Fall 2020 Course Descriptions as of 03/30/2020 08:12 PM

Information in Browse Course Catalog is subject to change. Information is term specific. Please refer to the appropriate term when searching for course content. Key to Course Descriptions may be found at: http://rcs.registrar.arizona.edu/course_descriptions_key.

Medicine: Interdept. (MED)

MED 481A: Innovation, Translation and Entrepreneurship (2 units)

Description: Where do new medical devices and therapeutic systems come from? In this course students will learn how one Innovates in the medical arena and how you take a concept of potential practical value and make it real. All the critical steps in medical innovation will be discussed.

Grading basis: Regular Grades

Career: Undergraduate

Course Components: Lecture Required

Equivalent to: ENGR 481, ENGR 481A, ENTR 481, MED 481, MED 481A, OPTI 481, OPTI

481A, PATH 481, PATH 481A

Also offered as: BME 481A, ENGR 481A, ENTR 481A, LAW 481A, OPTI 481A, PATH 481A,

SOC 481A

Co-convened with: MED 581A Course typically offered: Main Campus: Spring

Home department: McGuire Center for Entrepreneurship

MED 493A: Pre-Health Integrated Experiential Learning Course (3 units)

Description: The Pre-Health Integrated Experiential Learning Course and Internship introduces the pre-health profession student to contemporary topics in health care through interactive lectures, classroom discussions and online conversations that include the politics of healthcare systems, cultural competency and the implementation of the Affordable Care Act. Additional topics address nuts and bolts preparation for the health profession and may include a health professionals' panel, steps towards a successful medical school application, and a health profession's student panel. Hands-on experiences may include CPR training, a suture clinic, HIPAA training, and a clinical placement component where the student will be matched with a clinical mentor who will guide their clinical observation experience. Students will complete a reflective learning component that will include narrative essays, journal entries and peer review. Entry into this service learning course is limited to 15 students and requires instructor approval. Selection is primarily based on your personal statement, leadership experiences especially in health related clubs and groups, extent of completion of pre-health profession requirements and year in undergraduate education (preference for juniors and seniors).

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 499: Independent Study (1 - 18 units)

Description: Qualified students working on an individual basis with professors who have

agreed to supervise such work.

Grading basis: Alternative Grading: S, P, F

Career: Undergraduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

MED 581A: Assessing Early Stage Medical Technologies for Commercial Potential (2 unit

Description: Where do new medical devices and therapeutic systems come from? In this course students will learn how one Innovates in the medical arena and how you take a concept of potential practical value and make it real. All the critical steps in medical innovation will be discussed. Graduate-level requirements include graduate students serving as team leaders.

Grading basis: Regular Grades

Career: Graduate

Course Components: Lecture Required

Equivalent to: ENGR 581, ENGR 581A, ENTR 581, MED 581, MED 581A, OPTI 581, OPTI

581A, PATH 581, PATH 581A

Also offered as: ENGR 581A, ENTR 581A, LAW 581A, OPTI 581A, PATH 581A

Co-convened with: MED 481A Course typically offered: Main Campus: Spring

Home department: McGuire Center for Entrepreneurship

MED 599: Independent Study (1 - 18 units)

Description: Qualified students working on an individual basis with professors who have agreed to supervise such work. Graduate students doing independent work which cannot be classified as actual research will register for credit under course number 599, 699, or 799.

Grading basis: Alternative Grading: S, P, F

Career: Graduate

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

⁻SA represents a Student Abroad & Student Exchange offering

⁻CC represents a Correspondence Course offering

MED 800C: Global Health Capstone Course (4 units)

Description: Goals/Objectives: To demonstrate content mastery of an important issue in clinical Global Health prior to graduation with Distinction in Global Health. The course requires completion of an evidence-based synthesis paper. The paper is the culmination of a student's participation in the Global Health Distinction Track. It is intended to demonstrate a synthesis of knowledge learned during his or her participation in the Global Health Distinction Track. Format: Students will complete a paper in a format suitable for publication (e.g. as a fully referenced meta-analysis). The topic, preferably drawn from the student's Track experiences, will become the subject of an oral examination prior to graduation. Evaluation Methods: Faculty will evaluate the student on:* quality of the student¿s paper synthesizing the current literature on their research topic* quality of student-developed research protocols* quality of student-developed research study* student's ability to conduct data analysis, on the quality of the conclusions drawn and student's ability to support those conclusions with data from observations or the peer-reviewed literature* factual/content knowledge (using an oral examination)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

