# Western Kentucky University Doctor of Physical Therapy Program Summer 2020

Course Number / Title: DPT 724 Pathophysiology

Credit Hours: 4

Weekly Schedule: Monday – Friday, 9:00 – 11:30 am

Office Hours: Zoom or phone by appointment

**Location:** online

**Instructor:** David L Bell, PT, DPT, PhD, OCS, MTC, Cert DN

Mobile phone: (270) 929-3737 (call or text); Email: david.bell@wku.edu

# **Course Description:**

Fundamentals of physiology and pathology related to diseases causing abnormal movement patterns or capabilities. Processes and diseases most frequently encountered in physical therapy practice emphasized. Prerequisite: Open only to DPT students in good standing.

#### **Course Objectives:**

At the completion of the course content, the student will be able to:

Obj#	CAPTE	Objective	
1	7A	Understand the pathology of common diseases encountered in physical therapist	
	7B	practice and their contribution to impairments, activity and participation restrictions.	
	7C	Systems include cardiovascular, endocrine and metabolic, gastrointestinal, genital and	
	7D21	reproductive, hematologic, hepatic and biliary, immune, integumentary, lymphatic,	
		musculoskeletal, nervous, respiratory, renal and urologic, as well as system	
		interactions. Genetic, communication, and nutritional disorders are also addressed.	
2	7A; 7B;	Compare and contrast the signs and symptoms that distinguish/differentiate common	
	7D20	diseases encountered in physical therapist practice.	
3	7D16	Describe signs and symptoms that indicate an emergency or warrant medical	
		consultation.	
4	7A; 7C	Describe the physiological responses to injury and the stages of healing.	
5	7C	Describe the physiological responses to infection and the development of immunity.	
6	7D20	Identify abnormalities in laboratory data pertinent to physical therapy interventions.	

# **Course Structure and Learning Experience:**

The format for instruction is one that combines lecture, discussion, reading, and online media. Most lectures are online through Mediasite. Classroom sessions and discussions will also take place via Zoom during regularly scheduled class meeting times.

### **Evaluation Methods:**

#### 1. Attendance

Attendance in all synchronous learning experiences is expected monitored. Students are considered tardy if they are not signed in to the online session by the scheduled starting time. Consequently, 1% of the total grade will be deducted per late arrival and 2% of the total grade will be deducted per unexcused absence. Due to the unusual circumstance of this course being offered online during the summer, it is possible that not all scheduled class times will include a synchronous meeting. However, students are expected to be available during regularly scheduled class times for online synchronous meetings. The instructor reserves the right to call synchronous meetings at short notice to alter or discuss course content, answer questions, etc.

### 2. Testing

#### a. Written Exams

There will be 4 exams, each worth 100 points. If any student does not or cannot take an exam due to an emergency, plans must be made at the discretion of the professor to complete all coursework within a specified time period. Each student must take all exams.

### b. Quizzes

There will be 16 quizzes, each worth 10 points. Ten minutes are allowed for each quiz.

### 3. Grading

### a. Course Grading

The final course grade is a letter grade. The course grade will be based on the following:

Exams (4) 400 points
Quizzes (16) 160 points
Total 560 points

# b. Numeric and Letter Grade Translation

A 90-100 B 80-89 C 70-79 F <70

Grades are not rounded up. For example, 89.99 is not rounded up to 90.

#### **Instructional Practices:**

# 1. Teaching Methods

- a. Lecture (Mediasite, Zoom)
- b. Class discussion (Zoom)
- c. Student self-study

# 2. Teaching Aides

- a. Mediasite presentations
- b. Video
- c. Supplemental reading

#### **Supplemental Reading:**

• Goodman C, Fuller K. *Pathophysiology: Implications for the Physical Therapist*. 4th ed. St Louis: Elsevier, Inc; 2015. (This text is the primary resource for lecture material.)

Available through Access Physiotherapy:

• Hammer G, McPhee S, eds. *Pathophysiology of Disease: An Introduction to Clinical Medicine*. 8th ed. New York, NY: McGraw-Hill; 2019.

- Kemp W, Burns D, Brown T, eds. *Pathology: The Big Picture*. New York, NY: McGraw-Hill; 2008.
- Kibble J, Halsey C, eds. *Medical Physiology: The Big Picture*. New York, NY: McGraw-Hill; 2014.

