

2019/2020
Course Objectives

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MS II

CLIND 1603: Mental Illness and Treatments

This course focuses on psychiatric evaluation, assessment and psychopharmacological treatment options in psychiatric practice. By the end of this course, you should be able to (a) match a given set of diagnostic descriptive data with the most appropriate treatment option(s), b) describe the clinical course, prognosis, and biopsychosocial factors that impact treatment implementation c) identify appropriate assessment tools for the identification and management of psychiatric conditions. This course will also provide techniques for building therapeutic alliance, patient/family education, and treatment plan negotiating.

CLIND 1652, 1653, 1654: Clinical Symptom Integration I-III

Upon completion of these courses, the student should be able to:

- Provide an accurate description of each symptom, disease state/syndrome presented in class.
- Describe the pathophysiology for each disease state/syndrome presented in class.
- List and describe common signs and symptoms for each disease state/syndrome presented in class.
- Develop a thorough differential diagnosis for common patient complaints.
- Interpret laboratory and radiologic findings necessary to confirm suspected diagnoses.
- Arrive at the most likely diagnosis for common patient complaints.
- Prescribe an appropriate therapeutic regimen and anticipate common adverse consequences as a result of such therapy for common patient complaints.
- Be able to discuss the appropriate osteopathic corollary as it relates to the symptom, disease state/syndrome presented in class.
- Explain the importance of the behavioral medicine aspect/component of each symptom, disease state/symptom presented in class.
- Recognize the important aspects of spirit, end of life care, and ethical aspects of medicine

CLIND 1662, 1663, 1664: Simulated Patient Care I-III

At the conclusion of these courses, the student should be able to:

- Demonstrate a complete head-to-toe physical examination with proficiency in inspection, percussion, palpation, and auscultation.
- Demonstrate an integrated-osteopathic structural examination.
- Accurately document: history and physical examination, progress note, SOAP note, discharge summary, and an osteopathic examination.
- Demonstrate proficiency in using a stethoscope, an ophthalmoscope, an otoscope, a reflex hammer, a sphygmomanometer, and a tuning fork.
- Correctly interpret an electrocardiogram, variety of radiographs, such as chest, abdominal, and musculoskeletal, etc.) arterial blood gas, basic laboratory diagnostic tests (including, but not limited to, complete blood count, basic/comprehensive metabolic profile, coagulation profile, urinalysis, thyroid studies, and cardiac markers).
- Properly present a case in oral and written format.
- Develop a thorough diagnosis for any chief complaint.
- Discuss the proper approach to evaluating and managing a patient based upon their chief complaint, history, and physical examination.
- Satisfactorily perform Objective Structured Clinical Examinations (OSCEs).

MICRO 1652, 1653: Infectious Disease, Etiologic Agents and the Immune Response I-II

With the successful completion of these courses students will:

- Understand the basic biology of the groups of infectious agents that cause disease in humans (bacteria, viruses, protozoa, fungi, helminths).
- Be able to identify key infectious agents based on staining and microscopy.
- Be familiar with the different drug classes in antimicrobial therapy, the groups of infectious agents susceptible or resistant to these classes and the mechanisms of resistance to these drugs.
- Be familiar with the concepts, processes, and compounds related to sterilization, disinfection, and antisepsis.
- Understand the important biological characteristics of individual infectious agents that cause disease in humans.
- Understand the key concepts related to host-parasite interactions and the epidemiology of infectious diseases.
- Understand the importance of normal microbial flora in human health and disease.
- Be able to discuss the epidemiology (patient populations at risk and predisposing factors), explain (mechanism of pathogenesis and immunity), and describe (patient signs and symptom) the major, common, infectious diseases that occur in each major organ system (Respiratory tract; Gastrointestinal tract; Central nervous system; Skin, soft tissue and muscle; Bone and joint; Lymphoreticular system; Mouth, eye, ears and sinuses) and the important etiologic agents responsible for these infectious diseases.

- Be able to develop a differential diagnosis, order and interpret appropriate lab test based on that differential diagnosis, provide treatment and preventative measures for common infectious diseases based on a clinical presentation via paper cases.
- Be taught how to develop an algorithmic approach for each organ system including signs and symptoms, differential diagnosis, ordering and interpreting lab test, treatment and prevention.
- Be able to discuss the structural findings detected and osteopathic manipulative techniques used in many common infectious diseases.
- Be able to describe basic antigenic characteristics of microorganisms including factors pertinent to clinical medicine, vaccination and immunotherapy.
- Be able to list the cells and cell products involved in host defense mechanisms, including their origin, function, and their role in health, the infectious processes and immunologic disorders.
- Be able to describe the basic strategies of host defense related to combating various categories of pathogens.
- Be able to describe the mechanisms of the different hypersensitivity reactions and their clinical manifestations.
- Be able to describe the mechanisms of different transplant reactions, autoimmune diseases, and immunodeficiencies and their resulting clinical manifestations.
- Be able to explain the different methods of laboratory diagnosis using antigen and antibody-based tests.