MED 800D: Medical Spanish Capstone Course (4 units)

Description: The MED-800D - Medical Spanish Capstone Elective is the last component of the longitudinal Bilingual Medical Spanish Distinction Track (BMS-DT). This four-credit units course provides 4th year medical students with the space to: a) enhance their medical Spanish proficiency and communication skills to care for monolingual Spanish-speaking patients; b) reflect on the influence of language and culture in medical care; and c) demonstrate superior understanding of the application of the National Standards for Culturally and Linguistically Appropriate Services (CLAS) in health care.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Lecture Required

Course typically offered: Main Campus: Fall, Spring

⁻CC represents a Correspondence Course offering

MED 802: Foundations (8 units)

Description: The Foundations Block teaches basic clinical skills as well as the fundamentals of human biology, mechanisms of disease, and therapeutics in a context that fosters development of skills in evidence-based decision making, self-directed learning, communication, and professionalism. The block is designed to provide the student with the background knowledge required for subsequent blocks.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Medical students only.

MED 802R: Foundations Remediation (10 units)

Description: Foundations Remediation covers the same material as MED 819 that teaches basic clinical skills as well as the fundamentals of human biology, mechanisms of disease, and therapeutics in a context that fosters development of skills in evidence-based decision making, self-directed learning, communication, and professionalism.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical students who fail MED 819 with prior approval from course director.

MED 803: Nervous System (8 units)

Description: The Nervous System Block is a comprehensive overview of general principles in neuroscience, neuropathology, neurology, and psychiatry. The overarching goals are to introduce students to basics of the structure and function of the human nervous system while integrating gross anatomy of the head and neck, related histology and pathology, clinical applications in neurology, and relevant psychiatry and psychopathology.

Grading basis: Regular Grades

Career: Medical School

Course Components: Discussion May Be Offered

Laboratory May Be Offered

Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Medical Students Only.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 803R: Nervous System Remediation (9 units)

Description: The Nervous System Remediation course is a repeat of the Nervous System Block (MED 817). It covers the same material as the block, which includes comprehensive overview of general principles in neuroscience, neuropathology, neurology, and psychiatry. Students gain an understanding of the basics of the structure and function of the human nervous system while integrating gross anatomy of the head and neck, related histology and pathology, clinical applications in neurology, and relevant psychiatry and psychopathology.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical students who fail MED 817 with prior approval from course director.

MED 804: Musculoskeletal System (5 units)

Description: The Musculoskeletal System Block covers the structures of the limbs and spine with a multidisciplinary approach to understanding the fundamental tissues of bone, joint, muscle, and skin. The goals are to enable students to learn how the normal and abnormal mechanisms of development and disease of these structures are relevant to orthopedics, sports medicine, rehabilitation, and traumatic injury. In this manner, students will be introduced to common diseases of bone and muscle which may include rheumatoid arthritis, osteoporosis, back pain, muscle enzyme mutations, and muscular dystrophy. Related health issues such as living with disability or pain, and chronic care, paternalism of health providers, and age & gender differences in bone fractures will be addressed.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Medical Students Only.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 804R: Musculoskeletal System Remediation (5 units)

Description: Musculoskeletal System Remediation covers the same material as MED 814 which focuses on the structures of the limbs and spine with a multidisciplinary approach to understanding the fundamental tissues of bone, joint, muscle, and skin. The goals are to enable students to learn how the normal and abnormal mechanisms of development and disease of these structures are relevant to orthopedics, sports medicine, rehabilitation, and traumatic injury.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical students who fail MED 814 with prior approval from course director.