### **Course Policies**

# Refer to WKU DPT Student Manual for the following items:

- a. Student Responsibilities (p. 40)
- b. Student Accessibility Resource Center (SARC) (p. 48)
- c. Copyright (p. 42)
- d. Academic Misconduct (p. 27)
- e. Religious Holidays Notification (p. 35)
- f. WKU Writing Center (p. 49)
- g. Class Attendance and Course Policies (p. 35)
- h. Professional Behaviors (p. 22)

#### **Title IX Statement:**

Western Kentucky University (WKU) is committed to supporting faculty, staff and students by upholding WKU's Title IX Sexual Misconduct/Assault Policy (#0.2070) at <a href="https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf">https://wku.edu/eoo/documents/titleix/wkutitleixpolicyandgrievanceprocedure.pdf</a> and

Discrimination and Harassment Policy (#0.2040) at

https://wku.edu/policies/hr\_policies/2040\_discrimination\_harassment\_policy.pdf.

Under these policies, discrimination, harassment and/or sexual misconduct based on sex/gender are prohibited. If you experience an incident of sex/gender-based discrimination, harassment and/or sexual misconduct, you are encouraged to report it to the Title IX Coordinator, Andrea Anderson, 270-745-5398 or Title IX Investigators, Michael Crowe, 270-745-5429 or Joshua Hayes, 270-745-5121. Please note that while you may report an incident of sex/gender-based discrimination, harassment and/or sexual misconduct to the faculty member, WKU faculty are "Responsible Employees" of the University and MUST report what you share to WKU's Title IX Coordinator or Title IX Investigator. If you would like to speak with someone who may be able to afford you confidentiality, you may contact WKU's Counseling and Testing Center at 270-745-3159.

### **Student Accessibility Resource Center (SARC):**

In compliance with University policy, students with disabilities who require academic and/or auxiliary accommodations for this course must contact the Student Accessibility Resource Center located in Downing Student Union, 1074. SARC can be reached by phone number at 270-745-5004 [270-745-3030 TTY] or via email at <a href="mailto:sarc.connect@wku.edu">sarc.connect@wku.edu</a>. Please do not request accommodations directly from the professor or instructor without a Faculty Notification Letter (FNL) from The Student Accessibility Resource Center. For additional information, visit: <a href="http://www.wku.edu/sarc/">http://www.wku.edu/sarc/</a>.

# DPT 724 Pathophysiology Summer 2020 Class Schedule

Week	Date	Topic
1	Mon, June 8	Introduction
		Injury, Inflammation, and Repair
	Tues, June 9	Quiz 1; Immune System
	Wed, June 10	Quiz 2; Infectious Disease
	Thurs, June 11	Quiz 3; Cancer
	Fri, June 12	Quiz 4; Integumentary System
2	Mon, June 15	Quiz 5; Lymphatic System
	Tues, June 16	Exam 1
	Wed, June 17	Cardiovascular System
	Thurs, June 18	Quiz 6; Respiratory System
	Fri, June 19	Quiz 7; Renal and Urologic System
3	Mon, June 22	Quiz 8; Hematologic System
	Tues, June 23	Quiz 9; Endocrine and Metabolic System
	Wed, June 24	Quiz 10; Gastrointestinal System
	Thurs, June 25	Exam 2
	Fri, June 26	Hepatic and Biliary System
4	Mon, June 29	Quiz 11; Genital and Reproductive System
	Tues, June 30	Quiz 12; Intro to CNS Disorders;
		CNS Infections;
		CNS Neoplasms;
	Wed, July 1	Quiz 13; Epilepsy, Headaches, Vestibular Disorders
	Thurs, July 2	Exam 3
	Fri, July 3	No class
5	Mon, July 6	Peripheral Nervous System Disorders
	Tues, July 7	Quiz 14; Musculoskeletal System: MSK Disorders;
		MSK Infections;
		MSK Neoplasms
	Wed, July 8	Quiz 15; Bone, Joint, and Soft Tissue Disorders
	Thurs, July 9	Quiz 16; Genetic and Developmental Disorders;
		Transplantation
	Fri, July 10	Final Exam

The instructor reserves the right to make changes in the course schedule as needed to accommodate guest lecturers or to alter course content.