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|  | **Week** | **Monday** | **Wednesday** | **Friday** |
| **Care of Collections Section** | | | | |
| **Intro** | **1** |  | **Aug 27**  **Do:** Course Intro,  Team formation,  Grade Weights  **Assign:** Collection Manager description chapter plus Collections Best Practices for AAM | **RAT on Intro**  **Do:** Collections Tour—1/2 WITH JOHN, ½ with Bill (types of preservation, organization of collections, strengths of our collection, major contributors, challenges for this collection)  **Assign:** Fill out worksheet about collections tour  READ: Collecting Controversy read science article and response, watch brain scoop, maybe Kevin from Alaska’s blog |
| **Unit I**  **Theory and Organization of Collections** | **2**  **Sep 1** | * Activities about the controversy—give a scenario about collecting and ask when it is OK, have them list considerations before collecting or rank considerations? * 5 min any questions before Wed’s RAT * **Assign** Theory of Collections Paper and something else introducing collections Or questions from the controversy and intro are also fair game?-->leaning toward putting this paper later in this unit and having them read something a bit simpler first, but maybe it is a good introduction…or maybe biological voucher is better? | **RAT Unit I**  **Theory of Collections**  **DO:** place the collections they saw on the axes from the paper and justify their placement’’—ask John, Bill and AE to also do this and give 3 bullet points for why they chose each part of the axes; we can do this again at the end of this half of the class when they have more knowledge and experience. Then they will compare with the assessment from today and see that they have learned something—do this activity IN the collections rooms and meet in the hallway where I set up a chalkboard to share answers (or use the giant notepads  **Assign:** Biological Voucher and Field Collection Protocols | **Field Collection Protocols—**what is important to preserve, metadata  **Do**: Handwriting  Labels  Design a field collection worksheet for an insect trip back campus?  **Assign**: Biological Voucher paper |
| **3**  **Sep 8** | **Handwriting Quiz**  **Biological Voucher**  **Do: SOMETHING**  **Assign:** read our Specify manual or watch a video, maybe complete a tutorial, | **Hand back Handwriting Quiz**  **MEET IN COLLECTIONS**  Museum Databases: **Specify**  **Do:** they will need to answer a series of questions using Specify (# of specimens of particular species etc.)  accession specimens as teams—DO WE HAVE ANYTHING TO ACCESSION?  **Assign**: use Ornis or our database to answer some question… test hypothesis of sexual dimorphism in weight or length for some species  **READ**: article on Georeferencing? Or complete tutorial? | **MEET IN COLLECTIONS**  **Do:** Continue Accessioning, Georeferencing and/or doing an inventory of a drawer  **Assign**: Read about loans, read a loan policy that I choose |
| **Unit II**  **Agents of**  **Deterioration and Videography** | **4**  **Sep 15** | **Handwriting Quiz**  **🡪is this a better time to do the theory of collections activity? When they’ve been in the collections more?**  **Loans BRING LAPTOPS**  In class, teams write up a request for specimens as a google doc (I tell them which type of specimens, which museum based on the policy they read for homework, and give them a persona and project description; they have to figure out which specimens would be the best for their question) Then they pass their requests to the next team and get graded on it (Did they include all the requirements, were they convincing)  **Assign**: Deterioration reading/video  physical factors (fire, water, earthquakes, theft, best storage practices, climate and light control  chemical factors (acids, pollution); biological factors (pests) | **Hand back Handwriting Quiz**  **RAT Unit II**  **MEET IN COLLECTIONS AFTER RAT**  **Do:** an assessment of your collection for all deterioration factors..NEED AN ASSESSMENT CHECKLIST  **Assign**: Read about condition reports | **MEET IN COLLECTIONS**  **Do**: a condition report for a specimen you encountered last time  **Assign:** IPM, read someone’s plan, |
| **5**  **Sep 22** | **Handwriting Quiz**  IPM **Bring: Laptops**  **DO:** Here are some pests, now you figure out what they are and come up with a plan for what to do. Then you get graded by the other teams on what you proposed  **Assign:** Bunch of museum videos to watch for inspiration | **Hand back Handwriting Quiz**  **Do:** Videography Workshop  **Assign**: More museum videos for inspiration | **MEET IN COLLECTIONS**  **Do:** Talk over or vote on the videos we watched, have some critera for what makes it good  Video Outline Due (end of class)  **Assign:** Video Script**,** including description of shots, specimens to use, and timing |
| **Unit III**  **Policies, Permits and the Public** | **6**  **Sep 29** | **MEET IN COLLECTIONS**  Video Script Due (beginning of class)  **Do:** Video Worksession  **Assign:** reading/video on permits/policies | **RAT Unit III**  **Do:**  **Assign:** | **Do:**  **Assign:** |
| **7**  **Oct 6** | **Do: Video Contest/Peer Review**? 3 min videos, 3 min confer/feedback x 4 groups = 24 min, + 5 min to get to final consensus  **20 min other activity:**  **Assign:** Finalize Videos (have a paper/video ready to assign if the videos are pretty good) | **Final Video DUE to me**  **Do:**  **Assign:** | **Do:**  **Assign:** Nina Simon Tedx |
| **8**  **Oct 13** | **Final Videos DUE**  **Do:** Reflection?  Something about the public in museums  **Assign:** | **Hand Back Video Feedback**  **EXAM 1**  (Units 1-3)  **Assign**: primer on DNA sequencing/analysis/sampling | No Class: Early Semester Break |
| **Use of Collections Section** | | | | |
| **Unit IV**  **DNA Analysis** | **9**  **Oct 20** | **RAT Unit IV—**  All about DNA sequencing, rates of evolution, population genetics, etc.—look in an evolutionary biology textbook  **Do:**  **Assign:** | **Do:**  **Assign:** | **Do:**  **Set up for Collections Tours, Sat Oct 25th** —Homecoming Weekend  **Assign:** |
| **10**  **Oct 27** | **Do:**  **Assign:** | **Do:**  **Assign:** | **Do:**  **Assign**: Intro to Isotopes |
| **Unit V**  **Chemical Analysis** | **11**  **Nov 3** | **RAT Unit V--Isotopes**  **Paper selection due** | **Heather return comments on paper selection**  **Do:**  **Assign:** | Last day to drop a course  **Do:**  **Assign:** |
| **12**  **Nov 10** | **Background DUE (for peer review)**  **Do:**  **Assign:** | **Do:**  **Assign:** Background due on Friday | **(Background DUE to Heather)**  **Do:**  **Assign:** primer on physical analysis |
| **Unit VI**  **Physical Analysis and Miscellaneous** | **13**  **Nov 17** | **RAT Unit VI**  **Do:**  **Assign:** | **Do:**  **Assign:** | **Do:**  **Assign:** |
| **14**  **Nov 24** | **Fall Break** | | |
| **15**  **Dec 1** | **Do:**  **Assign:** | **Do:**  **Assign:** | **Project Description DUE for peer review**  **Do:**  Peer Review of Project Description  **Assign:** |
| **16**  **Dec 8** | **Budget Due for peer review**  **Do:**  Peer Review of Budget  **Assign:** | **Do:**  **Assign:** | **4-document proposal DUE to Heather (max 6 pages)**  Last day of class  **Do:**  **Assign:** |

