

Course Approval Form

For approval of new courses and deletions or modifications to an existing course.

registrar.gmu.edu/facultystaff/curriculum

Action Requested: X Create new course	Repeat Status		irse Level: Undergraduate Graduate	-	
College/School: COS Submitted by: Jane Flinn/Jen		Department: NEUR Ext: 3-4107/3-1469 E	mail: jflinn/jbrie	elmaier	
Subject Code: NEUR Number: 411 Effective Term: Fall (Do not list multiple codes or numbers. Each course proposal must have a separate form.) Effective Term: X Spring Year 2014 Summer					
Title: Current Banner (30 characters max inc New Seminar in Neu					
Credits: X Fixed 3 or Repeat Status: Not Repeatable (NR) (check one) to Check one) X Repeatable within degree (RD) Maximum credits Repeatable within term (RT) allowed:					
Grade Mode: X Regular (A, B, to Satisfactory/No Special (A, B C	Credit (check one)	Lab (LAB)	Independe X Seminar (S Studio (ST	•	
Prerequisite(s): PSYC 375 and PSYC 376. NEUR NEUR 335 recommended.	Corequisite(s):		⊢ •	*	
Restrictions Enforced by Syste	Restrictions Enforced by System: Major, College, Degree, Program, etc. Include Code. Are there equivalent course(s)? X Yes No If yes, please list NEUR 410				
Catalog Copy for NEW Courses Only (Consult University Catalog for models) Description (No more than 60 words, use verb phrases and present tense) Advanced seminar on a selected topic in neuroscience. Includes indepth reading and discussion of current research in human and nonhuman animals, with an emphasis on critical evaluation. Fulfills writing intensive requirement in the major. Indicate number of contact hours: When Offered: (check all that apply) Hours of Lecture or Seminar per week: Summer X Spring					
Approval Signatures					
Department Approval If this course includes subject mat	Date Date ter currently dealt with by any of	College/School Approval her units, the originating departm	nent must circulate t	Date	
those units and obtain the necessary Unit Name	signatures prior to submission. Fai Unit Approval Name	lure to do so will delay action on t Unit Approver's Signature		Pate	
For Graduate Courses Only					
Graduate Council Member	Provost Office		Graduate Counc	il Approval Date	
For Registrar Office's Use Only: Banner	Ca	talog		revised 11/8/11	

·Course Proposal Submitted to the Curriculum Committee of the College of Science

1. COURSE NUMBER AND TITLE: NEUR 411 Seminar in Neuroscience

Course Prerequisites: PSYC 375, PSYC 376. NEUR 327 and NEUR 335 recommended.

Catalog Description:

Advanced seminar on a selected topic in neuroscience. Includes in-depth reading and discussion of current research in human and nonhuman animals, with an emphasis on critical evaluation. Fulfills writing intensive requirement in the major.

Course Objectives:

- Hone skills in reading and critical evaluation of original neuroscience research.
- Gain an appreciation for methods used in neuroscience research using human participants and nonhuman animals.
- Begin to communicate scientific ideas effectively in writing and provide constructive written feedback on the ideas of peers.

2. COURSE JUSTIFICATION:

Course Necessity:

There is currently no course which provides students an opportunity to explore a selected neuroscience topic indepth through review and discussion of primary literature. This course will allow students to do so in seminar format. Students will have the chance to develop important professional skills in leading discussions, critical evaluation of research, preparation of a research proposal, and peer review.

Course Relationship to Existing Programs:

This course will fulfill the writing-intensive requirement for the Neuroscience major, and could be taken as an elective by Neuroscience minors.

Course Relationship to Existing Courses:

This course will be offered each spring to provide students with a second option (in addition to NEUR 410 offered each fall) to fulfill the writing-intensive requirement for the Neuroscience major.

3. <u>APPROVAL HISTORY</u>: No prior history of submission for approval.

4. <u>SCHEDULING AND PROPOSED INSTRUCTORS</u>:

Semester of Initial Offering: Spring 2014

<u>Proposed Instructors</u>: Jennifer Brielmaier (PSYC/NEUR Term Assistant Professor) or team-taught by 3 faculty with expertise in different aspects of the selected topic (e.g. psychiatric disorders).

5. TENTATIVE SYLLABUS: See attached. Example topic: Social Neuroscience.

Instructor: Dr. Jennifer Brielmaier E-mail address: jbrielma@gmu.edu
Class time: TR 1:30-2:45 pm Office phone #: 703-993-1469

Class location: Robinson A206, DK 2035 Emergency phone #: 703-993-1384 (Dept.)

