

Integrated Science 341: Service with Youth in STEM Practicum University of Wisconsin-Madison Syllabus

Course Info

1 Credit Hour, LAS Designation: Intermediate Level

Lecture: 75 Minutes/week on campus (“In-class” component)

Practicum/Field Studies: Additional hours off-campus (Community partnerships)

Location: 445 Henry Mall, Room 110

*Note: As a service learning class, a minimum of 25 hours of direct service is required in addition to the scheduled class time and associated assignments.

Instructor: Dr. Anna M. Bishop Courtier

Office: 445 Henry Mall, Room 114 B

Email, Phone, and Office Hours: anna.courtier@wisc.edu (preferred); 608-265-5526

I will do my best to respond to all emails within 24 hours (or the next business day, M-F).

If you need to discuss something that is time-sensitive or private in-person, please email me to confirm an appointment outside of office hours. Specific office hours TBA.

Course Description

This course combines an on-campus section and service learning component to match students who have completed the year-long Service with Youth in STEM sequence (INTEGSCI 240 and/or 340) with new community partners and different after-school science club settings. The primary aim is to give UW students experiences with community partners who have different missions and leadership styles, along with working with a different population of students, and different science curriculum than previous experiences in the sequence. This is similar to practicum experiences in the School of Education.

In-Class Component: This course includes an on-campus meeting that prepares undergraduates to work with children from a variety of backgrounds and to engage with the public more broadly. The in-class lab sessions will focus on the process of preparing for and implementing informal science outreach activities and will provide opportunities to “debrief” experiences in leading an after-school science club with a cohort of students who are participating in similar experiences. The labs will center on sample educational activities, role-playing the application of prerequisite knowledge into responses to after-school club dynamics, and just-in-time teaching to address students’ impressions and questions of the teaching approach to the activity and/or its connections to the students’ previous experiences in community settings. This practical, applied experience is a crucial part of the learning process that students experience prior to participating in the weekly service practicum component of the course.

Practicum Placements and Service Components: Students will apply the concepts learned in previous classes and practiced in lab to develop a relationship with a new community partner through participation in an after-school science club for elementary schoolers. UW students will not be placed at an after-school site where they have worked previously. Students will reflect upon cultural awareness, community relationships, and scientific content after implementing hands-on science lessons with the elementary students.

Course Learning Outcomes

Main goals of this course are to:

- Encourage interaction between scientists and community members from a variety ages and backgrounds
- Experience working with community organizations that have different missions and serve different populations than students' previous participation in community relationships
- Continue to develop mutually beneficial relationships between the University and the community
- Deepen students' understanding of diverse social factors that impact youth development, participation, and education
- Teach leadership skills and recognize personal growth in leadership experiences
- Encourage students to critically reflect on changes in their personal perspectives and experiences gained from working with new community partners

After participating in this course, UW-Madison students will:

- Communicate and collaborate with adult staff from a variety of cultures and backgrounds
- Independently design educational experiences for youth
- Assess appropriate strategies for designing developmentally appropriate science lessons
- Describe the importance of communication and connections between scientists and the general public
- Critically reflect on experiences in the community and connect these experiences broadly to service learning, cultural context, and similarities and differences in working with different community groups

Assignments and Grading

Much of the students' learning experience in the Service with Youth in STEM Practicum will be centered around collaborative in-class discussions, as part of a **group-learning environment**. This will be enhanced by the service learning experiences that occur off-campus. All written assignments must be an **individual effort** to highlight individual perspectives and understandings. Assessment will occur through written reflections, rather than through quizzes or exams. The in-class component of the Service with Youth in STEM Practicum will meet concurrently with the Service with Youth in STEM lab sections (240/340), but details of assignments and the timing of them will be different due to the students' previous experiences and different course objectives.

Grading

- **Minimum After-School Site Visits** 5%
- **Online Participation:** Club "Quizzes"* 20% → Weekly
**Must be completed within 1 week of your club to receive credit*
- **Community Partner Agreement:** 10% of the total grade
Along with submitting the community partner agreement form, *please include a paragraph or two about how this partnership is similar to or different from your work in previous semesters.*
Due within one week of your first club
- **In-Lab Participation** 20%
Your participation grade will consist of your attendance and your contribution to lab activities and/or discussions, as evaluated using the rubric below. As a returning student, your insight and participation in lab is especially helpful!
- **Final Portfolio:**
 - Peer review of presentations by 240
In-Lab Mentoring 10%
 - In-Lab Presentation Practice 10%
 - Final reflection 35% *Due Dec 17, 12:25pm*

Your final reflection will center around your experiences working with new community partners and new K-12 students. You will need to compare and contrast your current experiences with past participation in the program.

