# **Course Change Request**

# **New Course Proposal**

Date Submitted: 09/13/21 6:24 pm

# Viewing: NEUR 301 : Cross Cultural Studies in

# **Scientific Research**

Last edit: 09/13/21 6:24 pm

Changes proposed by: gscott21

Are you completing this form on someone else's behalf?

# In Workflow

#### **1. NEUR Chair**

- 2. SC Curriculum Committee
- 3. SC Associate Dean
- 4. Assoc Provost-Undergraduate
- 5. Registrar-Courses
- 6. Banner

# **Approval Path**

1. 09/14/21 9:17 am Saleet Jafri (sjafri): Approved for NEUR Chair

Yes

#### **Requestor:**

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Name		Extension		Emai	il	
Gwendolyn Lewis		36239		glewis13@gmu.ed	u	
Effective Term:	Summer 2022					
Subject Code: NEUR - Neuroscience		science	(	Course Number:	301	
Bundled Courses:						
Is this course replacing another course? No						
Equivalent Courses:						
Catalog Title:	Cross Cultural Studies in Scientific Research					
Banner Title:	Culture Studies in Sci Rsrch					
Will section titles vary by semester?						
Credits:	3					
Schedule Type:	Lecture					

9/14/21, 10:05 AM	NEUR 301: Cross Cultural Studies i	n Scientific Research
Hours of Lecture or S week:	eminar per 12	
Repeatable:	May only be taken once for credit, limited to 2 attempts (N2)	Max Allowable Credits: 3
Default Grade Mode:	Undergraduate Regular	
Recommended Prerequisite(s):		
Recommended Corequisite(s): NEUR 473(proposed Required Prerequisite(s) / Corequisite(s)	1)	
(Updates only):		
BIOL 213 and at leas	st 9 cr in NEUR, BIOL, CHEM or BENG	
Registrar's Office Use	Only - Required Prerequisite(s)/Corequisite(s):	

And/Or	(	Course/Test Code	Min Grade/Score	Academic Level	)	Concurrency?

Registration Restrictions (Updates only): Junior status/minimum of 60 credits

#### **Registrar's Office Use Only - Registration Restrictions:**

Field(s) of Study:

Class(es):

Level(s):

Degree(s):

School(s):

## Catalog

#### **Description:**

This immersive, experiential course is an exploration of the cultural and historical aspects of scientific inquiry. We will visit active research settings, interact with professional scientists from many backgrounds, learn about innovative and current research, and be able to inquire about the current topics. In this context, we will self-reflect on our cultural assumptions, scientific and personal. We will observe the European

#### NEUR 301: Cross Cultural Studies in Scientific Research

scientific infrastructure and organization and compare to that of the North American setting. In addition, we will explore the historical background of innovation from the dawn of the printing press to current, with a focus on how history and culture interact. Students will explore the cultural contexts for discovery by comparing the scientific culture between Europe and North America, and how scientific inquiry is affected by globalization.

#### Justification:

What- This course will be taught as part of a summer study abroad program in Germany and will be submitted for approval as a global understanding course. Scientific discovery is a global effort, and it is important for students to explore the contexts for discovery in different cultures.

Why- There is no similar or equivalent course at the university. This course will open up new avenues for neuroscience and other STEM students to study abroad.

Does this course cover material which No crosses into another department?

#### Learning Outcomes:

Identify and articulate one's own values and how those values influence their interactions and relationships with others, both locally and globally.

Demonstrate understanding of how the patterns and processes of globalization make visible the interconnections and differences among and within contemporary global societies.

Explore individual and collective responsibilities within a global society through analytical, practical, or creative responses to problems or issues, using resources appropriate to the field.