MED 805: Cardiovascular, Pulmonary, Renal Systems (11 units)

Description: Cardiovascular, Pulmonary, and Renal Systems is a 12-week block designed to provide students with an in-depth study of the cardiovascular, lymphatic, respiratory, renal, and urinary systems through lessons that integrate cell metabolism, endocrinology, normal and pathologic anatomy, pharmacology, physiology, pathophysiology, histology and the physical examination, diagnostic testing and imaging.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical students only.

MED 805R: Cardiovascular, Pulmonary, Renal Systems Remediation (12 units)

Description: Cardiovascular, Pulmonary, Renal Systems Remediation covers the same material as MED 818 and is designed to provide students with an in-depth study of the cardiovascular, lymphatic, respiratory, renal, and urinary systems through lessons that integrate cell metabolism, endocrinology, normal and pathologic anatomy, pharmacology, physiology, pathophysiology, histology and the physical examination, diagnostic testing and imaging.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical students who fail MED 818 with prior approval of course director.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 806: Digestion, Metabolism, Hormones (9 units)

Description: The Digestion, Metabolism & Hormones (DMH) block will be part of the Year 1 medical curriculum of the University of Arizona, College of Medicine. The block offers an integrated presentation of topics that focus on digestion and absorption of food (specifically the protein, lipid and carbohydrate components of food), nutritional aspects of macronutrients and micronutrients, fuel metabolism and storage, and the role of hormones in controlling physiological and biochemical functions in humans.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required Repeatable: Course can be repeated a maximum of 2 times.

MED 806A: Digestion, Metabolism & Hormones A (4 units)

Description: The Digestion, Metabolism & Hormones A & B courses together provide a comprehensive overview of digestion of foodstuffs and nutrition, the metabolism of nutrients in liver, the role of adipose tissue in fat storage, and the endocrine system. The combined goal is to provide a platform for learning how digestion, metabolism and nutrition are biochemically and physiologically integrated, to examine disease states associated with certain malfunctions in these systems, and to become familiar with forms of treatment of such diseases. The endocrine system is presented within the context of its roles in nutrient processing and responses to stimuli related to body requirements such as fuel mobilization, stress and development. Consequences of pathological conditions within the endocrine system are considered. Anatomy and cell biology are used to gain an understanding of function of the relevant tissue and cells. Part A of the course covers initial aspects of digestion including the oral cavity, salivary glands, esophagus and stomach as well as hormones of the gastrointestinal system.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: College of Medicine approval.

⁻SA represents a Student Abroad & Student Exchange offering

⁻CC represents a Correspondence Course offering

MED 806R: Digestion, Metabolism, & Hormones Remediation (14 units)

Description: Digestion, Metabolism, & Hormones Remediation covers the same material as MED 820 and provides a comprehensive overview of digestion of foodstuffs and nutrition, the metabolism of nutrients in liver, the role of adipose tissue in fat storage, and the endocrine system. The goal of the block is to provide a platform for learning how digestion, metabolism and nutrition are biochemically and physiologically integrated, to examine disease states associated with certain malfunctions in these systems, and to become familiar with forms of treatment of such diseases. The endocrine system is presented within the context of its roles in nutrient processing and responses to stimuli related to body requirements such as fuel mobilization, stress and development. Consequences of pathological conditions within the endocrine system are considered. Anatomy and cell biology are used to gain an understanding of function of the relevant tissue and cells.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical students who fail MED 820 with prior approval from the course director.

MED 807: Immunity and Infection (9 units)

Description: The Immunity and Infection block provides the student with a foundation of basic scientific principles in immunology and microbiology in order to interpret clinical problems. The disciplines involved in this block include immunology, microbiology (virology, bacteriology, mycology and parasitology), pathology, infectious disease, pharmacology, humanism, global & public health issues, and Bioterrorism.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: 2nd-year Medical Students only.

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-CC represents a Correspondence Course offering

MED 807R: Immunity and Infection Remediation (9 units)

Description: Immunity and Infection Remediation covers the same material as MED 822 and provides the student with a foundation of basic scientific principles in immunology and microbiology in order to interpret clinical problems. The disciplines involved in this block include immunology, microbiology (virology, bacteriology, mycology and parasitology), pathology, infectious disease, pharmacology, humanism, global & public health issues, and Bioterrorism.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical students who fail MED 822 with prior approval from the course director.

