

# **HLAC 2105 - PRINCIPLES OF CARDIORESPIRATORY TRAINING**

Department of Exercise Science  
School of Science, Math, and Engineering  
Salt Lake Community College

**Instructor:**

**Office Location:**

**Student consultation hours:**

**E-Mail Address:** Canvas Inbox (Preferred)

## **COURSE DESCRIPTION:**

An intermediate course designed to provide students with the knowledge and practice of cardiorespiratory training. Emphasis is in understanding cardiorespiratory modalities, manipulation of volume and intensity, and how it affects training adaptation and cardiorespiratory health. Students will get to experience various cardiorespiratory training concepts and modalities through in-class and out-of-class workouts. This course emphasizes lifelong fitness and wellness concepts.

**Prerequisites:** None

**Credit Hours:** 1

**Required Text:** None. Cardio Fitness Packet and other materials provided in Canvas.

**Supplies & Tools:** Workout clothes, water/hydration bottle, athletic shoes, and heart rate monitor (one will be provided to check-out for the semester)

## **OBJECTIVES/OUTCOMES**

Students will:

1. Demonstrate knowledge of basic physiology concepts as it relates to cardiorespiratory training.
2. Demonstrate knowledge of cardiorespiratory training modalities.
3. Demonstrate basic skill in cardiorespiratory testing protocols.
4. Demonstrate a knowledge of cardiorespiratory training adaptations and modifications, including benefits and limitations.
5. Demonstrate knowledge of concepts and a strategy to implement a lifelong cardiorespiratory program.

## **COURSE REQUIREMENTS**

All students are required to:

- Regularly attend and actively participate in class. If you choose not to attend, you accept the responsibility for what occurs during your absence.
- Be on time for class. Students who arrive late, leave class early, or fail to dress or participate in class will lose attendance points.

- Complete assignments on time to receive full credit.
- Wear appropriate workout clothing and shoes.
- Notify the instructor immediately in the event of any injury, or change in health status which occurs before, during, or after class. Make safety an important part of your learning experience.
- Cell phone use is not allowed during class time except for MyZone app use during labs. Please make sure that all devices are silenced and stored in your backpack during classroom time. Let's all be fully present during class!
- Practice mutual respect and cooperation. We all contribute to the learning community and can learn from one another. Respect should be shown at all times to the instructor and fellow students.

## COURSE POLICIES

This syllabus contains the policies and expectations that have been established for this course. These policies and expectations are intended to create a productive learning atmosphere for all students. Please bring any concerns or suggestions you may have to my attention. To create and preserve a course atmosphere that optimizes teaching and learning, we all share the responsibility of working together to cultivate a positive learning environment. A positive learning environment includes embracing the diverse identities, viewpoints, and experiences that you all bring to the class. The concepts and ideas we discuss in this class can be applied to everyone, but we must consider the differences in contributions to the field, access to healthcare and exercise opportunities, genetics, and social or cultural beliefs and backgrounds.

- Most assignments will be submitted electronically on Canvas. There will also be activities/assignments completed in class.
- It is assumed that if you are taking this course, you have access to a reliable, up-to-date computer and consistent internet access. Have a backup computer arranged with a friend or family member in case of computer malfunction. Computers are available at the public library and in Salt Lake Community College libraries. If there is a problem with Canvas, the instructor will be the first to know and will adjust due dates if necessary. If you have difficulty accessing the Canvas course site, contact the Salt Lake Community College Help Desk at 801-957-5555.
- Messages will be posted on the course “**Home**” page or in the “**Announcements**” tab in Canvas. Please be sure you read these messages as they contain pertinent information.
- Communication is key! If you have a question, email me through the Canvas Inbox. I typically respond to messages within 24-48 hours during the work week. I also check messages periodically on weekends. Please do not wait to contact me if you are having any issues in or out of the course. It is much easier for me to work with you if I know what is going on as soon as possible.
- To create and preserve a positive learning environment, students are expected to conduct themselves in a manner that does not disrupt teaching or learning, and they are expected to follow these standards: Course discussions (whether in-person or online) should be civilized and respectful to everyone and relevant to the topic we are discussing. Discussion forums are meant to allow for a variety of viewpoints, this can only happen if

we respect one another and our differences. Please see the **Netiquette** Page in Canvas for tips on how to interact with others in an online environment.

