**Museum Displays and Outreach**

**BSC 480/580, 3 credits**

**Spring 2014**

**Dr. Suzanne Strait, straitho@marshall.edu**

**Class:** Wednesday 5:00-7:30

**Course Description:** This class resolves around learning all the basic techniques for curating a natural history collection and making outreach exhibits. That will include specimen preparation (making study skins, skeleton mounts, and alcohol preps), preparation using mold and casting, acquiring specimens, exhibit and outreach design, field notes and georeferencing, and database management and design. The class will focus on vertebrates, because that is mostly what we have access to but if there is interest in other life forms we can add them as well. We will also spend a week considering plant curation and herbaria. There will not be traditional Powerpoint lectures – this is a hands-on class. We will learn by reading, discussion, and doing so everyone has to be ready to be an active participant in the class.

the own choosing which will be aeditessionk contributed to a poster presentation at a regional scientitc meeting and he was inclAs a group we will learn osteology and all basic techniques on our group project. We are designing an exhibit to be installed to complement the green roof on the outside of the 2nd floor window of the science building. Included in this will be a buck, coyote, rabbit, squirrel, raccoon, opossum, alligator, snake, turtle, bobcat, and numerous mice as Easter eggs. Each of you will be assigned an animal. You will skeletonize your specimen, make a professional quality exhibit that includes mounting them and naturalistic scenery, and complementary educational signage and material. This project should evolve from student input and group discussions.

This needs to be more than just a specimen preparation – it needs to include labeling, teaching instructions, or other type education material that will permit the display to be used by non-specialist educators. Educational content will be designed for different age groups by looking at K-12 science standards, talking to teachers, and researching age appropriate activities.

**Prerequisties:** BSC 121 with grade of C or better plus an additional 8 hours of BSC courses.

**Attendance Policy:** You are expected to come to every class – end of story. You will want to come to class because class will be fun.

Week: Date:

I August 27: Class Logistics

 Making Study Skins

II September 3:

Discuss class project ideas

Beyond taxidermy – skeletal preparation

Skeletonize your mice

III September 10:

 Whitening and degreasing

IV September 17:

 Developing educational content

V September 24:

 Museum databases and metadata

VI October 1:

 Field notes and archiving

VII October 8:

Georeferencing

Draft of general display information due

VIII October 15:

Herbarium, Plant curation techniques

IX October 22:

 Alcohol preparation and use

 Skeletal assembly done

X October 29:

 Projects

 Draft of individual display information due

XI November 5:

 Projects

 Specimen mounting done

XII November 12:

 Projects

XIII November 19:

 Final display information due

IX November 26

No Class Thanksgiving

X December 3

 Presentation of individual display information

**Grading:**

25% skeleton

20% habitat and specimen mounting

30% age specific overall activity development

20% general display material for your taxa

5% class participation and team work

**Skeleton** – Everyone will be responsible for cleaning and reassembling a skeleton. In most cases this means skinning it, putting it in the beetle tank for cleaning, monitoring it in the beetle tank so it comes out at the right time and you have all the pieces. After it has gone through the beetle tank your skeletal material will need to be degreased and whitened. Because this will be in outside exhibit the bones need to be treated before they are wired together. Then you need to decide on the pose your animal will take and figure out which materials you need to make this happen (typically wire and metal rods). Once your skeleton is wired together this component of your project is done.

**Habitat and Specimen Mounting** – Making your skeleton is just the first step – it is an exhibit specimen so it needs to be put into the exhibit. We will tell you generally about where it is to be then you need to work out how to put in a stabilized fashion in the exhibit and if you need any habitat or embellishments. Once your specimen is in the green space this part of your project is done.

**Overall activity development**- Meet with educators, read state/federal standards for you grade level and make an educational game, card quiz, notebook, etc…. that is developmental appropriate for your chosen age group. You can choose from the following education levels: College (non-majors, education majors focus), High school

Middle school, 3-5 grade, K-2 grade, Pre-K.

**General display info:** We want some permanent static signage associated with the display. What it looks like and the content is up to the class to develop as a group then individuals can add the contributions for their specific part of the project. This part is always a work in progress and takes a lot of teamwork and discussion to get it to include everyone’s vision for the final display.

**Class participation and team work** – we all help each other in this class. Everyone has different skills and interests that can let them contribute something unique to the whole class. When working on your project you will always have down time when something is soaking and being cleaned, etc.. but that doesn’t mean you have nothing to do. This is the time to help others and they will help you back when you need it.

**University Policies**

By enrolling in this course, you agree to the University Policies listed below. Please read the full text of each policy be going to [www.marshall.edu/academic-affairs](http://www.marshall.edu/academic-affairs) and clicking on “Marshall University Policies.” Or, you can access the policies directly by going to <http://www.marshall.edu/academic-affairs/?page_id=802>

Academic Dishonesty/ Excused Absence Policy for Undergraduates/ Computing Services Acceptable Use/ Inclement Weather/ Dead Week/ Students with Disabilities/ Academic Forgiveness/ Academic Probation and Suspension/ Academic Rights and Responsibilities of Students/ Affirmative Action/ Sexual Harassment