**NEW MEXICO STATE UNIVERSITY**

**Masters of Science in Clinical Psychopharmacology Degree Program**

**CLASS/MODULE #12 TRAINING OUTLINE**

**Course #** RXPP 606

**Official Title:** Digestive and Musculoskeletal Systems

*Note: An introduction to the Integumentary System will be provided if time allows.*

**Credit Hours:** 3.0 Credit Hours

**Continuing Education:** 13.5 CE (Provided by SIAP, Sponsored by APA)

*SIAP is approved by the American Psychological Association*

*to sponsor continuing education for psychologists.*

*SIAP maintains responsibility for the program and its content*

**Location:** Online ONLY: [**http://nmsu.adobeconnect.com/psypharm**](http://nmsu.adobeconnect.com/psypharm)

**Class Meeting Date:** July 18 & 19, 2020

8:00am – 5:00pm

**Instructor(s):** Davena Norris, Pharm.D., PhC, BCPS

**Required Text:** McCance, K.L., Huether, S.E., Brashers, V.L., & Rote, N.S. (2014). *Pathophysiology: The biological basis for disease in adults and children* (7th ed.). Chapters 40-47. pp. 1393-1667

**Recommended Readings:**

Deyle GD, Allen CS, Allison SC, et al. (2020). Physical therapy versus glucocorticoid injection for osteoarthritis of the knee. *N Engl J Med,* 382:1420-1429. <https://www.nejm.org/doi/pdf/10.1056/NEJMoa1905877?listPDF=true>

Heymsfield SB & Wadden TA. (2017). Mechanism, pathophysiology, and management of obesity. *N Engl J Med*, 376:254-266. <http://www.sisdca.it/public/pdf/Mechanisms,-pathophysiology-and-management-of-Obesity---Heymsfield-2017.pdf>

Mounsey A, Raleigh M, & Wilson A. (2015). Management of constipation in older adults. *Am Fam Physician, 92*(6):500-504. <https://www.aafp.org/afp/2015/0915/p500.pdf>

Rahman A, Underwood M, & Carnes D. (2014). Fibromyalgia. *BMJ*, 348: 28-32. <https://www.bmj.com/bmj/section-pdf/752708?path=/bmj/348/7947/Clinical_Review.full.pdf>

**Day 1: Digestive System**

**Training Description:** Students will learn about the structure and function of the digestive system, disorders of the gastrointestinal (GI) tract, and disorders of the accessory organs of digestion (liver, gallbladder, and pancreas).

**Learning Objectives:** By the end of the training, students will be able to:

1. Name 5 organs in the GI tract and 3 accessory organs of digestion.
2. Describe the process of digestion and absorption for 1 of the following nutrients: carbohydrates, proteins, or fats.
3. Describe at least 3 functions of the liver, 1 function of the gallbladder, and 1 function of the exocrine pancreas.
4. Review the pathophysiology of primary and secondary constipation and treatment options.
5. Explain the clinical manifestations and treatment of at least 1 disorder of motility.
6. List at least 2 risk factors for peptic ulcer disease.
7. Differentiate ulcerative colitis and Crohn’s disease using the following features: location of lesions, area affected, and the presence of abdominal pain and bloody stools.
8. Review the pathophysiology of obesity.
9. Recognize at least 2 complications of liver disease.
10. Describe the clinical manifestations and treatment of 1 digestive system disorder in children.

**Day 2: Musculoskeletal System**

**Training Description:** Students will learn about the structure and function of the musculoskeletal system, musculoskeletal injuries, and disorders of bones, joints, and skeletal muscles.

**Learning Objectives:** By the end of the training, students will be able to:

1. Describe the function of the 3 bone cells.
2. Compare common traumatic injuries, including fractures, dislocations, strains, and sprains.
3. Describe the pathophysiology, classic triad, and treatment of rhabdomyolysis.
4. List 2 patient populations at higher risk of osteoporosis and summarize prevention and treatment recommendations.
5. Explain and differentiate between the common types of arthritis, including an explanation of clinical presentation, diagnosis, and therapeutic interventions.
6. Review the clinical manifestations and treatment of fibromyalgia.
7. Name at least 2 musculoskeletal alterations in children.

**Evaluation:** Preparation and participation is expected with students' attendance. There will be a test (short answer and multiple choice), which will be provided for students to review before and during class. Graded examination will be submitted, via email, to the Training Director. Case discussions will be presented that involve conditions germane to class/course subject matter. Some of the case discussions will be presented during class, while the students will complete others independently. Academic integrity and conduct is expected. ***All graded assignments are due on Sunday, August 2, 2020, by 11:59 pm.*** Unexcused late submissions may be penalized 2 points per day; and students will receive 0 points on any assignment not submitted after 7 days.

**Grading Assignments Points Possible**

Test 25 pts

Case Analysis (combines days 1 and 2) 60 pts

Participation/Attendance (Via AdobeConnect) 15 pts (Both days/modules)

**Course grades:**

90-100 pts total = “A”

80-89 pts total = “B”

70-79 pts total = “C”

***Students with Disabilities:*** *If you have or believe you have a disability, you may wish to self- identify. You can do so by providing documentation to the Office for Services for Students with Disabilities, located at Garcia Annex (telephone: 646-6840). Appropriate accommodations may then be provided for you. If you have a condition which may affect your ability to exit from the premises in an emergency or which may cause an emergency during class, you are encouraged to discuss this in confidence with the instructor and/or the director of Disabled Student Programs. If you have questions about the Americans with Disabilities Act (ADA), call 646-3635.*

***Student Complaints:*** *If students have a complaint about a course, they are advised to discuss their concerns directly with the instructor whenever possible. If that does not resolve the problem or if they cannot approach the instructor, students should either access NMSU’s online complaint system at https://dos.nmsu.edu/concerns/ or seek out the department head (eadams@nmsu.edu) for help resolving the problem. Both of these processes provide opportunities for the department head to know about issues that need attention and for instructors to receive information about student concerns so that they can respond.*

**Further Notice:** Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act Amendments Act (ADAAA) covers issues relating to disability and accommodations. If a student has questions or needs an accommodation in the classroom (all medical information is treated confidentially), contact:

Trudy Luken, Director

Student Accessibility Services (SAS) - Corbett Center Student Union, Rm. 208

Phone: (575) 646-6840

E-mail: sas@nmsu.edu Website: http://sas.nmsu.edu/

NMSU policy prohibits discrimination on the basis of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex, sexual orientation, spousal affiliation and protected veterans status.

Furthermore, Title IX prohibits sex discrimination to include sexual misconduct: sexual violence (sexual assault, rape), sexual harassment and retaliation. For more information on discrimination issues, Title IX, Campus SaVE Act, NMSU Policy Chapter 3.25, NMSU's complaint process, or to file a complaint contact:

Lauri Millot, Director and Title IX Coordinator

Agustin Diaz, Associate Director, Title IX Deputy Coordinator Office of Institutional Equity (OIE)

O'Loughlin House, 1130 University Avenue

Phone: (575) 646-3635

Email: [equity@nmsu.edu](mailto:equity@nmsu.edu)

Website: http://eeo.nmsu.edu

**Other NMSU Resources:**

NMSU Police Department (575) 646-3311

[www.nmsupolice.com](http://www.nmsupolice.com)

NMSU Police Victim Services (575) 646-3424

NMSU Counseling Center (575) 646-2731

NMSU Dean of Students (575) 646-1722

For Any On-campus Emergencies 911

**The Instructor of Record reserves the right to make changes in the syllabus and timeline of the class. As feasible, any changes will be made in advance and with student input.**