

# Component I - First Year

## Component I: New ERA Curriculum

Component I includes eight (8) required Clinically Integrated Blocks (CIB) in addition to interprofessional education activities and selectives. The year begins with a five-week Foundational Science Block that focuses on both social and basic sciences followed by seven sequential blocks generally organized by organ system. The New ERA Curriculum is vertically (organ system) and horizontally (disciplines) integrated.

## Horizontally Integrated Disciplines

The Horizontal Integrated Disciplines (HID) extend across the curriculum. HID learning objectives are integrated into the Clinically Integrated Blocks. Students do not receive credit for the Horizontal Integrated Disciplines, however, student performance in each discipline will be tracked and reported to students at the end of each semester to allow identification of areas of weakness and guide further study. Horizontal disciplines require a minimum performance component internal to the school of medicine. Horizontal discipline performance will not be reported to the Registrar.

**Interprofessional Education (IPE)** is integrated into the medical school curriculum. Students are required to complete an online course, IPE 500, on interprofessional education and three interprofessional education activities. Additional opportunities to interact and learn with other health professionals are interspersed throughout the Medical Education Program.

| COMPONENT I<br>REQUIRED BLOCKS |   |  |  |                      |              |
|--------------------------------|---|--|--|----------------------|--------------|
| CIB DESIGNATOR                 | BLOCK TITLE                               | BLOCK DIRECTOR(s)<br>OMA                 | BLOCK DIRECTOR(s)<br>PRC               | WEEKS OF INSTRUCTION | CREDIT HOURS |
| CIB 103                        | Foundational Science                      | Joseph Knezetic, PhD                     | Mark Fischione, MD<br>Jeff Oliver, MD  | 5                    | 5            |
| CIB 105                        | Immunology and Hematology                 | Kristen Drescher, PhD<br>David Cantu, MD | Jeff Oliver, MD<br>Mark Fischione, MD  | 4                    | 4            |
| CIB 119                        | Infectious Diseases                       | John Horne, MD<br>Stephen Cavalieri, PhD | Ana Moran, MD<br>Erin Honsa, PhD       | 3                    | 3            |
| CIB 107                        | Musculoskeletal and Integumentary Systems | Naomi Schmalz, PhD                       | Christina Kwasnica, MD                 | 7                    | 7            |
| CIB 117                        | HEENT                                     | Cassandra Hays, PhD                      | Ram Narayan, MD.<br>Jonna Jackson, PhD | 3                    | 3            |
| CIB 109                        | Neuroscience                              | Leah Chrisman, PhD                       | Michael Robers, MD                     | 6                    | 6            |

|                           |                                    |                      |   |     |             |
|---------------------------|------------------------------------|----------------------|---|-----|-------------|
|                           |                                    | Melinda Burnett, MD  | Jonna Jackson, PhD                        |     |             |
| CIB 113                   | Cardiovascular System              | Michael Del Core, MD | Michael White, MD<br>Anantharam Kalya, MD | 5   | 5           |
| CIB 115                   | Respiratory System                 | William Pruett, MD   | Ashwini Arjuna, MD                        | 4   | 4           |
| IPE 500                   | Introduction to Collaborative Care |                      |   | N/A | 0.5         |
| <b>TOTAL CREDIT HOURS</b> |                                    |                      |   |     | <b>37.5</b> |

## **GOLD SELECTIVES**

**GOLD Selectives** are available to Component I and II students in four categories: (1) Student Interest Selectives (SIS) in the Humanities and Special Topics, (2) Guided Research Selectives (GRS), (3) Career Exploration Selectives (CES), and (4) Mission Outreach Selectives (MOS). Each GOLD Selective ranges from 0.5 to 1.0 credit hour. Preclerkship students are required to complete 1.5 credit hours of GOLD Selectives before advancement to Component III. Students must complete one SIS selective. Students receive information on the availability of Selectives offered in each semester of the pre-clerkship years during Orientation. Students can review the current GOLD Selective offerings on the EPC Syllabus Archive BlueLine Site:

<https://blueline.instructure.com/courses/1168315>

## **REQUIRED BLOCKS**

Each Clinically Integrated Block will be topic-centered with vertical integration across all disciplines, inclusive of medical science, personal and professional development, and clinical skills training.

### **CIB 103 Foundational Science**

This course is centered on both social and basic science topics. The overall goal of this course is to provide students with a comprehensive understanding of the fundamentals of the foundational sciences which serve as the basis of modern medicine.

### **CIB 105 Immunology and Hematology**

This is an introductory course for first-year medical students to learn the principles of bacterial, fungal, parasitic, and viral diseases as well as our innate and acquired defense mechanisms used by the immune system. The course also covers the normal and abnormal aspects of the hematopoietic system including anatomy, physiology, pathology, and clinical disorders of blood cells, bone marrow, lymph nodes, spleen, and other lymphoid tissues.