MED 808: Life Cycle (9 units)

Description: The Life Cycle Block teaches: 1) The biology and medicine of human reproduction and sexuality, and 2) Normal and abnormal development throughout the life cycle. Life Cycle will move from reproductive anatomy, histology and physiology through the life span from conception to pregnancy, birth, infancy, childhood, adolescence, adulthood, aging and end-of-life. Life Cycle also will introduce the cancers of the male and female organs of reproduction.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required

Course typically offered:

Main Campus: Fall

Recommendations and additional information: 2nd-year Medical Students only.

MED 808R: Life Cycle Remediation (9 units)

Description: Life Cycle Remediation covers the same material as Med 821 and teaches: 1) The biology and medicine of human reproduction and sexuality, and 2) Normal and abnormal development throughout the life cycle. Life Cycle will move from reproductive anatomy, histology and physiology through the life span from conception to pregnancy, birth, infancy, childhood, adolescence, adulthood, aging and end-of-life. Life Cycle also will introduce the cancers of the male and female organs of reproduction.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical students who fail MED 821 with prior approval from the course director.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 809: Advanced Topics (8 units)

Description: The Advanced Topics Block addresses complex and multi-organ system disease processes, with an emphasis on the integration of basic science principles with clinical practice through the study of cases. Students develop "best practice" algorithmic approaches to diagnosis and treatment and incorporate the use of ancillary diagnostic methods/ procedures to monitor and manage patient outcomes. Special attention is given to evolving laboratory diagnostic approaches that use telemedicine. Course instruction promotes an understanding of how advances in the basic sciences inform future medical practice.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical Students Only.

MED 809R: Advanced Topics Remediation (8 units)

Description: Advanced Topics Remediation covers the same material as MED 824 and addresses complex and multi-organ system disease processes, with an emphasis on the integration of basic science principles with clinical practice through the study of cases. Students develop ¿best practice¿ algorithmic approaches to diagnosis and treatment and incorporate the use of ancillary diagnostic methods/ procedures to monitor and manage patient outcomes. Special attention is given to evolving laboratory diagnostic approaches that use telemedicine. Course instruction promotes an understanding of how advances in the basic sciences inform future medical practice.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Medical students who fail MED 824 with prior approval from the course director.

⁻SA represents a Student Abroad & Student Exchange offering

⁻CC represents a Correspondence Course offering

MED 810A: Clinical Reasoning 1 (2 units)

Description: This course is designed to build students' skills of clinical reasoning. Clinical reasoning is the use of medical knowledge and skills, cognitive skills, and metacognitive skills to reach a decision about diagnosis or treatment in a clinical case, often in the face of uncertainty. Through a weekly, small-group-based examination of selected clinical cases and large-group interactive exercises, the course will guide medical students to develop a systematic approach to clinical reasoning, and to develop professional behaviors and attitudes, communication skills, and the consideration of the influence of cultural context and social determinants on health and health care.

Grading basis: Regular Grades

Career: Medical School

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 2 times.

Course typically offered:

Main Campus: Fall

MED 810B: Clinical Reasoning II (2 units)

Description: This course builds upon the content of the course, Clinical Reasoning I. Clinical reasoning is the use of medical knowledge and skills, cognitive skills, and metacognitive skills to reach a decision about diagnosis or treatment in a clinical case, often in the face of uncertainty. Through a weekly, small-group-based examination of selected clinical cases and large-group interactive exercises, the course will guide medical students to develop a systematic approach to clinical reasoning, and to develop professional behaviors and attitudes, communication skills, and the consideration of the influence of cultural context and social determinants on health and health care.

Grading basis: Regular Grades

Career: Medical School

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 2 times.

