WISCIENCE
UNIVERSITY OF WISCONSIN-MADISON

Integrated Science 140: Exploring Service in STEM

Exploring Service in STEM is a discussion-based seminar. We'll talk about how and why scientists engage in public service and outreach and have space to reflect on your own public service activities. You will have the opportunity to explore several different kinds of public service that match your area of scientific interest as part of this course.

Course Format and Structure:

General Course Information

Credits: 1 credit course **Section #: 001**

Meeting Times: Thursday, 1:00-2:15pm **Location: Room 117, 445 Henry Mall**

Course Instructor Contact Information

Anna Courtier
WISCIENCE Director of Community-Based Learning
Email: anna.courtier@wisc.edu
Office Location: Rm. 104F, 445 Henry Mall
Available by appointment

Peer Leaders Contact Information

E & K
Email: @wisc.edu
Email: @wisc.edu
Available by appointment

Our focus this semester will be on **community engagement and public service in the sciences**. We will investigate what community engagement looks like from many different perspectives, and how science can be both challenging and incredibly helpful in a community achieving its goals.

This program will not be successful without your **active participation as a member of a small learning community**. At different times, you may find yourself in a position of having more personal experience or knowledge of a given area than the rest of your cohort and the instructor.

This course might involve more reading than you are accustomed to doing in a science course. Please know that **the quality of our discussions depends on your commitment to finish the reading every week**, to build connections among course concepts and your experiences, and bring questions and problematic issues to the attention of your peers.

Have Questions?

The best way to get in touch with your instructors is via email. Email Lauren and Zoe for general course business. When sending email, please put **IntegSci140** or **Exploring Service** in the subject line. We will do our best to respond to your email within 24 hours (Monday-Friday).

We will still be dealing with the COVID-19 pandemic during this entire semester. Please be flexible as we may have to modify assignments, requirements, or class periods around mandates set by either the university or the county. If you do not feel safe due to COVID-19 concerns at any time inside our class, please let one of us know and we can talk to accommodate you! Finally, if you feel sick, **stay home** and email us!

Learning Goals

Community Engagement Program Goal: Students will develop knowledge of a spectrum of pathways to public service in science and be prepared to incorporate civic engagement through service into their academic plans. Students will:

1. Develop awareness of and access to public service opportunities

- Identify opportunities and engage in service to the community
- Network with individuals and organizations that engage in service to the community
- Identify ways that specific service opportunities can complement discipline-based learning and contribute to career preparation

2. Understand the reciprocal relationship between the university and local and state communities

- Explain how institutions of higher education engage in service to their communities, including how the evaluate the impact of their activities
- Define the Wisconsin Idea and identify examples of it in science
- Understand and outline different models of public service
- Identify the benefits and challenges of these different models of service

3. Develop metacognitive approaches to service

- Reflect on how service experiences impact you
- Describe and discuss the interactions of community members and service providers
- Create an individual civic engagement plan

Scientific and Cultural Literacy Course Goal: Students will develop awareness of and critique the ways science and society interact in diverse contexts. Students will:

1. Explore the impacts of science and scientists on society

- Recognize the broader impacts of scientific discoveries
- Recognize community assets and needs that could be supported by scientific approaches
- Examine the roles and responsibilities of scientists in society

2. Develop awareness of diversity and cultural competency

- Identify multiple dimensions of diversity in the university and community
- Recognize that cultural background influences understanding of and engagement with science
- Learn strategies and develop skills to communicate science to diverse audiences

Modes of Communication

Canvas. https://canvas.wisc.edu/

We have a Canvas website for this seminar, on which you will find the readings and assignments for each week. This is also where you will upload your completed assignments and find feedback from the instructor on those assignments. Grades will be regularly updated on Canvas throughout the semester. Please check it frequently.

Resources

Morgridge Center for Public Service https://morgridge.wisc.edu/index.htm
The Morgridge is not the only way to get involved in service, but it's a great place to start, and an amazing on-campus resource for all your questions and concerns about public service.

