Affordable Learning Georgia Textbook Transformation Grants

Final Report for Mini-Grants

General Information

Date: 7/24/2018

Grant Round: 11

Grant Number: M15

Institution Name(s): Georgia Highlands College

Team Members (Name, Title, Department, Institutions if different, and email address for each): Jason Christian, Instructor of Biology, <u>Jachrist@highlands.edu</u>; Veronica Morin, Associate Professor of Biology, <u>Vmorin@highlands.edu</u>

Project Lead: Jason Christian

Course Name(s) and Course Numbers: Human Anatomy and Physiology 1 (BIOL 2121K)

Final Semester of Project: Summer 2018

If applicable to your project:

Average Number of Students Per Course Section: 24

Number of Course Sections Affected by Implementation of Revised Resources: 30 per year

Total Number of Students Affected by Implementation of Revised Resources: 720 per year

1. Project Narrative

The main goal of this mini-grant project is to create instructional videos to guide students through the anatomical structures that they will learn in the laboratory component of the Human Anatomy & Physiology I (BIOL 2121K) course. These videos will enhance the current laboratory manual by providing additional visual references that students can utilize outside the classroom in order to become familiar with the structures before each lab session. Students can also utilize the instructional videos as reference when they are off campus. The videos will be delivered to faculty and students using D2L and will also be uploaded in Galileo Open Learning repository. The Videos were completed by end of Spring 2018 semester and implemented in the Summer of 2018.

The videos were taken on the anatomy lab by already owned video equipment on the existing models used in the course. Originally we had planned to use an outside company for closed captioning the videos but we learned that by using the YouTube servers, we could utilize their free closed captioning software and make necessary edits to the transcripts for spelling and incorrect transcribing. In the future we plan to do Anatomy and Physiology 2 in a very similar way.

2. Materials Description

We created 47 videos to encompass the entirety of the Anatomy and Physiology 1 lab content. Each video was designed to be short and on one specific topic rather than having one long video covering multiple topics. This allows students to find the specific area they are struggling with quickly and not have to sift through videos to find the correct spot they are looking for.

3. Materials Links

YouTube channel https://www.youtube.com/channel/UCJzco RimSMKvH7sg7TWoGw

Bones

- Skull <u>https://youtu.be/qNfSfZihLds</u>
- Back of Skull <u>https://youtu.be/0w9rUVcLToo</u>
- Front of skull <u>https://youtu.be/AdsoJFwi5bc</u>
- Underside of skull <u>https://youtu.be/NXar8xDkGeo</u>
- Holes on underside of skull <u>https://youtu.be/eZiJ8NjITAE</u>
- Structures on the inside of the skull <u>https://youtu.be/iNyjbkDMdMg</u>
- Side of Skull <u>https://youtu.be/rkxK04qIEgo</u>
- Holes on the inside of the skull <u>https://youtu.be/QBMIu95qBZo</u>
- Vertebra https://youtu.be/8Mcmq6BDjx0
- Clavicle https://youtu.be/Y_SGbxUGF3s
- Femur https://youtu.be/7BFv8HHalpM
- Foot https://youtu.be/zGKxBU2tLII
- Fibula https://youtu.be/ISblv5VaYhU
- Hand <u>https://youtu.be/PGIpevrV-H0</u>
- Humerus <u>https://youtu.be/uMYfKIL_GD4</u>
- Pelvic Girdle <u>https://youtu.be/0TQaz2pC_0Y</u>
- Radius https://youtu.be/cKLpcQ0wTfs
- Sacrum https://youtu.be/GMmt-ZIWKBA
- Scapula https://youtu.be/nZvDcgwT5BE
- Sternum <u>https://youtu.be/VBRjc3SJ890</u>
- Tibia <u>https://youtu.be/CDJkE9p2Yw8</u>
- Ulna <u>https://youtu.be/76idj2RZrMA</u>

Muscles

- Muscles of the face https://youtu.be/T4roswi7yHU
- Muscles of the eye <u>https://youtu.be/mOYQ4h1ymx8</u>
- Chest and Abdomen <u>https://youtu.be/uSsCQcRMOOU</u>
- Side of body <u>https://youtu.be/kjG0zAsk-Rk</u>
- Back of body <u>https://youtu.be/zDdzQoy6Ttc</u>
- Muscles of upper arm https://youtu.be/74zKfJsr8ps
- Muscles of Forearm <u>https://youtu.be/4mrQPTRO8XU</u>
- Muscles of hand https://youtu.be/q46_IMqW_cc
- Muscles of Pelvic floor <u>https://youtu.be/ZeZdBjG1zBE</u>
- Muscles of the Upper Leg <u>https://youtu.be/R1s8lef5zH8</u>
- Muscles of the Lower leg https://youtu.be/CVvx09WKMWE

Nervous system

- Brain External- superior https://youtu.be/k35NH2TJxzU
- Lobes of the Brain <u>https://youtu.be/PSCg6VWWKWs</u>
- Brain Structures of underside <u>https://youtu.be/7ysPLiINTgg</u>
- Brain inside Brain model <u>https://youtu.be/bhhjnL5AwjM</u>
- Brain inside- sagittal head https://youtu.be/XBW8xza9958
- Brain Ventricles https://youtu.be/-qWmF2_IQJE
- Cranial Nerves https://youtu.be/du5XPW3kuol
- Spinal Cord <u>https://youtu.be/e9qHj3OkjyE</u>
- Nerve Anatomy <u>https://youtu.be/coevkPynn78</u>
- Spinal Cord Cross section https://youtu.be/5QGTn1UTfpM

Special Senses

- External and middle ear https://youtu.be/WeWmGPaCWDE
- EYE <u>https://youtu.be/pkpOZHL229w</u>
- Inner ear https://youtu.be/djv-yLY3AVA
- Tongue <u>https://youtu.be/N0A_jdsv0xQ</u>

4. Future Plans

These videos may be revised as the curriculum fluctuates to address new structures required to learn or to remove structures that are no longer required. We may also add one or two videos to describe the histology required in the lab. Our current videography equipment would not allow viewing through the microscope but new photo capable microscopes have been purchased through other means by the school and will allow for high quality images and video of the tissues that are required.