Course typically offered: Main Campus: Spring

⁻CC represents a Correspondence Course offering

MED 810C: Clinical Reasoning 3 (2 units)

Description: This course builds upon the content of the previous courses, Clinical Reasoning I and 2. Clinical reasoning is the use of medical knowledge and skills, cognitive skills, and metacognitive skills to reach a decision about diagnosis or treatment in a clinical case, often in the face of uncertainty. Through a weekly, small-group-based examination of selected clinical cases and large-group interactive exercises, the course will guide medical students to develop a systematic approach to clinical reasoning, and to develop professional behaviors and attitudes, communication skills, and the consideration of the influence of cultural context and social determinants on health and health care.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 2 times.

Course typically offered:

Main Campus: Fall

MED 815A: The Doctor & Patient: Integrating the Art and Science of Medicine (4 units)

Description: This is the first semester of a three-semester series of courses intended to provide longitudinal mentoring to medical students with the emphasis on development of broad-based competency in clinical and professional skills. These skills include but are not limited to physical examination maneuvers, medical interview and communication skills, development of clinical thinking skills, and medical professionalism.

Grading basis: Elective Pass/Fail

Career: Medical School

Course Components: Workshop Required

Course typically offered:

Main Campus: Fall

MED 815B: The Doctor & Patient: Integrating the Art and Science of Medicine - Part 2 (4

units)

Description: This is the second semester of a three-semester series of courses intended to provide longitudinal mentoring to medical students with the emphasis on development of broadbased competency in clinical and professional skills. These skills include but are not limited to physical examination maneuvers, medical interview and communication skills, development of clinical thinking skills, and medical professionalism.

Grading basis: Elective Pass/Fail

Career: Medical School

Course Components: Workshop Required

Course typically offered: Main Campus: Spring

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 815C: The Doctor & Patient: Integrating the Art and Science of Medicine - Part 3 (4 units)

Description: This is the third semester of a three-semester series of courses intended to provide longitudinal mentoring to medical students with the emphasis on development of broadbased competency in clinical and professional skills. These skills include but are not limited to physical examination maneuvers, medical interview and communication skills, development of clinical thinking skills, and medical professionalism.

Grading basis: Elective Pass/Fail

Career: Medical School

Course Components: Workshop Required

Course typically offered:

Main Campus: Fall

MED 816: Basic Sciences Capstone (1 - 2 units)

Description: This course is a comprehensive review of the basic sciences curriculum serving as a culminating and integrative experience to prepare students for the USMLE Step 1 exam and the clerkships.

Grading basis: Elective Pass/Fail

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 2 times.

Course typically offered: Main Campus: Fall, Spring

MED 827A: Intersession 1 (1 unit)

Description: Two Intersession courses are part of the Year 3 curriculum of the University of Arizona, College of Medicine. These courses allow third-year medical students a reprieve from clinical duties and a return to classroom or seminar-style learning. Students will be expected to integrate the basic sciences and pathophysiology they learned in the first two years with the emergent concerns of clinical practice in the third year. In particular during the first intersession, we will focus on higher order and complex diagnostic problem solving and advanced physical exam techniques.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required Repeatable: Course can be repeated a maximum of 2 times.

Course typically offered:

Main Campus: Fall

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 827B: Intersession 2 (1 unit)

Description: Two Intersession courses are part of the Year 3 curriculum of the University of Arizona, College of Medicine. These courses allow third-year medical students a reprieve from clinical duties and a return to classroom or seminar-style learning. Students will be expected to integrate the basic sciences and pathophysiology they learned in the first two years with the emergent concerns of clinical practice in the third year.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required Repeatable: Course can be repeated a maximum of 2 times.