Details on Assignments

* Once you start your after-school site visits, post a **site summary** in the Canvas after-school site discussion. You must submit at least 8 site summaries during the semester. **Your site summary must be posted within 7 days of the after-school science session and should be posted using the same link as the IntegSci 240 posts.** You should submit a survey response every week, whether you held club or not.

Participation Rubric

	Exemplary (2pts)	Accomplished (1pt)	Developing (0pts)
Level of Engagement in Class	Student proactively contributes to class by offering ideas and/or asks more than one question per class and/or works consistently on the group projects.	Student proactively contributes to class by offering ideas and/or asks one question per class.	Student rarely contributes to class by offering ideas and asking questions OR is engaged in the use of personal electronics.
Listening and Discussion Skills	Student actively listens when other talk, and incorporates or builds off of the ideas of others during discussion.	Student actively listens when other talk, but contributes minimally to the discussion.	Student does not listen when others talk, OR is engaged in the use of personal electronics.
Behavior	Student almost never displays disruptive behavior during class.	Student rarely displays disruptive behavior during class.	Student occasionally displays disruptive behavior during class.
Preparation	Student is almost always prepared for class with assignments and required class materials.	Student is prepared for class with required class materials.	Student is present but not prepared for class with required class materials.

****The maximum points you can get per class period is 8. To receive full participation credit for the day you need to earn at least 6 points. Unexcused absence = 0% participation credit.**

6-8 points = 100% participation credit

4-5 points = 75% participation credit

1-3 points = 50% participation credit

DETAILS ON TIMING OF ASSIGNMENTS, DUE DATES, AND EXPECTATIONS WILL BE PROVIDED ON THE CANVAS WEBSITE ON LEARN@UW.

Grading Scale

Grade Assignment	
A 92-100%	Exceeded expectations. Incorporated new ideas or connected course ideas in new or creative ways. Work was well-organized, clear, and 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%	Exceeded expectations. Demonstrated a deep understanding of the material. Well organized, clear and professional. 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.
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. Little to no meaningful participation in group discussion.
F 0-59%	Work was not turned in. Class participation was lacking.

**** IMPORTANCE OF ATTENDANCE and SERVICE SITE ENGAGEMENT ****

You are required to participate in at least 8 after-school sessions at your site. Your attendance at the after-school site is crucial for the success of the elementary school students who are depending on you. Attendance in class will prepare you for the after-school sessions. Because of the importance of your preparedness and reliability at your after-school site, **your final grade will be REDUCED by 4% for unexcused ("no show") after-school sessions, and by 2% for unexcused in-class sessions.**

Students will not be penalized for after-school sessions that are canceled by the after-school site due to weather, early-release, school field trips, etc. Please contact your instructor if there are extenuating circumstances that have caused you to have fewer than 8 on-site interactions with your group. Instances for which additional absences will be excused are detailed below. IN ALL CASES, you must notify the instructor (and your community partner, if applicable) IN ADVANCE, when possible, or as soon as possible after an emergency situation. Excusable absences may require documentation.

Excusable absences include but are not limited to religious holidays, illness, family emergency, and University-sponsored events that require your participation. *If possible, make alternate arrangements in advance to accommodate your absence. For example, you could accommodate your absence by arranging with your community partner to come at a different date or time, or you could arrange a time to meet the instructor to go over class content and lesson planning.*

Credit Hour Description

Service with Youth in STEM Practicum is a 1-credit course that meets for on-campus for 75 minutes/week. It requires approximately 30 minutes online reflections per week and an average of 1 hour per week for other written assignments over the course of the semester. The reflection assignments associated with service learning component of the class will require an additional effort of 1-2 hours per week. In addition, as part of the service learning component the course requires approximately 1 hour of planning meetings with community partners and/or lesson implementation per week at after-school sites. This adheres to the federal definition of one credit hour.