Peer Leaders
Your peer leaders, E & K are students who are STEM majors with years of community engagement and community-based learning experience. They can provide advice and support as you negotiate issues in this class and at your service site.

Reflection

This course will have a considerable expectation of reflecting on your learning, on your process, on your experiences, and on your assumptions (to name a few things). This isn't always easy to do and will require a good faith effort on your part to truly engage in the reflective process.

A word on reflection

"Reflection is a process of seeking clarity about truth… truth in experience, thought, beliefs, instincts and relationships. Reflection can be accomplished independently or as a collective endeavor. Yet, however done, reflection demands consideration of one's internal state (beliefs, feelings, assumptions) and external circumstances (actions, relationships, power dynamics, obstacles). ***Reflection also demands a self-honesty and humility that will hold its own against affront from any quarter****."*

---Tony Chambers, National Forum on Higher Education for the Public Good (2002)

Current Events

There are many things happening on our campus and in our local communities, our country, and the world that will have relevance to us, both personally and with regard to the subject matter and intent of this course. If there is something current you would like to discuss during our meetings, I invite you to do one of several things:

1. Email your instructor ahead of time
2. Bring the topic up during our weekly check-in at the beginning of class
3. If it fits with our topic and readings for the week, feel free to make specific connections between course content and current events

Assignments and Grading

All assignments are due by 11:59PM on the day before class (i.e., Wednesday night) and should be uploaded to the course Canvas website. The file name should include the name of the assignment as well as your own name. If you will not be able to meet a deadline for an assignment, please email the instructors **prior** to the due date, and we will work with you to find an appropriate alternative. 2% reduction for any late assignments during the semester. 5% reduction per late assignment turned in during finals week.

30% Civic engagement plan
The civic engagement plan is at the heart of this class. Throughout the semester you will investigate ways of doing public service in the sciences and identify those that you plan on pursuing further while in college. This includes your civic autobiography.

20% Written reflections
Reflecting on your service experience is one of the best ways to identify what you learned, process encounters with new things, and develop a personal sense of civic engagement.

5% Participation in class
Your participation grade will consist of your attendance and your contribution to class discussions, both in class and via the written discussion posts and memos on readings you share on Canvas. Example discussion posts or memos may be found on the class Canvas website.

10% Pre-class assignments & discussion posts
Each week, unless directed otherwise, you are required to upload discussion points or memos you generate from the readings to the weekly discussion forum on Canvas. You will find instructions and examples of this weekly assignment on Canvas. These memos and discussion posts will be used as the basis for our conversation in class and contribute to your participation grade.

15% Participation in community-based experiences
During the semester, you are required to commit outside of class, to participating in public service activities. Your documented completion of service and your research into your service site will count for fifteen percent of your grade.

Participation split:

5% on campus community exploration, STEM related (i.e., seminar, geology museum, WI Science festival etc.)
5% off campus community exploration, STEM related or not
5% service work with community partner (Goal of three meetings. We will help match you with a partner at afterschool clubs)

20% Storytelling assignment
At the end of the semester, we will take some time to share your experiences and reflections on what you observed and experienced at your service sites.

Representative readings

You will not need to purchase any textbooks for this course. Readings in this course will be a mix of book excerpts, scholarly papers taken from primary sources, and articles from the popular media. Readings will be made available to you on Canvas. To a certain extent, reading selections will be made based on current events and guest speaker preferences, so be sure to *check the Canvas website each week*.