Course typically offered: Main Campus: Spring

MED 827R: Intersessions Repeat (1 - 8 units)

Description: This course is a structured independent study. The student is expected to review materials from the previous year Intersessions course that they failed. These materials include readings, powerpoints posted to ArizonaMed on-line, as well as podcasts of lectures. In addition, the student is expected to research literature relevant to the assigned topics. See assessment. Assessment of student performance: The student will complete 3, 5-10 page double-spaced papers. Each paper will address a topic assigned to the student. The topics are selected by the course director to reflect one major theme for each week of the Intersessions course that was failed. The student should address the topic and focus on the current trends and controversies related to the topic. The papers should be the student to discuss and defend should be scholarly and cite references. The student will then be required to discuss and defend her papers with a small committee composed of the course director and several other faculty with expertise in the topic area.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Medical students who fail MED 827 must take this course.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 828: Transition to Clerkships (1 - 2 units)

Description: Third-year medical students will participate in a variety of educational experiences designed to prepare them to begin their clerkship curriculum. In addition to lectures on topics pertinent to patient care, students will participate in simulations and performance exercises to learn and practice basic skills that will be required of them in the clerkship curriculum.

Attendance at sessions and active participation is mandatory.

Grading basis: Regular Grades

Career: Medical School

Course Components: Lecture Required Repeatable: Course can be repeated for a maximum of 2 units.

Course typically offered:

Main Campus: Fall

Recommendations and additional information: Successful completion of 1st & 2nd year of medical school.

MED 840: Application of the Basic Sciences to Clinical Medicine (2 - 4 units)

Description: This course is intended for fourth-year medical students and focuses on the application of the biomedical sciences to the practice of medicine, including the etiology, diagnosis, prognosis and treatment of human disease.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Field trip: N/A

MED 841: Preparation for Residency Boot Camp (2 units)

Description: The Preparation for Residency Boot Camp Course is a 2-week elective course offered to 4th year medical students at the end of their medical school career. The course is meant to prepare students for the start of their professional medical career. Specialty specific course material in the fields of Internal Medicine, Family Medicine, Emergency Medicine, Pediatrics and General Surgery will be presented in the format of lectures, small group discussion and simulations. Course material will be presented by clinical faculty and house staff from the respective departments with the goal of preparing students for the unique demands of residency.

Grading basis: Elective Pass/Fail

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Field trip: none

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 880A: Commitment to Underserved People (CUP) I (1 - 16 units)

Description: The CUP program is designed to nurture students' commitment to caring for people who have limited access to health care and who are socially and economically disadvantaged. The CUP I elective offers the opportunity to: 1. Develop patient education and clinical skills needed to serve specific underserved populations. 2. Understand the issues faced by people who must deal with social and medical disadvantages in the access to care. 3. Identify the physician's roles and leadership in assisting disadvantaged people and communities. 4. Develop leadership skills in working with a team of care providers.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Students must complete CUP orientation and appropriate skills training.

MED 880B: Commitment to Underserved People (CUP) II (1 - 16 units)

Description: The CUP program is designed to nurture students' commitment to caring for people who have limited access to health care and who are socially and economically disadvantaged. Students will: 1. Provide medical care, under the supervision of an attending physician, and educational services to people who are medically underserved or disadvantaged. 2. Mentor first-year and second-year medical students in providing care and educational services for these populations. Upon completion of this elective, students will be able to demonstrate the skills necessary to work effectively with medically underserved and disadvantaged people, including the provision of advocacy for improved access to health care and social services.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

MED 881A: Rural Health Professions Preceptorship (1 - 16 units)

Description: This course is designed to provide medical students with quality educational

experiences in selected rural settings. **Grading basis:** Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Equivalent to:** MEDI 891I, OBG 891I, PED 891I, SURG 891I

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Open to medical students formally admitted to the Rural Health Professions Program.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 882A: Senior Mentor Program 1 (1 unit)