#### Attach Syllabus

NEUR 301 Syllabus.pdf

Additional Attachments

Staffing: Greta Ann Herin & Wendy Lewis

Relationship to Existing Programs: N/A. New courses for GEO program

Relationship to Existing Courses: N/A

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#### **Green Leaf Course**

## Designation

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Arts

**Course must meet the first** 

**Global Understanding** 

Information Technology

and Computing

Information Technology

and Computing

**Ethics** 

Literature

Course must meet at least three

Natural Sciences with Lab

**Course must meet the following** 

Natural Sciences Non-Lab

Courses must meet the following

#### Oral Communication

Course must address all of the

Quantitative Reasoning

#### NEUR 301: Cross Cultural Studies in Scientific Research

**Social and Behavioral** 

Sciences

## Capstone

While each academic degree

Synthesis

Course must meet learning outcomes 1 and 2:

## Western Civilization/World

History

Additional Comments:

Reviewer Comments

Key: 17299

## **Cross Cultural Studies in Scientific Research**

NEUR 301, Summer 2022

#### Instructors:

Dr. Greta Ann Herin (<u>gherin@gmu.edu</u>) Dr. Wendy Lewis (<u>glewis13@gmu.edu</u>)

# Credits: 3

**Location:** This course is part of a faculty-led, summer study abroad program in Germany titled "Neuroscience and Technology in Germany"



## **Course Overview**

This immersive, experiential course is an exploration of the cultural and historical aspects of scientific inquiry. We will visit active research settings, interact with professional scientists from many backgrounds, learn about innovative and current research, and be able to inquire about the current topics. In this context, we will self-reflect on our cultural assumptions, scientific and personal. We will observe the European scientific infrastructure and organization and compare to that of the North American setting. In addition, we will explore the historical background of innovation from the dawn of the printing press to current, with a focus on how history and culture interact. Students will explore the cultural contexts for discovery by comparing the scientific culture between Europe and North America, and how scientific inquiry is affected by globalization.

## Mason Core: Global Understanding Learning Goals

This is a Mason Core: Global Understanding course. Global understanding learning goals and the activities that support them are listed below.

- Identify and articulate one's own values and how those values influence their interactions and relationships with others, both locally and globally.
  - Students will regularly engage in an "Analytical Notebook". Students will be given prompts to examine their values and others' values.
  - Students will reflect on their experiences in a "Final Integrative Essay".
- Demonstrate understanding of how the patterns and processes of globalization make visible the interconnections and differences among and within contemporary global societies.
  - Following tours and activities that discuss globalization and interconnectedness, students will be prompted to write in their "Analytical Notebook" according to prompts exploring this theme.
  - Students will reflect on their experiences in a "Final Integrative Essay".

- Explore individual and collective responsibilities within a global society through analytical, practical, or creative responses to problems or issues, using resources appropriate to the field.
  - Students will regularly discuss in small groups the cultural differences observed between the German culture and subcultures, the North American culture, and the cultures of their families of origin, according to prompts that will be appropriate to each experience.
  - Students will reflect on their experiences in a "Final Integrative Essay".

# **Readings**

Readings will be available to you through Blackboard before departure. A paper reader/packet will be made available to you upon arrival in Germany.

# **Grading and Assessments**

Grading Item	% of total grade
Engagement and Participation	40
Analytical Notebook	30
Final Integrative Essay	30

#### **Grading Scale:**

А	93-100%	B+	88-89.9%	C+	78-79.9%	D	60-69%	F	0-59%
A-	90-92.9%	В	82-87.9%	С	72-77.9%				
		B-	80-81.9	C-	70-71.9%				

## **Engagement and Participation**

You will be graded on your engagement and participation in the experience. You will be expected to be present, prepared, and actively participate in all aspects of the program and discussions.

## **Analytical Notebook**

The analytical notebook is a written record of your responses to what you have experienced, heard, and observed during your travel and study. The analytical notebook is by its very nature subjective, but it includes concrete observations and experiences. **It goes beyond data collection to responding to the experiences.** It records and helps to process feelings, emotional responses, intellectual reactions and reasoning.

## The Final Integrative Essay

During the final days in Germany, you will be challenged to reflect on your overall experience. For the last notebook entry, you will select one

event/experience/happening that strikes you as particularly "cross-cultural" and deal with it in depth. It should be an experience that challenged you in some way because you confronted a cultural difference that perhaps exposed you for who you are vis-à-vis your host culture. You will use this event to talk about what you have gained cross-culturally from your experience. What have you learned about yourself, your limitations, your ability to step outside your comfort zone, about human nature, about culture and people, about justice, or beauty, or faith, or whatever else is relevant to your cross-cultural experience.