OMEDD 1652, 1653, 1654 and OMEDD 1662, 1663, 1664: OMM Lecture I-III and OMM Workshop I-III

The goals of the OMS I and OMS II Osteopathic Manipulative Medicine courses are to:

- Provide the student with the fundamental knowledge of osteopathic principles.
- Provide the student with the basic skills to diagnose somatic dysfunction in all 10 regions of the body.
- Introduce the student to the basic principles of the various osteopathic manipulative techniques including soft tissue, counterstrain, myofascial release, facilitated

positional release, indirect, muscle energy, HVLA, Still technique, and osteopathy in the cranial field.

- Instruct the student in proper technique for performing and executing the various osteopathic treatment techniques.
- Demonstrate to the student how to integrate OMT into general medical care.
- Provide small group, case based learning to demonstrate the integration of osteopathic diagnosis and treatment in to general medical practice.
- Illustrate the use of OMT as adjunct treatment in common medical conditions.
- Present concepts to stimulate ideas for research on the use and efficacy of OMT.
- Provide hands on treatment opportunities for students.

After completion of the year 1 and year 2 OMM courses the student should be able to:

- Describe the basic principles of osteopathic philosophy and medicine.
- Perform a proper osteopathic structural exam in an efficient manner.
- Successfully treat somatic dysfunction in all 10 body regions with various types of treatment techniques.
- Integrate osteopathic diagnosis and treatment in to the overall treatment plan for common medical conditions.
- Develop a knowledge base in OMT that can be used as the basis of future research.

PATHD 1601, 1602, 1603: Pathology I-III

To demonstrate thorough understanding of basic pathophysiologic mechanisms which cause development of human disease and to identify the characteristic disease processes involving all organ systems.

At the completion of the Pathology course sequence, a student should be able to:

- Describe and understand the basic principles that contribute to the pathophysiologic development of disease, specifically pertaining to cellular injury/adaptation, inflammation/repair, neoplasia, and genetic associations.
- Explain how basic osteopathic principles help explain pathophysiologic mechanisms of disease. Apply them to the principle of homeostasis.
- Compare the physiologic, histologic, cytologic and molecular differences between acute and chronic inflammation. Understand how these mechanisms are important in the development of all forms of disease.
- Understand how genetics influence the development of disease.
- Understand basic hematology. Describe the process of hematopoiesis. Describe the different types of blood cells and their functions.
- Describe the pathologic abnormalities that may affect blood. List and describe the pathophysiologic mechanisms that give rise to hemoglobinopathies, and disorders of erythrocytes, leukocytes, megakaryocytes, and platelets. Understand and describe coagulation disorders. Compare the cause and characteristics of hematologic neoplasms (leukemias).
- Know and compare the characteristic clinical, anatomic, histologic, pathophysiologic, and genetic features of diseases that affect each organ system.

PHARO 1670, 1671, 1672: Pharmacology I-III

After successfully completing the Pharmacology course sequence, a student should be able to:

- Identify drugs having pharmacological actions useful in treating various diseases and solving clinical problems.
- Select appropriate therapeutic agents based on the diagnosis and clinical indications.
- Identify the site and mechanism of action of each agent considered.
- List the prominent side effects, toxicities, and contraindications for each agent.
- Describe the absorption, distribution, metabolism and elimination of the drug under consideration, and account for any effects of unusual metabolic or disease states.
- Be aware of potential interactions among various drugs and be able to adjust therapy appropriately.
- Monitor the efficacy of drug therapy, and demonstrate awareness of tests to adequately monitor drug effects and toxicities.
- Identify laboratory tests which can be altered as a result of drug therapy.

- Chose a proper course of action upon detection of toxicities or untoward drug effects.
- Decide when drug dosage should be decreased or terminated and, when appropriate, select proper antidotes or antagonists.
- Demonstrate awareness of issues related to patient compliance.
- Demonstrate awareness of the legal, ethical, and moral responsibilities in dealing with drugs.
- Demonstrate an awareness of the abuse potential of the drugs under consideration.
- Demonstrate awareness of the costs and benefits of the various drugs.
- Identify drugs that have the potential to produce unusual responses in specific populations of patients due factors such as age, gender, racial, ethnic background, genetic makeup, etc.
- Apply principles of evidence-based medicine in making decisions regarding drug therapy.
- Identify and utilize accurate sources of drug information.