**Introduction goals**:

* Motivate to be in the class
  + Get them into the collections rooms! This is hard because we don’t have a full three hours to see all the collections at once. **I want to check in the evals** if the students like this shorter tour as much as when we do it in a lab setting.
  + Importance of museums—I’m turning this into using the controversy over collecting to get them interested in motivated. Some really good articles, blog posts and the brainscoop video **where did we get all the dead animals**
    - Video of what its like to be a curator? Probably better to select a few Brain Scoops
      * Corrie Moreau on ants: <https://www.youtube.com/watch?v=hWWw3SHCIAw>
      * Squirrel McNastyface

<https://www.youtube.com/watch?v=4iko2eExc08>

* + What is a curator (both the titles used in different museums and a sample list of duties Buck reading in The New Museum Registration Methods)
    - **ASSIGNMENT:** Read article, find a job ad for a collections manager in a natural history collection and AS A TEAM?? highlight the duties in that job ad that are also on the reading’s generic list of duties, note any duties in the ad that are *not* in the generic list…but is this significant? Not really…so maybe do it as individuals and report as a team on new duties and consistent duties🡪use class time to get into the collections rooms
    - Could also use the table in Developing Staff Resources for Managing Collections
* Practice a RAT (half done)

Topics to cover:

**Care of Collections**

**Unit I**: **Theory and Organization of Collections**

**✔** Controversy around collecting—use recent science article🡪and the brain scoop response:

https://www.youtube.com/watch?v=nS8suhK-c5I

**✔** Theory of Collections Paper

Labels (Field to Drawer), software, phylogeny, georeferencing, handwriting

**✔**Biological Voucher

Field Collection—could go in the second half of the semester too, but it has a lot to do with labeling, so could go here

Accession, Loan, Permitting

**Unit II:** **Agents of Deterioration**

IPM

Physical, chemical, biological

**Unit III:** Policies and Permits? Maybe collecting? Also serving the Public: Use Nina Simon TedEx talk: https://www.youtube.com/watch?v=aIcwIH1vZ9w

**Use of Collections:** (probably put DNA or Chemical last because it’s probably harder to understand than physical/morphological work)

DNA analysis—phylogenetics, population genetics, genomics

Chemical analysis: include isotopes, pesticides, heavy metals)

Physical analysis: Morphology—CT scans, baby mammoth?? (Climate Change)

pXRF, DNA and isotope analysis.  We are experimenting with 3D printing,

* + - Talk by Helgen—

Video about using biodiversity collections to understand evolution: Palaeobiologist Dr Anjali Goswami (UCL Genetics, Evolution and Environment and UCL Earth Sciences) explains what we can learn about biodiversity from the unique collection housed at UCL's Grant Museum of Zoology.

https://www.youtube.com/watch?v=SNXMPUYvdfw&list=PLXXq6t7B9L\_7itwvL8hG9fGKxdcIyRi0Z&index=15

**Week one goals**:

* Motivate to be in the class?
  + Importance of museums
    - Talk by Helgen?
  + Get them into the collections rooms!
* What is a curator (both the titles used in different museums and a sample list of duties Buck reading in The New Museum Registration Methods)
  + **ASSIGNMENT:** Read article, find a job ad for a collections manager in a natural history collection and AS A TEAM?? highlight the duties in that job ad that are also on the reading’s generic list of duties, note any duties in the ad that are *not* in the generic list…but is this significant? Not really…so maybe do it as individuals and report as a team on new duties and consistent duties🡪use class time to get into the collections rooms
* Practice a RAT

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Theory of Collections Paper

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