Grade Assignment	
A **92-100%**	Exceeded expectations. Incorporated new ideas or connects course ideas in new ways. Well organized, clear, professional. Work demonstrated critical thought. Participation included contributing clear, well-considered, creative ideas, promoting group discussion, asking thoughtful questions about others' ideas and responding well to questions. Completed service hours in a timely fashion.
AB **89-91%**	Demonstrated a deep understanding of the material. Well organized, clear and professional. Work demonstrated critical thought. Participation included contributing clear, well-considered, and creative ideas, promoting group discussion, asking thoughtful questions about others' ideas, and responding to questions. Completed service hours in a timely fashion.
B **80-88%**	Met expectations. Work was well organized and clear. Regular and respectful contributions to class and group discussion, both asking and responding to others' questions. Completed service hours in a timely fashion.
BC **77-79%**	Directions were followed and work indicates that student understood the concepts of the assignment. Regular and respectful contributions to class and group discussion.
C **68-76%**	Directions were followed. Regular and respectful contributions to class and group discussions.
D **60-67%**	Directions were not followed, and a significant portion of the work was not turned in or was incomplete. No meaningful participation in group discussion. Service hour requirements were not met in a timely fashion.
F **0-59%**	Work was not turned in. Class participation was lacking, and service hour requirements were not met.

Student Responsibilities

Attendance

Attendance is **required** at all class meetings. To be excused from class, you must email the instructor *BEFORE* the missed class with an acceptable reason. This is subject to the instructor's discretion, but acceptable reasons include personal illnesses, religious holidays, emergencies, or personal matters that require your presence. Unexcused absences will affect your participation grade, which is 20% of your total grade. In the case of excused absences, you will still be responsible for completing all course materials and turning them in on time.

Academic Integrity

By enrolling in this course, each student assumes the responsibilities of an active participant in UWMadison's community of scholars in which everyone's academic work and behavior are held to the highest academic integrity standards. Academic misconduct compromises the integrity of the university. Cheating, fabrication, plagiarism, unauthorized collaboration, and helping others commit these acts are examples of academic misconduct, which can result in disciplinary action. This includes but is not limited to failure on the assignment/course, disciplinary probation, or suspension. Substantial or repeated cases of misconduct will be forwarded to the Office of Student Conduct & Community Standards for additional review. For more information, refer to https://www.students.wisc.edu/doso/academic-integrity/.

Accessibility

The University of Wisconsin-Madison supports the right of all enrolled students to a full and equal educational opportunity. The Americans with Disabilities Act (ADA), Wisconsin State Statute (36.12), and UW-Madison policy (Faculty Document 1071) require that students with disabilities be reasonably accommodated in instruction and campus life. Reasonable accommodations for students with disabilities is a shared faculty and student responsibility. Students are expected to inform the instructor of their need for instructional accommodations by the end of the third week of the semester, or as soon as possible after a disability has been incurred or recognized. We will work either directly with you or in coordination with the McBurney Center (mcburney@studentlife.wisc.edu, 608/263-2741) to identify and provide reasonable instructional accommodations. Disability information, including instructional accommodations as part of a student's educational record, is confidential and protected under FERPA.

We aim to create an environment where all students feel comfortable learning

All are welcome, regardless of age, race, gender, background, political affiliation, sexual orientation, etc. All students' ideas have value and should be received respectfully. If any student feels they are not being respected in Exploring Service, please contact one of your instructors or the course director, Dr. Anna Courtier.

Hate and Bias Incidents

We value each member of our community and an integral part of this class is engaging with your classmates and the community at large. Hate and bias incidents distract from our classroom community and negatively affect your and your classmates' ability to learn, feel welcome, and feel safe. Hate and bias incidents will not be tolerated in this classroom nor in public service experiences.

Please intervene in incidents of hate and bias when you can, and report incidents to me—if you feel comfortable—and/or to the UW-Madison hate and bias reporting system: www.students.wisc.edu/reporthate. The University and I are dedicated to addressing reports of hate and/or bias seriously, promptly, confidentially, and sensitively. Reports can include, but are not limited to, crimes such as vandalism or physical assault; non-academic misconduct such as online or verbal harassment or disruptive behavior; and/or microaggressions such as derogatory or demeaning speech from another student, TA, or faculty/staff member. A Hate and Bias Incident Team member will respond to your report and provide you with options meet your needs. You can also report anonymously.

For more information, support, and resources regarding addressing hate and bias on campus, please visit www.students.wisc.edu/reporthate.