# **Skills Required**

**Academic skills required:** Foremost, you will need to be curious and engaged in our academic adventures. Additionally, because this course fulfills Core: Global Understanding and Core: Synthesis requirements, it requires a considerable amount of writing, discussion in small groups, and analysis. There will be reading and reviewing of basic and specialized science concepts. You will be expected to learn from lectures and educate yourself of upcoming research topics enough to interact with the scientists by asking informed questions. You will need to be able to write 1-2 page papers in a few hours of quiet time. This syllabus provides examples of rubrics used to assess learning objectives. Others will be provided via Blackboard before departure and expectations for assignments will be discussed during orientation.

**Personal skills required:** You need a keen sense of adventure, ability to stay alert to beauty and dangers, a tolerance of tight living quarters, willingness to live in unfamiliar places, flexibility for changing plans and conditions, openness to trying new foods, appreciation of outdoor activities and new flora and fauna, ability to dress appropriately for the weather and social circumstances, ability to participate in walking tours that may involve several miles of walking, and ability to stay engaged with host scientists and other representatives despite a lack of foreign language skills.

**Community Participation Required:** We will be traveling together as a group for >3 weeks. Keep the following in mind:

- Attendance is mandatory at all scheduled classes and activities.
- Follow safety guidelines and leaders' instructions. These will include avoiding certain places and always traveling in small groups.
- Show **utmost** respect for lecturers, local guides, and hosts. Engage with them at every opportunity. Thank them for their contributions to your experience and learning.
- Often, you may not understand what is being said. Use non-verbal clues and remain engaged in conversations and interactions despite a lack of language skills.
- Your voice is important to us! Participation in group discussions is expected.
- Your attitude has a powerful effect on the group: Maintain a positive can-do attitude and cooperative behavior.

- Listen carefully and openly to one another, even when you disagree or take offense at what someone is saying. Remember that we are all human beings, worthy of respect, no matter our views, opinions, or perspectives.
- Please feel free to address any concerns with the leaders at all times.
- Get adequate rest at night -- cross-cultural engagement requires more than your typical energy requirements in your home culture.

## **Policies and Resources**

**Academic Integrity:** Mason is an Honor Code university; please see the Office for Academic Integrity for a full description of the code and the honor committee process. The principle of academic integrity is taken very seriously and violations are treated gravely. What does academic integrity mean in this course? Essentially this: when you are responsible for a task, you will perform that task. When you rely on someone else's work in an aspect of the performance of that task, you will give full credit in the proper, accepted form. Another aspect of academic integrity is the free play of ideas. Vigorous discussion and debate are encouraged in this course, with the firm expectation that all aspects of the class will be conducted with civility and respect for differing ideas, perspectives, and traditions. When in doubt (of any kind) please ask for guidance and clarification.

**Disability Services:** Disability Services at George Mason University is committed to upholding the letter and spirit of the laws that ensure equal treatment of people with disabilities. Under the administration of University Life, Disability Services implements and coordinates reasonable accommodations and disability-related services that afford equal access to university programs and activities. Students can begin the registration process with Disability Services at any time during their enrollment at George Mason University. If you are seeking accommodations, please visit http://ds.gmu.edu/ for detailed information about the Disability Services registration process. Disability Services is located in Student Union Building I (SUB I), Suite 2500. Email:ods@gmu.edu | Phone: (703) 993-2474

**Diversity and Inclusion:** George Mason University is committed to providing equal opportunity and an educational and work environment free from any discrimination on the basis of race, color, religion, national origin, sex, disability, veteran status, sexual orientation, gender identity, gender expression, age, marital status, pregnancy status or genetic information. George Mason University shall adhere to all applicable state and federal equal opportunity/affirmative action statutes and regulations. The University is dedicated to ensuring access, fairness and equity for minorities, women, individuals with disabilities, and veterans (as covered by law) in its educational programs, related activities and employment. George Mason University shall thus maintain a continuing affirmative action program to identify and eliminate discriminatory practices in every phase of university operations.

Any employee who becomes aware of sexual harassment or other potentially discriminatory behavior must contact Compliance, Diversity, and Ethics. Retaliation against an individual who has raised claims of illegal discrimination or has cooperated with an investigation of such claims is prohibited

## Title IX: Notice of mandatory reporting of sexual or interpersonal

**misconduct:** As a faculty member, I am designated as a "Non-Confidential Employee," and must report all disclosures of sexual assault, sexual harassment, interpersonal violence, stalking, sexual exploitation, complicity, and retaliation to Mason's Title IX Coordinator per University Policy 1202. If you wish to speak with someone confidentially, please contact one of Mason's confidential resources, such as Student Support and Advocacy Center (SSAC) at 703-380-1434 or Counseling and Psychological Services (CAPS) at 703-993-2380. You may also seek assistance or support measures from Mason's Title IX Coordinator by calling 703-993-8730, or emailing titleix@gmu.edu.

