

Review your essay after submission...

D2L home page

FA2013-BIOL-2401 - Human Anatomy and Physiology I - Austin - INT

Updates 157

Calendar | ▼

Friday, December 6, 2013

Upcoming events

DEC 6 12:01 PM Muscle Physiology Essay goes HERE

DEC 20 12:00 AM Exam 3 - (exam 4 materials will appear as exam 3 closes) - Availability Ends

News | ▼

Muscle Exam Review on LearningCatalytics
Posted Dec 5, 2013 5:57 PM

Muscle Exam Review available on
LearningCatalytics
enter session # **497232**

Muscle Essay - Due by noon on Friday Dec 6
Posted Nov 22, 2013 9:40 AM

Dropbox Folders - FA2013-BIOL-2401 - Human Anatomy and Physiology I - Austin - INT - Temple College

Dropbox Folders

View History

20 per page

Folder	Score	Submissions	Feedback	Due Date
No Category				
Muscle Physiology Essay goes HERE	- / 20	1	-	Dec 6, 2013 12:01 PM

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Submission History - FA2013-BIOL-2401 - Human Anatomy and Physiology I - Austin - INT - Temple College

The screenshot shows a Blackboard interface for a course. The top navigation bar includes 'My Home', 'Email', 'Locker', 'Calendar', 'TC Web Mail', and 'TConnect'. The course title is 'FA2013-BIOL-2401 - Human Anatomy and Physiology I - Austin - INT'. The main content area is titled 'Submission History' and shows a folder named 'Muscle Physiology Essay goes HERE'. Below this is a table of submitted files:

Submitted Files	Report	Date Submitted
essay 1.docx (16.2 KB)	3%	Nov 26, 2013 9:51 AM

A red callout box with the text 'hover over and click the color bar' points to the small blue square icon next to the 3% similarity score. A tooltip below the icon reads 'View originality report for essay 1.docx'.

clicking the color bar after the percentage will show you the originality report for your essay.

Review your essay after submission...

Turnitin Document Viewer

GradeMark PeerMark turnitin 45% SIMILAR OUT OF 100

not take.

READ ONLY

In order to keep our bodies moving, our muscular system is involved in constant activation and contraction. It involves coordination of many muscles in order for us to perform movements like walking, jumping or even throwing a ball. Unfortunately we weren't all just born with the ability to move, it is a learned process. We continue to learn this coordinated muscle activation is part of our motor system development as we progress through the different stages of life. Our muscle fibers will generate tension during the action of actin and myosin cross-bridge cycling. Our muscles under tension may shorten, get longer or remain the same. Within the muscular system, the term contraction means our muscle fibers are generating tension with the help of our motor neurons.

There are three major events that happen within our muscular system. An event at the neuromuscular junction involving action potential, events of excitation and contraction coupling, and the event of the cross-bridge cycle. One of the first things to recognize about our muscles is that they are activated by electrical signals from within the nervous system. Our brain is in control of our movements. Muscle physiology shows us that a movement can also occur involuntarily. Our Beating heart muscle through rhythmic pulses is one example. As these electrical signals activate a muscle, it will contract. The neuromuscular junction connects our muscular system to our nervous system through synapses between nerve and muscle fibers known as muscle cells. As an action potential reaches the end of a motor neuron, voltage-dependent calcium channels open allowing calcium to enter the neuron. Calcium binds to sensor proteins on synaptic vesicles triggering vesicle fusion with plasma membrane and subsequent neurotransmitter release from the motor neuron into the synaptic cleft. The nicotinic acetylcholine receptors are ionotropic, meaning they serve as ligand gated ion channels. The binding of ACh to the receptor can depolarize the muscle fiber, causing a cascade that eventually results in muscle contraction. The events at the neuromuscular junction set the stage for the second event of excitation/contraction coupling by providing excitation. The action potential is brief and ends well before any signs of contraction are obvious. The release of acetylcholine binds to receptor proteins on the sarcolemma and triggers an action potential in a muscle fiber. In much the same way as a

Match Overview

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2	muscle.ucsd.edu Internet source	8%
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In this example the text highlighted in red looks quite similar to a section of a paper submitted by a Tarrant County student while the area in brown may have been copied from a website (scioly.org)