Office hours: Tues. 12-1 pm Office location: DK 2063

Course Description:

The primary goal of this course is to provide advanced undergraduate students an opportunity to explore the emerging field of social neuroscience. Each week, students will read and discuss empirical and review articles relevant to understanding the neural bases of social behavior and cognition. Both human and animal literatures will be surveyed, and relevant areas covered will include theory of mind, trust, empathy, social rejection/exclusion, social recognition, and social reward. Students will have the chance to develop important professional skills in leading discussions, critical evaluation of research, preparation of a research proposal, and peer review.

Required Text: None

Required Readings: Available on Blackboard

Course Objectives:

Hone skills in reading and critical evaluation of original neuroscience research.

- Gain an appreciation for methods used in neuroscience research using human participants and nonhuman animals.
- Begin to communicate scientific ideas effectively in writing and provide constructive written feedback on the ideas of peers.

Assignments:

- Readings: Assigned readings will include original research articles and literature
 reviews on a variety of topics in social neuroscience. These readings will be distributed
 via Blackboard. One or two papers will be assigned per week, depending on their length.
 Successful discussions (see below) depend on each of you coming to class prepared.
 This means that you have to complete the readings BEFORE you come to class. There
 is no grade assigned for having completed the readings, but completion will affect your
 participation grade (see below).
- Participation: Your grade for this course will include a "participation score" ranging from 0-45 points (0-3 points per class meeting). This part of your grade will be based on my assessment of the extent and quality of your participation in class discussions. (Note that you can't contribute to class if you're not there.) As part of this, students will generate 2 discussion questions prior to class each week, and should specify the reading(s) that inspired the question if there is more than one reading that week. The purpose of these questions is to ensure that you have actually read the papers that have been assigned and to help raise issues for discussion. Your discussion questions are due by noon on Mondays (i.e., the day before our first meeting of the week), and should be turned in whether or not you will be able to attend the class session to which they apply. Questions should be submitted in the Blackboard Discussion Board forum for that week. The participation score will constitute 20% of the final grade.

- Leading the discussion. Students will each take responsibility for leading the discussion with a partner on one or two papers (corresponding to one week) during the semester, altogether worth 10% of your final grade. Leading the discussion will entail the following: 1) summarizing the background, methods, key findings and conclusions from the paper(s) we read for that week, 2) integrating the discussion questions posted by the other students in the Discussion Board forum and 3) integrating your own discussion questions. Note that everyone is responsible for keeping the conversation going, but having a discussion leader throw new balls in the air once the old ones have fallen to the ground is very helpful. The discussion leaders do not need to submit their discussion questions to the Blackboard forum for that week. I will lead the discussion for the first week and any remaining weeks left on the schedule.
- Summaries of Related Papers. For a total of five times throughout the semester, each student will select, read and summarize an original research paper that was not assigned, but is related to that week's topic. Papers summarized must report on empirical research (i.e., no literature reviews). Specific guidelines for the article summaries will be distributed in class and posted on Blackboard. Summaries are due in class the Monday after the paper(s) relating to your summary was/were discussed in class. These article summaries will constitute 30% of your final grade.
- Written Research Proposal. Each student will design and propose a study they would like to conduct within the field of social neuroscience. Each written proposal will include a brief summary of existing research on the topic, questions yet to be addressed, the specific aims of the proposed research and how they would advance our understanding of social neuroscience, the specific methods that would be used to conduct the research, and hypotheses about the expected findings. Specific formatting guidelines will be distributed in class and posted on Blackboard. You will first turn in a draft proposal, which you will revise based on my feedback. The draft is due in class on April 15th and the final version is to be uploaded to Blackboard by May 6th. The proposal will constitute 30% of your final grade.
- Presentation of Proposed Research. Each student will give a 10-minute presentation on their research proposal to the rest of the class between April 22nd and May 1st. Presentations will be based on the content of the written proposal. Additionally, each student will receive informal written feedback on his or her presentation (on both content and style) from classmates. Part of your presentation grade will be based on your presence at others' presentations. The proposal presentation will constitute 10% of your final grade.

Attendance and Makeup Policies:

• Attendance: Attendance per se is not part of your grade for this course. However, arriving to class late and/or failing to attend class will adversely affect your participation grade and will likely interfere with your ability to complete the article summaries and research proposal. With that being said, I understand that emergencies do come up. If you must miss a class, arrive late, or leave early, please let me know in advance via email. This is especially important if an emergency comes up on a day you are supposed to lead the discussion. NOTE: You are responsible for all announcements

and any syllabus modifications made in class each week whether you are present or not.

• Makeups: Due to the discussion format of this class, participation points cannot be made up outside of class. The written assignments (article summaries and research proposals) cannot be turned in late without penalty unless you have obtained my consent in advance or unless you have written medical documentation. Assignments turned in late will carry a grade penalty of 10% per day. If an assignment is not turned in within 10 days of the original due date, a grade of 0 will be given for the assignment. Permission to postpone an assignment will be given at my discretion, and may not be granted in all cases. Presentations cannot be postponed, and a grade of zero will be given for a student that does not give a presentation. Incomplete (IN) grades will be assigned only in cases of compelling and documented need, in accordance with policies set forth in the University Catalog.