# Neuroscience and Technology in Germany Program Calendar For Courses NEUR 301 and NEUR 473

Day	Base Location	Activities	Hrs*	Assessment NEUR 301	Assessment NEUR 473
1 Mon 5/16	Fairfax	Orientation on Fairfax Campus	6		
2 Tues 5/17	Fairfax	Orientation on Fairfax Campus	6	Analytical notebook (1): expectations	
3 Wed 5/18	Travel	Fly to Germany			
4 Thr 5/19	Arrival FRA/ Frankfurt	Arrive, check in, get settled, meal together			
5 Fri 5/20	Frankfurt	Physical orientation	3	Analytical notebook (2): first impressions	
6 Sat 5/21	Frankfurt	German lessons, cultural orientation, guided tour, history lesson	6	Analytical notebook (3): Language shapes thought Analytical notebook (4): Mannheim history	
7 Sun 5/22	Frankfurt	Trip to Schwannheim	1		H/C Context discussion (1)
8 Mon 5/23	Frankfurt	Academic lecture 1, Lab visit- Sarah Weigelt	4		Scientific Visit Report (1)
9 Tues 5/24	Frankfurt	Academic lecture 2, Lab visit- Ivana Mesic, tour Frankfurt	5.5	Analytical notebook (5): Post-WWII Frankfurt	H/C Context discussion (2)
10 Wed 5/25	Frankfurt	Academic lecture 3, Lab visit- Heidelberg lab, tour Heidelberg	5.5	Analytical notebook (6): Pre-modern life in Heidleberg	Scientific Visit Report (2)
11 Thr 5/26	Frankfurt	Academic lecture 4, Lab visit- Frankfurt Lab	4		Scientific Visit Report (3)

12 Fri 5/27	Frankfurt	Academic lecture 5, Lab visit- Georg Nagel, Tour Wurzburg	5.5	Analytical notebook (7): Wurzburg role in German economy	Scientific Visit Report (4)
13 Sat 5/28	Frankfurt	Tour Mainz Gutenberg Museum, Tour Rudesheim and Rheingebeit	3		
14 Sun 5/29	Frankfurt	Academic lecture 6, Hiking near Frankfurt	2		
15 Mon 5/30	Frankfurt/ Munich	Academic lecture 7, Travel to Munich	3		H/C Context discussion over Darmstadt (3)
16 Tues 5/31	Munich	Academic lecture 8, Tour Munich with technology focus	3.5		
17 Wed 6/1	Munich	Visit Technisches Universitat Munich (GA)	3		H/C Context discussion (4)
18 Thr 6/2	Munich/Leipzig	Travel to Leipzig, Academic lecture 9	2		
19 Fri 6/3	Leipzig	Visit MPI: Cognitive & Brain Sciences, Tour Leipzig		Analytical notebook (8): East Germany's legacy on technology	Scientific Visit Report (5)
20 Sat 6/4	Leipzig/ Berlin	Travel to Berlin, dinner together			
21 Sun 6/5	Berlin	Tour Berlin with technology focus, cultural event	3	Analytical notebook (9): Reflections on Cultural Event	
22 Mon 6/6	Berlin	Two Lab visits at Charite/ Humboldt University (Christian Madry & TBD)	4		Scientific Visit Reports (6&7)
23 Tues 6/7	Berlin	Visit Technical University, Historical lecture and tour	5	Analytical notebook (10): Berlin's Global Influence	Scientific Visit Report (8)
24	Berlin	Discussion, time to	6		H/C Context

Wed 6/8		prepare for final presentations			discussion over Berlin (5)
25 Thr 6/9	Berlin	Final presentations	6		Next Steps Presentation
26 Fri 6/10	Berlin	Final Wrap up and Conclusions, preparation to leave	4		H/C Context discussion overall (6)
27 Sat 6/11	Travel	Flying back to US		Final Integrative Essay due before departure.	
Total	Academic Hours		91		

\*Hrs = Academic hours