DMS Medical Education *Cognate*

Course Descriptions

Medical Conference (remote/virtual *or* live-on-campus)

DMS 812: Medical Conference I (3 credit hours)
The student will attend on-campus training in the use of ultrasound and its application to common ultrasound-guided diagnostics and procedures, such as a FAST exam, vascular access, and identification of DVT, pneumothorax, fractures, foreign bodies, retinal detachment, abscess I&D, and more.

Medical Modules (5-weeks each, remote/virtual modules, synchronous Zoom sessions)

DMS 820: Medical Science Module I- Nephrology (3 credit hours)
The course takes a systematic approach to advanced clinical Nephrology. The epidemiology, pathophysiology, diagnosis, and management of system diseases, as they relate to primary care will be evaluated. The course will integrate relevant clinical anatomy, imaging, and pharmacotherapy to maximize the student's applicability in clinical practice.

DMS 821: Medical Science Module II- Neurology (3 credit hours)
The course takes a systematic approach to advanced clinical Neurology. The epidemiology, pathophysiology, diagnosis, and management of system diseases, as they relate to primary care will be evaluated. The course will integrate relevant clinical anatomy, imaging, and pharmacotherapy to maximize the student's applicability in clinical practice.

DMS 822: Medical Science Module III- Psychiatry (3 credit hours)
The course takes a systematic approach to advanced clinical Psychiatry. The epidemiology, pathophysiology, diagnosis, and management of system diseases, as they relate to primary care will be evaluated. The course will integrate relevant clinical anatomy, imaging, and pharmacotherapy to maximize the student's applicability in clinical practice.

DMS 823: Medical Science Module IV- Pulmonology (3 credit hours)
The course takes a systematic approach to advanced clinical Pulmonology. The epidemiology, pathophysiology, diagnosis, and management of system diseases, as they relate to primary care will be evaluated. The course will integrate relevant clinical anatomy, imaging, and pharmacotherapy to maximize the student's applicability in clinical practice.

DMS 824: Medical Science Module V- Cardiology (3 credit hours)
The course takes a systematic approach to advanced clinical Cardiology. The epidemiology, pathophysiology, diagnosis, and management of system diseases, as they relate to primary care will be evaluated. The course will integrate relevant clinical anatomy, imaging, and pharmacotherapy to maximize the student's applicability in clinical practice.

DMS 825: Medical Science Module VI- Gastroenterology (3 credit hours)
The course takes a systematic approach to advanced clinical Gastroenterology. The epidemiology, pathophysiology, diagnosis, and management of system diseases, as they relate to primary care will be evaluated. The course will integrate relevant clinical anatomy, imaging, and pharmacotherapy to maximize the student's applicability in clinical practice.

DMS 826: Medical Science Module VII- Endocrinology (3 credit hours)
The course takes a systematic approach to advanced clinical Endocrinology. The epidemiology, pathophysiology, diagnosis, and management of system diseases, as they relate to primary care will be evaluated. The course will integrate relevant clinical anatomy, imaging, and pharmacotherapy to maximize the student's applicability in clinical practice.

DMS 829: Medical Science Module VIII- Rheumatology (3 credit hours)
The course takes a systematic approach to advanced clinical Rheumatology. The epidemiology, pathophysiology, diagnosis, and management of system diseases, as they relate to primary care will be evaluated. The course will integrate relevant clinical anatomy, imaging, and pharmacotherapy to maximize the student's applicability in clinical practice.

DMS 828: Medical Science Module IX- Infectious Disease (3 credit hours)
The course takes an advanced systematic clinical approach to Infectious Disease. The epidemiology, pathophysiology, diagnosis, and management of system diseases, as they relate to primary care will be evaluated. The course will integrate relevant clinical anatomy, imaging, and pharmacotherapy to maximize the student's applicability in clinical practice.

Scholarly Project Series (remote/virtual, asynchronous)

DMS-800 Research Design & Writing for the Health Professional (1 credit hour)
The purpose of this course is to help students develop and refine their knowledge about conducting literature reviews and action research projects centered on pertinent topics, issues, and concerns in the practice of health maintenance, the provision of healthcare services, or medical education. Students will identify a research topic, develop a problem statement, and one or more high-quality research questions to guide their research. In addition, students will learn how to use Microsoft Word, Zotero, and style sets to help them develop and practice their skills in writing for the medical community.

DMS 889 Scholarship in the Practice of Medicine I (1 credit hour)
In this course, students will learn about survey research, the nature and structure of documents describing action research and literature reviews, and will examine methodologies researchers in the medical field commonly use to conduct qualitative and quantitative research. Additional foci will include: (a) different strategies for collecting data; (b) using Excel as a data organization, manipulation, basic analysis, and preparation tool; (c) critiquing published research, and (d) the cautions and procedures required of researchers who conduct research that involves human subjects.

DMS 900: Scholarship in the Practice of Medicine II (1 credit hour)
This course focuses on helping students execute their research by (a) collecting, organizing, and analyzing their data; (b) organizing and documenting their findings; (c) completing at least one draft of their complete document and receiving at least one round of feedback from the instructor. During the course, the instructor will introduce students to various applications that help researchers analyze and interpret data collected through both qualitative and quantitative designs. Course topics will include issues surrounding professionalism and ethics as they relate to designing, conducting, analyzing, and reporting research related to the teaching and practice of medicine. The course will also include instruction in the effective use of PowerPoint, which can be used in the presentation of the student's final research project.

Medical Education Courses (remote/virtual, synchronous Zoom sessions)

DMS 916: Learning & Curriculum Design (4 credit hours)
This course will introduce student learning and development theories and curriculum design approaches with a focus on best practices for adult learners in medical education. Multiple curriculum design strategies will be discussed, along with factors that influence those designs such as resources, research, and accreditation. Students will have the ability to build a curriculum that aligns with ARC-PA standards, program competencies, and course and unit learning objectives.

DMS 918: Designing & Delivering Instruction (4 credit hours)
In this course, students will learn to integrate the concepts of adult learning theory and curriculum design to develop all aspects of a course. Activities include preparing a course syllabus, developing lesson plans and instructional materials, evaluations, and assessments. Emphasis will be placed on selection and incorporation of instructional methods, technology, and resources that promote student achievement of the specific objectives.

DMS 919: Assessment (4 credit hours)
This course will introduce foundational theories in educational assessment and their application in the design of sound assessments to measure and improve student learning. Different types of assessment methods and their role in providing feedback to students, informing future instruction, and making student progression decisions will be discussed. Participants will create assessments that measure learners' progress and achievement of specific learning objectives and be able to draw appropriate conclusions from assessment results. Participants will also learn how to identify at-risk students and implement various remediation strategies.