**Biol5480-Entomology is a COMMUNITY ENGAGED LEARNING (CEL) class**

**Most people know virtually nothing about the invertebrates living right under their feet and over their heads. This presents an excellent opportunity for community engagement in this class! You will have opportunities to raise awareness about the importance of, and the decline of some, insect species and to contribute data to insect-focused community science projects.**

**CEL DESCRIPTION: *We know that when students engage in applied experiences with community partners it creates a deeper understanding of the course material and provides a sense of purpose to their education.***

**By enrolling in Entomology this semester, you will earn the CEL attribute on your official transcript, which signals to future employers and institutions that you have engaged in applied, hands-on experiences that are valuable to our scientific and civic communities.**

**CEL is a graded component of class, worth 25% of your grade. It has 3 components:**

1. **Completing the CEL work itself (see below for which project applies to you):**
	1. log your time collecting/observing insects.
	2. Submit the insect collections themselves, or a screenshot of your total observations for the semester
	3. Participate in a Zoom Poster Session during the last week of class. You are encouraged to work in pairs/triples to create a poster sharing the results of your CEL work, the evolution of your knowledge about the relevance of insects, your conclusions about the importance of scientific collections and community science, and the urgency of insect conservation
	4. Worth 50 points, graded on completion of work, submittal of time log, quality of poster, and active participation in Zoom Poster session
2. **CEL Reflection Discussion #1:** focused on why we study insects, why we kill them to study them, and the value of public outreach and community science.
	1. Read article “Why We Kill Bugs”, and be prepared to discuss
	2. Worth 25 points, graded on attendance and active participation**. Date: Sept 3**
3. **CEL Reflection Discussion #2:** focused on your experiences, insights, successes and failures with CEL this semester. *What do you know now that you didn’t know on Aug 24? How have your opinions and knowledge about insects changed?*
	1. Worth 25 points, graded on attendance and active participation. **Date: Nov 19**

 **CEL Project for students concurrently enrolled in Biol5485-Entomology Lab:**

**We believe that building a campus insect collection will help raise awareness about insects and provide educational value for future U of U students, Edible Campus Gardens managers, the Entomological Collection at the Natural History Museum, and future scientists. It will also be a powerful tool for you to learn more about insect taxonomy, identification, and distribution.**

* Your required insect collection for the class can be from any location you visit during the semester, but some time should be spent collecting on the University campus and vicinity (urban and foothill landscapes).
* You should be prepared to be an "Entomology Ambassador," explaining to on-lookers why you’re collecting insects and why it’s important.
* Among the specimens you prepare for your class collection (following proper collecting protocols for the course), at least ten from the campus environs should be donated to the UofU Campus Insect Collection.
* You will be given special tags to designate these specimens in your collection. Note that these are part of the general collection you submit for evaluation, and are simply flagged for donation.
* You are welcome to donate all of your collection if you wish!

**CEL Project for students enrolled in Biol5480-Entomology, but not Biol5485-Lab:**

**If you live in Utah, you will become a contributor to the community science effort called “Utah Pollinator Pursuit”**

* The Rare Insect Conservation Coordinator for Utah’s Department of Natural Resources, Amanda Barth, is collaborating with the WildUtah Project, a local non-profit, to collect data on monarchs and bumblebees in Utah.
* Both groups of insects are in decline, but we are lacking data on them. You can be a huge help in boosting our understanding of where these at-risk insects occur and in what numbers. To do so, you will:

**1)** go through the Utah Pollinator Pursuit training here: <https://sites.google.com/utah.gov/monarchconservationinutah/out-and-about-surveys>

 **2)** download the Survey123 app here, or directly onto your smartphone: <https://survey123.arcgis.com/share/0d3d7563ca224210929e29bcb26b3b3d?open=menu>

**3)** spend 1 hour/week (until the snow flies), looking for bumblebees and monarchs (including signs of monarchs on milkweeds) anywhere in Utah, and upload your observations to the above app. This can take place in both urban and wild spaces.

**4)** Join the Utah Pollinator Pursuit’s Instagram: <https://www.instagram.com/explore/tags/utahpollinatorpursuit/>

**\*If you are not in Utah this semester:** You will contribute to the Bumblebee Watch community science project instead of Utah Pollinator Pursuit. <https://www.bumblebeewatch.org/>

Download the app onto your smartphone (or upload observations directly to the above website).

* You will upload photos of bumblebee observations from anywhere in the U.S. The app will help you identify the species and ask for you to share information about the host plant and your location.
* Spend 1 hour/week looking for bumblebees in urban and wild spaces, until the season ends (usually end of October in temperate locations, may be later if you’re in the southern areas of the U.S.)

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Questions? Contact **Amy Sibul**, the CEL coordinator for the School of Biological Sciences**amy.sibul@utah.edu** **/ cell: 801-891-2819**

**(working remotely this semester, please email or text to make a zoom appointment)**