

## SYLLABUS

**Name of Course:** GASTROINTESTINAL PHYSIOPATHOLOGY (PHPA-213)

**Length of Course:** 2 units, 33 hours (3 hrs lecture/week)

**Course Description:** Normal gastrointestinal anatomy and physiology is studied. The most significant of the digestive system pathologies are also studied. Clinical considerations are emphasized.

**Prerequisites:** PHYS-122, PATH-120

**Course Offered by:** Basic Sciences Department

**Required Text:** Hall, John E. Guyton and Hall textbook of medical physiology. Latest edition. Philadelphia, PA : Saunders/Elsevier

**Reference Texts:** Vinay Kumar ...[et al]. Robins and Cotran pathologic basis of disease. Latest edition. Philadelphia, PA : Saunders/Elsevier

**Method of Instruction:** Lecture/discussion, Power point presentation, whiteboard

**Evaluation/Grading Criteria:**

Midterm 1	25%	Approximately week 4
2 Quizzes	25%	Approximately week 6 and 8
Cumulative Final	50%	Week 11
Total	100%	

**Grades and the Grading System Final Grades** are available online through the CAMS student portal. If there are any questions on grading procedures, computation of grade point average, or the accuracy of the grade report, please contact the Registrar's Office or the Office of Academic Affairs. Grades will be reported and evaluation will be based on the Academic Policies, Procedures, & Services. Please refer to Evaluation Policy (**Policy ID: OAA.0007**)

In order to maintain **Satisfactory Academic Progress**, a student must maintain a 2.0 or better in each and every course. **Any grade less than a C must be remedied by repeating the class.** Please refer to Satisfactory Academic Progress (**Policy ID: OAA.0006**)

**Attendance:** Please refer to Attendance Policy (**Policy ID: OAA.0002**)

**Conduct and Responsibilities:** Please refer to the Personal Conduct, Responsibility and Academic Responsibility Policy (**Policy ID: OAA.0003**)

**Make-up Exams:** Please refer to Make-up Assessment Policy (**Policy ID: OAA.0001**)

**Request for Special Testing:** Please refer to Request for Special Testing (**Policy ID: OAA.0004**)

**Accommodation for Students with Disabilities:**

If you have approved accommodations, please make an appointment to meet with your instructor as soon as possible. If you believe you require an accommodation, but do not have an approved accommodation letter, please see the Academic Counselor Lori Pino in the Office of Academic Affairs. Contact info: [Lpino@lifewest.edu](mailto:Lpino@lifewest.edu) or 510-780-4500 ext. 2061. Please refer to Service for Students with Disabilities Policy (**Policy ID: OAA.0005**)

**Electronic Course Management:**

**Canvas** is LCCW's Learning Management System (LMS). Canvas will be used throughout the quarter during this course. Lectures, reminders, and messages will be posted. In addition, documents such as the course syllabus and helpful information about the class project will be posted. Students are expected to check Canvas at least once a week in order to keep updated. The website address for Canvas is <https://lifewest.instructure.com/login/canvas> Please refer to the Educational Technologies Policy (**Policy ID: OAA.0009**)

**Course Goals:** The student is expected to understand the Anatomy, Physiology and Pathology involving the gastrointestinal tract and associated organs, and recognize clinical features of abnormal conditions present in the GI tract and associated organs.

**Curricular Objectives:** [Council of Chiropractic Education (CCE) and LCCW Mapping]

1. Formulate a diagnosis/es supported by information gathered from the history, examination, and diagnostic studies. [CCE: 1E]
2. Explain health risk factors, leading health indicators and public health issues to patients. [CCE: 3B]

**Course Topics:**

- Overview of digestive tract.
- Oral cavity-anatomy and function of the oral cavity, teeth, and salivary glands.
- Pathologies including Xerostomia, leukoplakia, erythroplakia, and cavities.
- Anatomy, function and pathologies such as atresia, fistula, achalasia, hernias, GERD, Barrett's esophagus, scleroderma, Mallory-Weis syndrome, and Plummer-Vinson affecting the esophagus.
- Anatomy and function of the stomach.
- Discuss pathologies of the stomach which include gastritis, peptic ulcers, Zollinger-Ellison syndrome, and malignancies