### **CIB 119 Infectious Diseases**

This three-week block helps students understand the structures of individual organisms, their pathogenic potential and the diagnosis and treatment of the diseases they cause. The block

helps the students become familiar with the pathogenesis, epidemiology, diagnosis, treatment, and prevention of important bacterial, viral, fungal, and parasitic infectious diseases.

### **CIB 107 Musculoskeletal and Integumentary Systems**

Throughout this 7 credit-hour course student will apply knowledge of the basic sciences (normal anatomy, histology, embryology, and physiology) to an understanding of the biologic behavior, morphological appearance, clinical presentation, and classification of diseases within the musculoskeletal and integumentary systems. The principles of appropriate therapies for these conditions will also be considered. By the end of the course students will not only apply basic science knowledge to explain the normal and pathological states of the integumentary and musculoskeletal systems but also relate that knowledge to the diagnosis, treatment, and prevention of common clinical diseases.

### **CIB 117 HEENT**

This course introduces students to the anatomy, embryology, and physiology of the head and neck with an emphasis on the special senses. Basic and clinical sciences are integrated so that students learn the pathophysiology and pathology of common disorders within the region.

### **CIB 109 Neuroscience**

This course is focused on the neurological clinical method of regional anatomical diagnosis. Not only will students learn the factual material, but they will utilize the content to think as a neurologist in approaching clinical problems. The course will integrate basic science and clinical science. Mentors will be clinical and basic scientists who will teach in both realms.

Neuroanatomy, neurophysiology, neuropathology, neuropharmacology, and neurology have been integrated as much as possible and will be interwoven with each other throughout the course.

### **CIB 113 Cardiovascular System**

This 5-semester hour interdisciplinary course surveys normal and abnormal function of the cardiovascular system. In conjunction with a discussion of the normal structure and function of the cardiovascular system, students learn the pathophysiology and pathology of the common disorders of the heart and vascular structures. Students also study the pharmacology and therapeutic principles of the common agents used in cardiovascular medicine. Clinical skill instruction includes interpretation of electrocardiograms, echocardiograms, and auscultation of the heart. Students also work through a series of clinical cases gaining experience in developing a differential diagnosis and management plan.

### **CIB 115 Respiratory System**

This course teaches the anatomy and physiology of the lungs and airways as well as the diagnosis and treatment of medical problems of the respiratory system including, upper airway disorders, reversible obstructive lung disease, chronic obstructive pulmonary disease, ALI-ARDS, restrictive lung disease, neoplasms, thrombosis, sleep apnea, and neonatal respiratory problems.

### **IPE 500 Introduction to Collaborative Care**

This course is an introduction to the concepts of interprofessional collaborative practice preparing students across the health sciences to engage in interprofessional education and practice activities during their tenure at Creighton and beyond. In this course, health sciences students will gain knowledge in the Core Competencies for Interprofessional Collaborative Practice, versed in the basics of teamwork in the context of health care and begin to develop skills in team-based clinical reasoning. This course is to be completed by M1 students no later than the last day of the fall semester and is available on BlueLine (<https://blueline.instructure.com>).

### **ELECTIVES**

#### **IDC 183 Healer's Art (0.5 credit hour)**

The Healer's Art course is a medical school elective designed by Rachel Remen, M.D. The course's innovative educational strategy is based on a discovery model. The Healer's Art course addresses one of the hidden crises in medicine: the growing loss of meaning and commitment experienced by physicians nationwide under the stress of today's healthcare system. The course consists of five two-and-a-half-hour evening sessions which occur typically five weeks in a row, each divided into large- and small-group experiences.

#### **IDC 797 Directed Independent Research (1 credit hour)**

IDC 797 is an elective research opportunity. Students who have prior research experience or completed GRS 591 and GRS 592 work with a faculty research mentor to develop a research proposal generally carried out during the summer between Components I.

#### **FAP 480 M1-COPC Public Health Summer Endowed Research Assistantship**

This eight-week summer assistantship exposes students to the COPC process and improves their knowledge about health disparity issues. After the selection process, students will be asked to either identify a research question they have developed which fits the COPC model and seeks to research a health disparity issue in an underserved population or choose from a list of ongoing faculty COPC research projects. Students then will submit the research proposal in conjunction with the grant faculty to the IRB for their approval. As part of the assistantship, students will participate in an orientation program in May at the end of their M1 year which will introduce them to the COPC research model and provide an overview of the faculty's expectations for this project. Once the research question is selected and approved by the IRB, students will begin to enroll subjects into the research program. It is the expectation of this project that students will continue to work on the research question and enrolling available subjects on a longitudinal basis past the 8-week assistantship. It is also expected students will culminate their research activity by taking FAP481 in the M4 year in order to finish analyzing and writing their manuscripts.