- Please see Canvas for the **Institutional Syllabus** with important institutional policy and services information.

### **COURSE SCHEDULE**

This is a face-to-face course that meets for 2 lecture/lab hours per week. Additional course material and assignments will be available in Canvas. A tentative course schedule can be found below and in the Orientation module in Canvas. Assignments will be done primarily through Canvas.

- **Week 1:** Course overview & physiology of cardiorespiratory exercise  
MyZone HR monitor setup
- **Week 2:** Physiology, Metabolism, & Heart Rate Training Concepts  
Bike fits  
Cardio assessment: 12-minute Cooper test
- **Week 3:** Physiology, Metabolism, & Heart Rate Training Concepts  
Cardio assessment: Conconi Test
- **Week 4:** Program Design Concepts  
Class workout
- **Week 5:** Program Design Concepts  
Class workout
- **Week 6:** Aerobic/Endurance (LSD) Theory  
LSD Training Workout
- **Week 7:** Lactate Threshold Theory  
Lactate Training Workout
- **Week 8:** VO<sub>2</sub>max Training Theory  
VO<sub>2</sub>max Training Workout
- **Week 9:** Supra-Maximal Training (MAOD or Supra VO<sub>2</sub>max) Theory  
Supra-Maximal Workout
- **Week 10:** Review  
Class workout
- **Week 11:** Recovery Principles & Theory  
Recovery Workout
- **Week 12:** Putting It All Together & Wrap-up  
Cardio Reassessments: Conconi and 12-minute Cooper tests  
Finalize Conconi data and graphs  
ePortfolio due

### **IMPORTANT DATES**

1st Day of the Semester:

- Full term- August 20
- 1st half 8-week- August 20
- 12-week- September 11
- 2nd half 8-week- October 14

Last Day of Classes:

- Full term- December 5
- 12-week- December 5
- 1st half 8-week- October 12
- 2nd half 8-week- December 5

Holidays:

- September 2- Labor Day (no classes, college closed)
- October 17-18- Fall Break (no classes)
- November 27-30- Thanksgiving (no classes the 27th) (no classes/college closed the 28th-30th)

**GRADING**

- Late work policy: Assignments should be submitted on time. **A 5% deduction will be taken for each day that an assignment is late.** Assignments submitted more than one week after the due date will not be accepted. *Some assignments (Exams, In-class activities) may not be submitted late.*
- If you are more than 10 minutes late or leave early without prior notification you will only receive 80% attendance credit for the day. It is important that you stay until the end of class.

**Incompletes:** An incomplete is a conditional grade given only in extraordinary cases where a student has completed a major portion of the class but is unable to complete coursework due to circumstances beyond their control such as a major illness/injury or a death in the family. Written documentation from your physician will be required.

**Grades:** Student performance is based on a percentage of the possible points. You can check your scores in the Canvas gradebook and should discuss grade concerns with your instructor throughout the semester.

<b><u>Grade Breakdown by Percentage</u></b>					
<b>Grade</b>	<b>Bottom</b>	<b>Top</b>	<b>Grade</b>	<b>Bottom</b>	<b>Top</b>
<b>A</b>	95%	100%	<b>C</b>	73%	76%
<b>A-</b>	90%	94%	<b>C-</b>	70%	72%
<b>B+</b>	87%	89%	<b>D+</b>	65%	69%
<b>B</b>	83%	86%	<b>D</b>	60%	64%
<b>B-</b>	80%	82%	<b>D-</b>	55%	59%
<b>C+</b>	77%	79%	<b>E</b>	0%	54%

<b>Point Breakdown: Assessment</b>	<b>Points</b>	
Out of Class Workouts (5 x 15pts)	75	
Workout Write-Ups (5 x 30pts)	150	
Journal Article Analysis	15	
ACSM Risk Strata Questionnaire	10	
Goals Assignment	30	
Attendance	100	
LW ePortfolio Assignment	100	
Heart Rate Zones	15	
<b>Total</b>	<b>495</b>	

\*The instructor reserves the right to modify dates/points for assignments.

### **GENERAL EDUCATION ePORTFOLIO**

Lifelong Wellness (LW) designated courses are the physical component of the mind/body connection. Good health is critical to a person's quality of life. The instruction given in these courses emphasizes the connection between being physically active and good health. These courses require active participation so students will develop skills in the various fitness, sport, or leisure activities that will be used for life.

