



The Physiology of Human Performance

figs.wisc.edu/2019fall59

FIG 59 • Fall 2019

main class instructor: **Gary Diffie**

9 credits

MAIN CLASS

Kinesiology 115

Physiology of Human Performance

LINKED CLASS

Chemistry 103

General Chemistry I

LINKED CLASS

Kinesiology 119

Introduction to Kinesiology

For many years, physiologists have used exercise as a way of studying the limits of human performance. An athlete running as fast as a human is capable of running, or lifting as heavy a weight as she can lift is an excellent way of observing the limits of performance. By studying physiological processes when they are being pushed to their limits, we can learn a lot about these processes—the regulation of the processes, the constraints that they operate under, and how processes may adapt to improve performance.

In Kinesiology 115: “The Physiology of Human Performance,”

we will be exploring the factors that influence human performance in the context of exercise or performing other physical work. We will examine a number of case studies where the goal will be to determine what the physiological factors are that are limiting performance. We will consider cases of athletic performance, other work conditions, age and developmental issues, as well as injury or other pathological conditions, among many other cases. We will also spend some class time in an Exercise Physiology laboratory where we will collect some data on subjects while they are exercising. We will then use these data to determine some of the underlying physiological processes that are at work during different types of exercise. The other two class in this FIG are well matched with this small seminar class and provide many opportunities to integrate material across different subject areas.

Chemistry 103: “General Chemistry I”

— Provides an understanding the basic chemical

reactions that underlie many physiological processes and allows us to connect these two areas. How are our muscles’ ability to perform work ultimately limited by the underlying chemical reactions in the muscle?

Kinesiology 119: “Introduction to Kinesiology”

— Allows us to place the physiology that we are exploring into the larger context of the field of kinesiology. How do people use the physiological responses to exercise to help understand the role of exercise and movement in health and disease? Given the course subject matter that we will explore, as well as the paired courses, this FIG is an excellent learning opportunity for students who:

- may want to explore a major in kinesiology;
- may be interested in medical school;
- have plans to study athletic training, physical/occupational therapy, or other allied health professions;
- are interested in biology; or
- have a general interest in learning more about exercise and/or physiology. ●

[more on the other side](#)

The Physiology of Human Performance

figs.wisc.edu/2019fall59

FIG 59 • Fall 2019

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
8:00 am					
9:00 am					
10:00 am		KINES 115 LEC 1 9:30–10:45 am	CHEM 103 DIS 352 9:55–10:45 am	KINES 115 LEC 1 9:30–10:45 am	CHEM 103 DIS 352 9:55–10:45 am
11:00 am					
12:00 pm				CHEM 103 LAB 652 11:00–2:00 pm	
1:00 pm					
2:00 pm					
3:00 pm		KINES 119 LEC 1 2:25–3:15 pm		KINES 119 LEC 1 2:25–3:15 pm	
4:00 pm	CHEM 103 LEC 3 3:30–4:20 pm		CHEM 103 LEC 3 3:30–4:20 pm		CHEM 103 LEC 3 3:30–4:20 pm
5:00 pm					
6:00 pm					

Enrolled in a FIG and you change your mind?

FIG classes are designed to be taken together. When you enroll in a FIG, you are signed up for these classes as a whole group, not as separate classes.

Dropping one FIG class means ending your enrollment in all of the classes in the FIG.

So, here's what you should know if you want to drop the FIG:

- You can drop all the classes on your own at enroll.wisc.edu. Any non-FIG class will not be affected.
- After classes begin, if you need to drop a single class within the FIG, please contact Kari Fernholz (see below) to review your situation. If necessary, she will provide the required authorization to drop the class.
- Wednesday, September 11, 2019** is the last day to drop a class without it appearing on your college transcript.
- Friday, September 13, 2019** is the last day to add a class without first getting department permission.

MAIN CLASS

Kinesiology 115 Physiology of Human Performance

LEC 1: TR 9:30–10:45

- Elementary
- credits: 3
- class number: **42866**

LINKED CLASS

Chemistry 103 General Chemistry I

LEC 3: MWF 3:30–4:20 +
DIS 352: WF 9:55–10:45 +
LAB 652: R 11:00–2:00

- Quantitative Reasoning Part B
- Physical Science
- Elementary

credits: 4
class number: **45021**

LINKED CLASS

Kinesiology 119 Introduction to Kinesiology

LEC 1: TR 2:25–3:15

credits: 2
class number: **42484**



University of Wisconsin–Madison • figs.wisc.edu

Nathan Phelps, director • 608-263-6504 • nathan.phelps@wisc.edu

get help from **Kari Fernholz**, assistant director
608-262-7375 • kari.fernholz@wisc.edu

June 4, 2019 11:07 AM