

Application of Instructional Design and Technology in Medical Education: CI7083

Kristy A. Brandabur: Final Project  
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**Documentation:**

**Description of Instructional Lesson**

The purpose of this program is to teach an introductory lesson of the Anatomy and Physiology of the Human Body to first term nursing students. For many first term nursing students this will be their first experience with biology and anatomy and physiology since high school. Many of the students in the class are non-traditional, single, working parents. It is imperative to construct a course that provides quality information in a format that is effective, efficient and appealing to a variety of students.

The content to be covered in this lesson is the basic structure or levels of organization of the human body beginning at the cellular level and describing the complex hierarchy to a living organism. The lesson will include PowerPoint presentations, concept mapping, and small group brainstorming activities. At the conclusion of the lesson an assessment will be conducted using a gaming program to determine the level of comprehension.

**Learning Outcomes**

At the completion of this course, students should have a thorough understanding of the basic levels of human development.

- Define the terms anatomy and physiology.
- List, discuss and diagram in order the increasing complex levels of organization of the human body.
- Demonstrate the use of a concept mapping tool Mind42 to measure student retention.

**Assessment**

- PowerPoint presentations will be utilized to discuss lesson materials.
- Small group brainstorming will be used to discuss examples of levels of organization relating to things other than the human body to conceptualize the concept of hierarchy.
- Concept mapping using Mind42 will be used to ensure self-directed learning and to assess the level of student retention of material.

**Schedule/Plan**

<b>Learning Lesson 1</b>		<b>Date 00/00/00</b>	
	<b>Objectives</b>	<b>Content outline</b>	<b>Assessment</b>
Class Period 1	To understand the difference between anatomy and	PowerPoint to present material	Small group brainstorming will be used to discover the

	physiology		concept of hierarchy
Class Period 2	To identify the levels of organization of the human body	Demonstrate the use of Mind42 Work in class on individual concept maps	Students will create a concept map using Mind42 for content retention
Class Period 3	Measure student retention of levels of organization	Using a gaming program assess student retention	Computer generated activity for assessment of retention

**Artifacts:**

**Sample Assessment**

See PowerPoint Presentation attached.

Jing Screencast of Concept Map created. <http://screencast.com/t/w0LqItNb>

Game link: [http://www.quia.com/rr/178887.html?AP\\_rand=1898332697](http://www.quia.com/rr/178887.html?AP_rand=1898332697)

iMap link with screencast and audio presentation. <http://screencast.com/t/E5lqVvoz>

Rubric for Mind42 student project

<b>Exemplary</b> <b>4</b>	<b>Exceeds Standard</b> <b>3</b>	<b>Adequately Meets Standard</b> <b>2</b>	<b>Below Standard</b> <b>1</b>	<b>Student Score</b>
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<p style="text-align: center;"><b>Organization</b></p>	<ul style="list-style-type: none"> <li>• Well organized</li> <li>• Logical format</li> <li>• Contains main concepts</li> <li>• Contains a appropriate number of concepts</li> <li>• Map is “treelike” and not stringy</li> <li>• Follows standard map conventions</li> </ul>	<ul style="list-style-type: none"> <li>• Thoughtfully organized</li> <li>• Easy to follow most of the time</li> <li>• Contains most of the main concepts</li> <li>• Contains an adequate number of concepts</li> <li>• Follows the standard map conventions</li> </ul>	<ul style="list-style-type: none"> <li>• Somewhat organized</li> <li>• Somewhat incoherent</li> <li>• Contains only a few of the main concepts</li> </ul>	<ul style="list-style-type: none"> <li>• Choppy and confusing</li> <li>• Contains a limited number of concepts</li> </ul>	<hr style="width: 50px; margin-left: auto; margin-right: 0;"/>
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<b>Content</b>	<ul style="list-style-type: none"> <li>• Linking words demonstrate superior conceptual understanding</li> <li>• Links are precisely labeled</li> </ul>	<ul style="list-style-type: none"> <li>• Linking words easy to follow but at times ideas unclear</li> <li>• Links are not precisely labeled</li> </ul>	<ul style="list-style-type: none"> <li>• Linking words are clear but present a flawed rationale</li> <li>• Links are not labeled</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to follow</li> <li>• No links</li> </ul>	_____
<b>Cooperation</b>	<ul style="list-style-type: none"> <li>• Worked extremely well with each</li> <li>• Respected and complemented each others ideas</li> </ul>	<ul style="list-style-type: none"> <li>• Worked very well with each other.</li> <li>• Worked to get everyone involved</li> </ul>	<ul style="list-style-type: none"> <li>• Attempted to work well with others.</li> <li>• At times "off task" and not everyone was actively involved</li> </ul>	<ul style="list-style-type: none"> <li>• Little or no teamwork</li> </ul>	_____

**Strategy:**

The strategy for using a concept map application allows students to elaborate on basic information. In nursing, much of what is learned must be applied over various areas of specialty. Using the mapping tool allows me to show students how ideas and concepts are interrelated. In the actual classroom, each student will create a map for each body system and how it interrelates with other systems. This allows students to see the continuity between systems and organisms.