COURSE BACKGROUND
Anatomy and Physiology is a two-semester freshman level course that has no college prerequisites. It is taken by all the students in the health professional majors. These majors include: clinical (medical) laboratory science, exercise physiology, nursing, nutrition, and health and sustainability. The course’s goal is to provide a foundation of basic concepts related to the structure and functions of the human body. The course is taught as a 3 credit lecture course of approximately 80 students accompanied by a separate 1 credit laboratory course of 20-22 students. The course challenges are that the students are novice to college level instruction, and students of the majors are expected to maintain high academic achievements in order to maintain their status in their majors.

EXAMPLES OF INSTRUCTIONAL POWERPOINTS

Forming the Nine Abdominopelvic Regions
Run two vertical lines from midway of the clavicles down.

Forming the Nine Abdominopelvic Regions
Notice that this line separates the abdominal and pelvic cavities.

The Names of the Abdominopelvic Regions
Run one horizontal line through the xiphisternum of the torso. Run the lower horizontal line just below the tops of the hips (transverse colon).

Identify Organs in the Abdominopelvic Regions
These organs are located anteriorly in the top three abdominopelvic regions. Notice that some organs are located in more than one region.

Identify Organs in the Abdominopelvic Regions
Organs located anteriorly in the lower abdominopelvic regions. These organs are in the pelvic cavity.

APPLICATION OF METHOD
Typically, a slide illustrating the torso with the with lines demarking the nine abdominopelvic regions would be shown in the lecture presentation slide. The instructions and highlights indicated in yellow would have been discussed in the lecture. The modified slides include observations which students should pay attention to in order to correctly form the nine regions. For this particular objective, a photograph of the anatomical model that the students use in their lab was used to blend the lecture and laboratory experiences. In other, instructional PowerPoints, questions are added as well as unlabeled illustrations that students can use to test their understanding of the chapter concepts. The intent is to make the PowerPoint handouts interactive tools that engage students and promote active learning rather than being a condensed chapter summary for memorization. This project is ongoing and is currently being piloted in A&P 1.

INSTRUCTIONAL ISSUE ADDRESSED
In meeting the expectations and needs of today’s students, instructors generally make available to students, copies of their PowerPoint slides used in lectures. Why? Some slides are text heavy, and students use them as class notes. Best practices for PowerPoints recommend that PowerPoint slides be used as visual communication tools and that notes be provided separately (Shank, 2011).

Even though I provided the class with separate notes and study guides and had the class sessions available through lecture capture, students were still requesting copies of the PowerPoint slides. When I asked why since my slides were mostly illustrations, they replied that when they looked at the images they could remember the lecture. Upon hearing how the students wanted to use the slides, I decided to modify my presentation slides prior to releasing them to the class.

INSTRUCTIONAL STRATEGY
• Continue to make class notes and study guides available to the class.
• Continue to use visually enhanced PowerPoint for class presentations and discussions.
• Modify PowerPoints based on lesson objectives with focus questions and instructional highlights.
• Release modified PowerPoint packets to students after the completion of each chapter.

Relevant Resources
Acknowledgements
This project evolved from a Technology in Teaching Grant involving Capturing Learning Modules to Enhance More Effective Learning in Anatomy and Physiology 1. In developing the project for the grant, it was discovered that the modified slides had additional pedagogical applications.