Your [General Education](#) ePortfolio tells your SLCC learning story. Your ePortfolio enables you to introduce yourself to your professors and classmates, showcase your learning, and reflect on how your courses connect to each other, your life, goals, and community. The ePortfolio is intended to help you connect with other students and communicate with professors about how you learn, what you are taking away from your experience, and what supported your learning in their class. Professors can use your ePortfolio to get to know you before class and use your reflections and signature assignments to continuously improve their teaching.

Your General Education ePortfolio will also help you weave together the concepts you learn across all general education courses. To do this, each general education course you take at the college will ask you to demonstrate your engagement with the general education learning outcomes by designing a course-specific ePortfolio page that includes a Signature Assignment and reflection. When you finish your time at SLCC, your ePortfolio should provide a multi-media showcase of your educational experience and tell the story of your learning growth while at SLCC. You can learn more and create your ePortfolio by visiting the [SharePoint Gen Ed Hub](#). SharePoint is replacing Digication as the supported General Education ePortfolio platform.

In order for us to learn from your ePortfolio and provide effective support, your ePortfolio must be connected to your MySLCC account. To connect your portfolio to MySLCC:

1. Copy the URL for your ePortfolio from the web browser.
2. Click [here](#), and then click "Submit" under General Education ePortfolio.
3. Paste the link to your Welcome page and click "Save."
4. Finally, confirm that everything worked by clicking on the link and making sure it goes to your Gen Ed ePortfolio Welcome page.

If you would like virtual or in-person help with your ePortfolio please sign up for an ePortfolio appointment [here](#).

### **INSTRUCTIONAL CONTINUITY AND CONTINGENCY PLAN**

In the event of a campus emergency, mandatory action for air quality, inclement weather, instructor absence, or other event that disrupts academic activities the instructor may need to adjust the following:

- course format
- assignments and deadlines
- grading policies
- other course requirements

Possible changes to the class format for this course include:

- shifting from in-person to alternative online assignments such as doing an out-of-class/at home workout or completing an online assignment/discussion on course specific content to count for attendance points
- shifting from in-person to livestream (Zoom) class

Information about changes in the course will be communicated as soon as possible via email and in Canvas. The instructor will do their best to notify students in a timely manner. They will comply with state and college recommendations in making a decision that is in the best interest of the class. It is the responsibility of the student to check Canvas and their email not only regularly but also when there is the potential threat of a disruption to academic activities. Students are expected to contact their instructor promptly if they have any questions or concerns.

### **STUDENT CODE OF CONDUCT**

Each student is expected to follow the SLCC Code of Student Rights and Responsibilities found at: [https://www.slcc.edu/policies/policies/student\\_affairs/8.1.050.aspx](https://www.slcc.edu/policies/policies/student_affairs/8.1.050.aspx)

Use of Artificial Intelligence (AI) in this course:

"Generative artificial intelligence (AI) software is a rapidly emerging tool that students may be interested in using. If doing so, SLCC students are expected to adhere to the same standards as the Code of Student Rights and Responsibilities statement on plagiarism. Presenting generative AI software content as your own is a violation of academic integrity. If you use generative AI in your work, you must indicate that you have done so." -SLCC Dean of Students

Generative AI can be an excellent resource, but your own thoughts and words must be used on all assignments and discussion posts. If any sources are used, including generative AI, they must be properly cited. As stated in the SLCC Code of Student Rights and Responsibilities, " Students who are unsure of what constitutes plagiarism should consult with their instructors. Claims of ignorance will not necessarily excuse the offense."


### **MEDICAL CONSIDERATIONS**

If you have any doubts about your health in relation to this course, consult with your doctor and then your instructor before beginning your program. Notify the instructor immediately in the

event of any injury, or change in health status which occurs before, during, or after class. Please do not leave class without notifying the instructor.

**ACCESSIBILITY AND DISABILITY SERVICES**

SLCC values inclusive learning environments and strives to make all aspects of the College accessible to our students. If you have a disability and believe you need accommodations to improve access to learning materials or the learning environment, please contact the Disability



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policies, procedures, and services available to students (such as the [Bruin Pantry](#) and [Center for Health and Counseling](#)).