: The last five digits of your SSID6

Affirmation.

Graduate students face serious time pressures. The DPS process is intended to promote your learning. It also presents a possible temptation to falsify your reports about what you have read/viewed. Better to take a hit on your grade than to lose your integrity! It has sometimes been said 'You can't expect what you won't inspect.' In order to encourage assignment completion and integrity, your DPS assignment may include an affirmation about your work and instructions about identifying assignments which you have not completed. Please read them carefully.