Academic Integrity

By enrolling in this course, each student assumes the responsibilities of an active participant in UW-Madison'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 their 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. Faculty [I], will work either directly with the student [you] or in coordination with the McBurney Center 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

Mental Health

Students sometimes feel overwhelmed, lost, experience anxiety or depression, or struggle with relationship difficulties or diminished self-esteem. These issues may be school-related or personal. The no-cost mental health services at University Health Services include individual, couple/partner, group counseling, stress management, and psychiatry services. Most importantly, there is a system in place so students can immediately speak with someone if they are in crisis. Please consult <https://www.uhs.wisc.edu/mental-health/> if you feel you or someone you know needs mental health support.

Hate and Bias Incidents

We value each member of our community. 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 this class, please contact the instructor. 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 the classroom or at after-school sites.

Please intervene in incidents of hate and bias when you can, and report incidents to me—if you feel comfortable—to the UW-Madison hate and bias reporting if the incident happened on the UW campus, and/or to the after-school site staff if the incident happened at your site. 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; hazing; 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.

Mandated Reporting

Mandated Reporters are required by law to report child abuse and/or neglect to a county or law enforcement. Wisconsin law [48.981(2)] indicates that any mandated reporter who has a reasonable cause to suspect that a child seen by the person in the course of professional duties has been abused or neglected, or who has reason to believe that a child seen by the person in the course of professional duties has been threatened with abuse or neglect and that abuse or neglect of the child will occur is required to make a report.

University employees, school district employees, and child care providers are among the groups who are considered mandated reporters by the state. *As a student in Service with Youth in STEM Practicum, you are not officially a mandated reporter.* However, if you suspect a case of neglect or abuse for one of the students in your group, **please talk to one of the on-site staffers so that person is able to make a judgment call on whether an issue must be reported**. Do not report the incident directly to your UW instructors or to Dane County Department of Human Services.

Reading Materials

There is no textbook for this class. Since the students in Service with Youth in STEM Practicum will have already completed the readings as part of the pre-requisites, these readings will not be required for practicum students. However, they will be made available via Canvas in case students would like access to the readings to refresh concepts that apply to their development of new community partnerships.

Class Schedule

The practicum's in-class schedule will run concurrently with the Service with Youth in STEM lab meetings and discussions will center around the same topics.

Tentative Schedule

Week	Topic
1	<p>Lab: Logistics of After-School Partnerships After-school site matches, roles and responsibilities, background checks and photo releases; community partner agreements Science notebooks</p> <p>Activity: Ice-breakers, Importance of getting to know kids and building trust,</p> <p>*Community partner agreement assigned</p>
2	<p>Lab: Introductory Club Experience and Activity Advice for new leaders Behavior strategies → Positive learning environments</p> <p>Sample semester's activity theme: Water</p> <p>Activity: Simple Demonstrations; Activity that introduces water as a theme and could serve as a "stand alone one-time activity" or the introduction to a series of activities about water</p> <p>*Community partner introductions by email *Ideally community partner meetings start this week</p>
3	<p>Lab: Planning for After-School Clubs Class/Community Connections Lesson planning (and over-planning, and improvising)</p> <p>Activity: Water Lesson 2</p>
4	<p>Lab: Awareness and Flexibility in After-School Clubs Class/Community Connections "Two Madisons" Community demographics Science Notebooks</p> <p>Activity: Science Notebooks and Water Lesson 3</p> <p>*After-school clubs start no later than this week</p>
5	<p>Lab: Lesson Planning for After-School Clubs: Class/Community Connections Differentiation: Modifying lessons for different age groups</p> <p>Activity: Water Lesson 4</p>

6	Lab: Engagement in After-School Clubs: Class/Community Connections Role playing student questions and answers Activity: Water Lesson 5
7	Lab: Questioning and Answering in After-School Clubs: Class/Community Connections Balance between Conceptual vs Hands-On Based Activities Activity: Water Lesson 6
8	Lab: Experiences in After-School Clubs: Class/Community Connections Direct experiences from after-school clubs Sharing successes and opportunities for growth Activity: Water Lesson 7
9	Lab: Student Identity: Class/Community Connections Role-play: Assessing student engagement Activity: Water Lesson 8
10	Lab: Student Identity: Class/Community Connections Role-play: What do scientists look like? Students as citizen scientists Activity: Water Lesson 9
11	Lab: Self-Assessment: Considering connections to prompts vs personal experiences Activity: Water Lesson 10
12	Lab: Presentation Preparation Mentoring Class/Community Connections
13	Lab: Feedback on 3-minute presentation practices
15	Final Reflection due electronically Tuesday December 17, 12:25pm