Land Acknowledgement

The University of Wisconsin–Madison occupies ancestral Ho-Chunk land, a place their nation has called Teejop (day-JOPE) since time immemorial. Today, UW–Madison respects the inherent sovereignty of the Ho-Chunk Nation, along with the eleven other First Nations of Wisconsin.

Class Schedule

Subject to change, all preparation materials will be on Canvas

Service Site	Week	Topic	In Class	Readings Due	Assignments Due
	1 Sept 7	What is public service?	• Ernesto Sirolli TedxTalk • Defining Public Service • Course Overview and syllabus		
	2 Sept 14	Pathways of public service and civic engagement in science	• Intro to 6 pathways and your service history • Civic engagement plan	• Haas Center, Pathways of Public Service and Civic Engagement	• Discussion forum 1: Intro & previous experiences with public service
	3 Sept 21	The Wisconsin Idea	• Mini lecture on land-grant universities • WI Idea student slides & discussion	• See which topic you have been assigned on canvas and find an article for the WI assignment • Example WI idea articles science vs community are available under Week 3	• Civic Engagement Plan Assignment #1 due • WI idea assignment
Week 4: Campus Science Spot	**4** Sept 28	Engaging in service as a UW-Madison student	• Community exploration assignment introduction • What is direct service? • Opportunities in Madison	• Falk, J.H. and Dierking, L. The 95% Solution • Blackawton, P.S., et al, Blackawton Bees	• Discussion forum 4: direct service • Scavenger Hunt picture
	5 Oct 5	Identity (in STEM) and Culture in Community Engagement	• Identity wheel discussion • Danger of a Single Story TEDx Talk	• Constructing a Broader, More Inclusive Value System in the Sciences	Fill out identity wheel

Service Site	Week	Topic	In Class	Readings Due	Assignments Due
	6 Oct 12	Diversity, Equity and Inclusion in STEM	• Equality, equity, justice image & discussion • WI science festival	• Review: Constructing a Broader, More Inclusive Value System in the Sciences (pay close attention to p71-73) • Unintended Consequences; How Science Professors Discourage Women of Color • TBD	• Discussion forum 6: Watch this short video and respond to the discussion board. https://www.nytimes.com/video/us/1247467672743/blood journey.html
Science Festival Oct 16-22	**7** Oct 19	Reflection as a way of learning	• Class discussion of service experiences and the importance of reflection • Community exploration and civic engagement updates	• Cress, C.M. et al. Learning through serving, Ch 9 • Covey, Kelli. What I didn't know then • To Hell with Good Intentions • What we don't talk about when we don't talk about service	• Discussion forum: Reflection on service
Afterschool science clubs	**8** Oct 26	Asset-Based Community Development	• Virtual Tour of Access Community Health Center	• Investigate community health center website • Bringing Local Knowledge into Environmental Decision Making by Jason Corburn	• Civic Engagement Plan Assignment #2 - investigate non-credit service opportunities • Discussion forum 8: Prepare a question for the tour • Begin service work with a community partner
	9 Nov 2	Ways of knowing the Madison Community	• Community map drawing • Pick and share story of impact in pairs	• Richard Harris—Oral History • Madison Neighborhood Indicator Project	• community map assignment • story of impact: https://www.madisongives.org/nonprofits/nonprofit stories-of-impact
	10 Nov 9	Career Panel	• career panel Q&A		• Prepare a question for the panelists
	11 Nov 16	Science & Public Policy and Activism	• The role of scientists in public policy and decision making.	TBD	• Discussion forum 11
	12 Nov 23	No class			Finish Community Explorations

		Thanksgiving Break		
13 Nov 30	Broader Impacts of university research on the community	• Case study comparisons, modes of spreading science to public	TBD - case studies	• Civic Engagement Plan Assignment #3 - conversation with campus or community leader
14 Dec 7	Debrief: tell your story	• Student storytelling and student-led reflection		• Service artifact and storytelling • Reflection - final draft due
Finals Week: No final exam—turn in any missing assignments by Dec 14. 2% reduction for any late assignments during the semester. 5% reduction per late assignment turned in during finals week.				