

IB/ESPM 105 – Natural History Museums and Biodiversity Science

Week and dates	Tuesday (lectures)	Thursday (activities)
1: Aug 24	No class	Overview of museums worldwide & their role in research (Rosie)
2: Aug 29 & 31	Introduction to research using collections. (Brent)	Entomology & botany – Field & Museum. How to collect, prepare etc. iNaturalist, bioblitz, geo-cache, (Pete & Andrew)
3: Sept 5 & 7	Curating physical specimens I (Pete & Andrew), including preservation, technical issues such as permits, accession policy.	Vertebrates & paleo – Field & Museum. How to collect, prepare etc (Chris/Carla and Pat)
4: Sept 12 & 14	Curating physical specimens II (MVZ, UCMP), including preservation, technical issues such as permits, accessions.	Hearst tour - emphasis in part on cultural sensitivities
5: Sept 19 & 21	Digitizing – capturing information from collections, crowd sourcing, georeferencing introduced. iDigBio (e.g., Erica, Andrew & Pat)	Gardens tour – start early; focus on what the special problems are for a living collection (Holly/Chris)
6: Sept 26 & 28	Databasing and Technology – Information Management (Michelle)	Essig Museum tour – emphasis on digitization
7: Oct 3 & 5	Public portals for biodiversity information. Introduction to mapping, e.g., Holos, CCH, Vertnet, PaleoPortal (Michelle)	MVZ tour – demos of frozen tissue
8: Oct 10 & 12	Midterm on material to date.	UCMP tour
9: Oct 17 & 19	Exploration of museum data – hands-on, HOLOS (Michelle & Pat)	Herbaria tour – emphasis on digitization, imaging
10: Oct 24 & 26	History of museums, BNHM in particular, archives (Andrew)	Garden experience*
11: Oct 31 & Nov 2	Outreach; citizen science; education; diverse communities (Lisa)	Essig experience*
12: Nov 7 & 9	Use of molecular data in research in biodiversity; molecular / genomic tools (Lydia)	MVZ experience*
13: Nov 14 & 16	Value of collections – isotopic tools, CT scanning, morphometrics (e.g., Mark, Pat)	UCMP experience*
14: Nov 21	Hearst experience*	<i>Thanksgiving</i>
15: Nov 28 & 30	Public dimensions of museums, including their place in the modern world (Eric S.)	Herbaria experience*
16: Dec 4-8	RRR week **	
17: Dec 11-15	Final	

* By "experience" we mean a second session for each museum, the topic of which is their choice. It could be a lecture in the classroom, a lecture inside the museum, a demonstration, a hands-on opportunity, or some mix. Might be best to break into groups within museum.

** In RRR week, we'll organize an event (including refreshments) bringing together museum staff and students from the class to talk about URAP and other research opportunities in the coming year.