Description: The Senior Mentor Program seeks to provide experiences for students with older adults who are well and vital. Through this program, it is intended that students will: Develop a longitudinal relationship with an older adult in the community gaining views of growing older and interfacing with the healthcare system. 2. Establish a longitudinal relationship with a faculty advisor/mentor. 3. Increase their knowledge of geriatrics/gerontology. More specific learning objectives are that students will: Define what successful aging means to an older adult. Identify the role of exercise, nutrition, spirituality, and mental attitude in reducing risk factors and preventing premature aging. Reflect their own thoughts about the aging process; the influence of ageism, and how societal attitudes shape the way older adults are treated and cared for. Format: The Senior Mentor Program I is part of a two (2) year longitudinal senior mentor program for 1st and 2nd year medical students. The program is self-paced study to include small group discussions, lectures, grand rounds, web-based learning, didactics, and experiential learning. Students are required to complete identified program requirements. The program includes a minimum of 15 contact hours that involves: One-on-one mentoring with a healthy older adult (60 and older) in the Tucson community that includes phone calls, emails, and excursionsEducational activitiesJournalingMembership in the Geriatric Interest GroupAssigned physician advisorOptional clinical experiencesParticipation in community eventsCompletion of a one- to two-page reflection paper/journal entryEach student will meet with their assigned faculty advisor a minimum of twice a year. During this contact, students will review their journal entries; discuss clinical issues related to caring for older adults; and review the number of contact hours in order to meet the program requirements.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 882B: Senior Mentor Program II (2 units)

Description: Objective/Goals: The Senior Mentor Program seeks to provide experiences for students with older adults who are well and vital. Through this program, it is intended that students will: ¿ Develop a longitudinal relationship with an older adult in the community gaining views of growing older and interfacing with the healthcare system. ¿ Establish a longitudinal relationship with a faculty advisor/mentor. ¿ Increase their knowledge of geriatrics/gerontology. More specific learning objectives are that students will: ¿ Illustrate knowledge of clinical and assessment tools for: home safety, depression, falls, and mental status. ¿ Make use of the references and resources on the AHSL website: http://www.ahsl.arizona.edu/topics/geriatrics/ Format: The Senior Mentor Program II is a continuation of Part I. Part II is a two-year longitudinal senior mentor program for 3rd and 4th year medical students. The program is a selfpaced study to include small group discussions, lectures, grand rounds, web-based learning, didactics, and experiential learning. Students are required to complete identified program requirements. The program includes a minimum of 45 contact hours that involves: ¿ One-onone mentoring with a healthy older adult (60 and older) in the Tucson or Phoenix community that includes phone calls, emails, and excursions ¿ Educational activities ¿ Journaling ¿ Membership in the Geriatric Interest Group ¿ Clinical Encounters with Mentor and Geriatric Faculty ¿ Assigned physician advisor. ¿ Optional clinical experiences. ¿ Participation in community events. ¿ Optional Project designed by student and faculty mentor Evaluation Methods: Each student will meet with their assigned faculty advisor a minimum of twice a year. During this contact, students will review their journal entries; discuss clinical issues related to caring for older adults; and review the number of contact hours in order to meet the program requirements.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Lecture Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Third & fourth-year medical students only.

MED 891A: Global Health Preceptorship (1 - 16 units)

Description: This clinical preceptorship offers the student participation in clinical and public health care in a developing nation context. Emphasis is on understanding local health problems and combined clinical and community approaches to them. Emphasis in this preceptorship will vary with the nature of the clinical site. Our preference is for district-level hospitals, especially those having community health programs in the surrounding area.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Completion of all clerkships.

Enrollment requirement: MED 896A

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 891C: Global Health Externship: Health & Development Across the Lifecycle (1 - 2 units)

Description: Supervised clinical patient care in a developing nation. Students are expected to demonstrate proficiency in the language of the selected country and adequate preparation for the assignment. Locations are in Latin American countries. A qualified faculty physician provides direct supervision at each site. Where possible, efforts will be made to assist in the location of funding sources to help finance travel expenses. Additionally, the student will be locally mentored in the development of a health project in preparation for a selected activity for the trip. Examples include learning about and preparing a model for the chronic management of diabetes, asthma, or hypertension in the community site; or learning about and preparing a model to support infant and child nutrition.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: 1st or 2nd-year medical students only.

MED 896A: Global Health: Clinical & Community Care (1 - 16 units)

Description: This course prepares the participant to work and learn in a developing country health care setting. This course is generally a prerequisite to, and preference is given to students enrolled in, MED891A, Global Health Clinical Preceptorship. This course integrates the community public health aspects of International Health with the actual clinical challenges of practice in a developing country or other resource-poor health care setting.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Seminar Required

Equivalent to: PHL 896A Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: 3rd and 4th-year medical students only.