Grading Breakdown:

Participation (20%) + Discussion Leading (10%) + Related Article Summaries (30%) + Written Research Proposal (30%) + Proposal Presentation (10%) = 100%

Grades will be assigned based on the following scale:

A+ 97% or above	B+ 87 - 89%	C+ 77-79%	D 60-69%
A 93-96%	B 83-86%	C 73-76%	F 59% & below
A- 90-92%	B- 80-82%	C- 70-72%	

Official communications via GMU email:

Mason uses electronic mail to provide official information to students. Examples include communications from course instructors, notices from the library, notices about academic standing, financial aid information, class materials, assignments, questions, and instructor feedback. Students are responsible for the content of university communication sent to their Mason email account, and are required to activate that account and check it regularly.

Technology statement:

Required knowledge of technology for this course includes ability to retrieve additional materials sent via email to your GMU address and/or posted on Blackboard. Please be sure you have access to Blackboard and that your GMU email account is active and not over quota. I will post relevant information and documents via the latest version of Microsoft Office, so make sure to have the latest version of office or download the converter in order to read all important documents.

Special Needs:

Every effort possible will be made to accommodate students with a disability or other special needs. If you are a student with a disability and you need academic accommodations, please see me and contact the Disability Resource Center (DRC) at 703-993-2474. All academic accommodations must be arranged through that office.

The GMU Honor Code will be strictly enforced. Cheating and plagiarism will not be tolerated and will be reported to the University Honor Board and/or penalized. Plagiarism is defined as using another's work (e.g. words or ideas) without giving proper credit. Sources of information

used in the final written research project must be properly cited so as to avoid plaigarism. The instructor for this course reserves the right to enter a failing grade to any student found guilty of an honor code violation.

Add/drop deadline:

Last day to add – January 28th Last day to drop – February 21st

There is also an elective withdrawal option for undergraduate students that will be from February 24 – March 28. I strongly suggest that you speak with your academic advisor before choosing this option.

Tentative Schedule

Week	Topic	Readings/ Assignments
	Introduction	
January 21 & 23	Understanding others'actions/intentions	lacoboni & Dapretto Nat Rev Neurosci 2007 7(12): 942-51
January 00 9 20	Funding appropriation	Adolphs et al. <i>Nature</i> 2005 433(7021): 68-72
January 28 & 30	Emotion recognition	Loughead et al. <i>Brain Res</i> 20081194: 37-44
February 4 & 6	Theory of mind	Saxe & Kanwisher <i>Neuroimage</i> 2003 19(4); 1835-1842
February 11 &13	Social judgment, social hierarchy	Adolphs et al. 1998 <i>Nature</i> 393: 417-418 Farrow et al. <i>Neuroimage</i> 2011 57(4): 1552-60
February 18 & 20	Trust/fairness	Baumgartner et al 2008 <i>Neuron</i> 8(4); 639-650
February 25 & 27	Social stress	Takahashi et al. 2004 Neurosci Lett 363(2): 125-30 Fanous et al 2010 Neuroscience 67(3): 598-607
March 4 & 6	Social motivation/reward	Trezza et al. <i>J Neurosci</i> 2011 31: 6362-6370 Davey et al. 2010 <i>Hum Brain Mapp</i> 31(4): 660-668
March 11 & 13		SPRING BREAK - NO CLASS
March 18 & 20	Love/attachment	Winslow et al. <i>Nature</i> 1993 365(6446): 545-548

		Fisher et al 2005 <i>J Comp Neurol</i> 493(1): 58-62
		Bolling et al. 2011 Dev Sci 14(6): 1431-1444
March 25 & 27	Social exclusion/rejection	Eisenberger et al. 2003 <i>Science</i> 302: 290-292
		Bartal et al. 2011 <i>Science</i> 334(6061): 1427-1430
April 1 & 3	Empathy	Masten et al. 2011 Neuroimage 55(1): 381-388
April 8 & 10	Social recognition	Ferguson et al. 2001 <i>Nat Gen</i> 25(3); 284-288
Αμιιοα το		Kanwisher et al. <i>J Neurosci</i> 1997 17(11): 4302-4311.
	Social impairments in psychiatric disorders	4/15 Draft Proposal Due
April 15 & 17		Kohls et al. 2012 J Neurodev Disord 4(1): 4-10
		Yamada et al. 2007 <i>Neuroimage</i> 35(1):292-298
April 22 & 24		Presentations
April 29 & May 1		Presentations
May 6		Final Proposal Due