

**DEREE COLLEGE SYLLABUS FOR:  
PS 4990 SOCIAL NEUROSCIENCE**

**3/0/3**

(Spring 2022)

**LEVEL 6  
UK CREDITS: 15**

**PREREQUISITES:**

PS 1000 Psychology as a Natural Science-L4  
 PS 1001 Psychology as a Social Science-L4  
 PS 2207 Infancy and Preschool Years-L4  
 PS 2236 Human Learning and Memory  
 PS 2260 Introduction to Statistical Thinking-L4  
 PS 2347 Analysis of Quantitative Data-L4  
 PS 3630 Biological Psychology -L 5  
 PS 3632 Testing and Assessment- L5  
 BI 1000 Introduction to Biology I- L4

**CATALOG DESCRIPTION:**

Understanding the brain in its social context. The way neural mechanisms give rise social phenomena. Examination of brain basis of social processes, including theory of mind, empathy, altruism, emotion, morality, antisocial behavior and romantic love.

**RATIONALE:**

This module exposes students to the basic tenets of social neuroscience, which utilizes novel techniques such as brain imaging to investigate the emergence of social abilities in humans. The module is intended for psychology majors, but it could also be of interest to students in other sciences.

**LEARNING OUTCOMES:**

Upon completion of the module, the student should be able to:

1. Demonstrate systematic knowledge of the methods utilized in social neuroscience.
2. Critically evaluate the neuroscientific theories of empathy, altruism, romantic love, morality and antisocial behavior.
3. Demonstrate systematic knowledge of the development of the social brain throughout the life span.
4. Critically evaluate the neurobiological basis of disorders with primary deficits in socialization.

**METHOD OF TEACHING AND LEARNING:**

In line with the teaching and learning strategy of the college, the following tools are used:

- Classes consist mainly of critical class discussions of assigned readings.
- Office hours
- Use of Blackboard site

**ASSESSMENT:**

**Summative:**

<p><b>1<sup>st</sup> assessment: Research Proposal</b>                  Students will write a research proposal for a social neuroscience experiment containing an introduction, a hypothesis, and a methodology section.</p>	<p><b>40%</b></p>
---	-------------------

	<table border="1" data-bbox="561 109 1352 247"> <tr> <td data-bbox="561 109 1166 247"> <b>Final assessment: Critical Review Paper</b>  Students will have to conduct a review of the scientific literature with respect to a chosen subject area. </td> <td data-bbox="1166 109 1352 247" style="text-align: center;"><b>60%</b></td> </tr> </table> <p data-bbox="561 285 711 317"><b>Formative:</b></p> <table border="1" data-bbox="561 317 1352 386"> <tr> <td data-bbox="561 317 1166 386">In-class discussion activities: active class engagement during the weekly meetings</td> <td data-bbox="1166 317 1352 386" style="text-align: center;"><b>0%</b></td> </tr> </table> <p data-bbox="561 422 1284 489">The 1<sup>st</sup> assessment tests Learning Outcomes 1 and 2. The final assessment tests Learning Outcomes 3 and 4.</p> <p data-bbox="561 522 1398 554">Students are required to resit failed assessments in this module.</p>	<b>Final assessment: Critical Review Paper</b> Students will have to conduct a review of the scientific literature with respect to a chosen subject area.	<b>60%</b>	In-class discussion activities: active class engagement during the weekly meetings	<b>0%</b>
<b>Final assessment: Critical Review Paper</b> Students will have to conduct a review of the scientific literature with respect to a chosen subject area.	<b>60%</b>				
In-class discussion activities: active class engagement during the weekly meetings	<b>0%</b>				
<p data-bbox="94 590 391 621"><b>REQUIRED READING</b></p> <p data-bbox="94 688 412 720"><b>INDICATIVE READING:</b></p>	<p data-bbox="561 590 1419 657">Ward, J. (2017). <i>The student's guide to social neuroscience</i> (2<sup>nd</sup> Edition). Hove, United Kingdom. Psychology Press Ltd.</p> <p data-bbox="561 688 948 720"><b>RECOMMENDED READING:</b></p> <p data-bbox="561 758 1419 856">Aharon, I., Etcoff, N., Ariely, D., Chabris, C. F., O'Connor, E., and Breiter, H. C. (2001). Beautiful faces have variable reward value: fMRI and behavioral evidence. <i>Neuron</i> 32, 537–551.</p> <p data-bbox="561 894 1419 1024">Koenings M., Young, L., Adolphs, R., Tranel, D., Cushman, F., Hauser, M., Damasio, D. (2007). Damage to the prefrontal cortex increases utilitarian moral judgements. <i>Nature</i> 446 (7138), 908-911.</p> <p data-bbox="561 1062 1419 1192">Scheele, D., Wille, A., Kendrick, K.M., Stoffel-Wagner, B., Becker, B. et al. (2013). Oxytocin enhances brain reward system responses in men viewing the face of their female partner. <i>Proceedings of the National Academy of Sciences (U.S.A)</i>, 110:20308-20313.</p> <p data-bbox="561 1230 1419 1297">Schutt, R.K., Seidman, L.J., Keshavan, M. (2015). <i>Social Neuroscience: Brain, Mind and Society</i>. Harvard University Press.</p> <p data-bbox="561 1335 1419 1402">Ward, J. (2017). <i>The student's guide to social neuroscience</i> (2<sup>nd</sup> Edition). Hove, United Kingdom. Psychology Press Ltd.</p>				
<p data-bbox="94 1461 521 1560"><b>INDICATIVE MATERIAL:</b> (e.g. audiovisual, digital material, etc.)</p>	<p data-bbox="561 1461 943 1493"><b>REQUIRED MATERIAL:</b> N/A</p> <p data-bbox="561 1560 1122 1759"><b>RECOMMENDED MATERIAL:</b> Social Neuroscience Nature Neuroscience Nature Journal of affective disorders Social cognitive and affective neuroscience</p>				
<p data-bbox="94 1829 347 1885"><b>COMMUNICATION REQUIREMENTS:</b></p>	<p data-bbox="561 1829 1170 1927">Individual projects submitted in Word Academic use of English, both oral and written. APA style</p>				

<b>SOFTWARE REQUIREMENTS:</b>	Blackboard, MS Office, search engines
<b>WWW RESOURCES:</b>	
<b>INDICATIVE CONTENT:</b>	<ol style="list-style-type: none"><li>1. Introduction to social neuroscience</li><li>2. The methods of social neuroscience</li><li>3. Evolutionary origins of social intelligence and culture</li><li>4. Emotion and motivation</li><li>5. Reading faces and bodies</li><li>6. Understanding others</li><li>7. Interacting with others</li><li>8. Relationships</li><li>9. Groups and identity</li><li>10. Morality and antisocial behavior</li><li>11. Developmental social neuroscience</li></ol>