- Anatomy and physiology of the small and large intestine.
- Pathologies commonly seen affecting the small and large intestines including: Meckel's diverticulum, Hirschprung's disease, Enterocolitis, malabsorptive conditions, Crohn's disease, Ulcerative Colitis, intestinal obstructions, and malignancies.
- Anatomy of the liver including the functional and structural description.
- Pathologies commonly seen in the liver including cirrhosis, portal hypertension, hepatitis A, B, C, D, and E, alcoholic liver disease, and malignancies

If time allows,

- Anatomy and physiology of the pancreas.
- Pathologies of the pancreas such as acute and chronic pancreatitis, and cancer.

### **Student Learning Objectives (SLOs):**

**This course aligns to PLOs: (1 and 3)**

The student will be able to differentiate disorders of GI motility, such as diarrhea, irritable bowel syndrome, and constipation.

The student will comprehend the physiology of the alimentary canal, including the functions of hormones and enzymes.

The student will be able to discuss the pathologies of the alimentary canal, from the mouth to the anus, as well as accessory organs associated with the GI canal.

**Program Learning Outcomes (PLO):** Students graduating with a Doctor of Chiropractic degree will be proficient in the following:

- 1. ASSESSMENT AND DIAGNOSIS:** An assessment and diagnosis requires developed clinical reasoning skills. Clinical reasoning consists of data gathering and interpretation, hypothesis generation and testing, and critical evaluation of diagnostic strategies. It is a dynamic process that occurs before, during, and after the collection of data through history, physical examination, imaging, laboratory tests and case-related clinical services.
- 2. MANAGEMENT PLAN:** Management involves the development, implementation and documentation of a patient care plan for positively impacting a patient's health and well-being, including specific therapeutic goals and prognoses. It may include case follow-up, referral, and/or collaborative care.
- 3. HEALTH PROMOTION AND DISEASE PREVENTION:** Health promotion and disease prevention requires an understanding and application of epidemiological principles regarding the nature and identification of health issues in diverse populations and recognizes the impact of biological, chemical, behavioral, structural, psychosocial and environmental factors on general health.
- 4. COMMUNICATION AND RECORD KEEPING:** Effective communication includes oral, written and nonverbal skills with appropriate sensitivity, clarity and control for a wide range of healthcare related activities, to include patient care, professional

- communication, health education, and record keeping and reporting.
5. **PROFESSIONAL ETHICS AND JURISPRUDENCE:** Professionals comply with the law and exhibit ethical behavior.
  6. **INFORMATION AND TECHNOLOGY LITERACY:** Information literacy is a set of abilities, including the use of technology, to locate, evaluate and integrate research and other types of evidence to manage patient care.
  7. **CHIROPRACTIC ADJUSTMENT/MANIPULATION:** Doctors of chiropractic employ the adjustment/manipulation to address joint and neurophysiologic dysfunction. The adjustment/manipulation is a precise procedure requiring the discrimination and identification of dysfunction, interpretation and application of clinical knowledge; and, the use of cognitive and psychomotor skills.
  8. **INTERPROFESSIONAL EDUCATION:** Students have the knowledge, skills and values necessary to function as part of an inter-professional team to provide patient-centered collaborative care. Inter-professional teamwork may be demonstrated in didactic, clinical or simulated learning environments.
  9. **BUSINESS:** Assessing personal skills and attributes, developing leadership skills, leveraging talents and strengths that provide an achievable expectation for graduate success. Adopting a systems-based approach to business operations. Networking with practitioners in associated fields with chiropractic, alternative medicine and allopathic medicine. Experiencing and acquiring the hard business skills required to open and operate an on-going business concern. Participating in practical, real time events that promote business building and quantifiable marketing research outcomes
  10. **PHILOSOPHY:** Demonstrates an ability to incorporate a philosophically based Chiropractic paradigm in approach to patient care. Demonstrates an understanding of both traditional and contemporary Chiropractic philosophic concepts and principles. Demonstrates an understanding of the concepts of philosophy, science, and art in chiropractic principles and their importance to chiropractic practice.