⁻CC represents a Correspondence Course offering

MED 896B: Teaching in Medicine: CBI facilitation Elective (2 - 4 units)

Description: This course offers fourth-year medical students the opportunity to learn and practice small-group facilitation skills by participating in the ArizonaMed curriculum as Case-Based Instruction (CBI) facilitators ("Student-Facilitator"). Student participation in this elective will be contingent on the following: Identification of a Year II block that fits the student's schedule Identification of a faculty facilitator in the chosen block who will serve as mentor ("Faculty-Mentor") to the student-facilitator. Approval by the Block Director of student participation in the Block and of the Faculty-Mentor The elective is designed to offer the following experiences. 1) Introduction to the educational concepts of CBI 2) Training in the process and techniques of CBI facilitation 3) Experience with providing feedback to students on their performance 4) Practical experience in medical student teaching

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Seminar Required

Course typically offered: Main Campus: Spring

Recommendations and additional information: Fourth-year medical student.

MED 896C: Skills for Teaching Physical Exam (1 - 16 units)

Description: Goals: This course is designed to provide fourth-year medical students with teaching skills, particularly in the area of teaching physical exam by: providing an overview of professional teaching; integrating knowledge of physical exam skills with an understanding of teaching methods and small group management; providing an practical experiences in student teaching.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Fourth-year medical students only.

⁻CC represents a Correspondence Course offering

MED 896D: Peer Tutoring 1 (1 - 2 units)

Description: The course will consist of classroom didactics as well as mentoring/tutoring medical students. Tutoring/mentoring sessions may be one-on-one or small group. Students will be observed by their peers and receive feedback from them during at least 3 tutoring/mentoring sessions. Students will be required to observe at least 3 of their peers during a tutoring session and provide reflective feedback. A self-reflective final paper will be required to complete the course.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 2 times.

Course typically offered: Main Campus: Fall, Spring

MED 896E: Peer Tutoring II (1 - 2 units)

Description: The course will consist of classroom didactics as well as mentoring/tutoring medical students. Tutoring/mentoring sessions may be one-on-one or small group. Students will be observed by their peers and receive feedback from them during at least 3 tutoring/mentoring sessions. Students will be required to observe at least 1 of their peers during a tutoring session and provide reflective feedback. A self-reflective final paper will be required to complete the course. Peer tutors will write a scholarly paper of publication quality on a medical education topic or give a scholarly presentation on medical education at an appropriate venue.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Seminar Required **Repeatable:** Course can be repeated a maximum of 2 times.

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: - Participation in Peer Tutoring 1 course or-Received peer tutoring training with the Office of Student Development and minimum 20 hours tutoring experience

⁻CC represents a Correspondence Course offering

MED 8961: Integrative Medicine (2 - 8 units)

Description: Goal: Introduce students to the use of complementary medicine in association with traditional medicine for the prevention and treatment of various health conditions. Objectives: Gain a comprehensive introduction to the field of integrative medicine Understand the distinctions between integrative medicine and complementary and alternative medicine (CAM) Learn tools to evaluate claims and modalities of CAMLearn about physician wellness and implement a personalized self-care programLearn about specific CAM modalities through experiential workshops and clinical observations with CAM and integrative medicine providersBecome part of a supportive interactive community Develop a network of resources and databases for integrative medicine and CAM Format: The rotation is approximately onemonth long, and it is currently held in the fall and spring semesters. Students spend the majority of their time in an academic setting learning about the various modalities associated with integrative medicine from professors, practicing physicians, and other field practitioners. The rotation includes sessions on a variety of topics, including an overview of integrative medicine, integrative medicine research, the difference between integrative medicine and CAM, and integrative medicine approaches to various health conditions. Additionally, students will spend 3-5 days working with community preceptors participating in the diagnosis and treatment of health conditions and experiencing some of the complementary practices of integrative medicine, including botanicals, homeopathy, naturopathy, nutrition, traditional Chinese medicine, and osteopathy.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

⁻CC represents a Correspondence Course offering

MED 896J: Teaching in Medicine: CRC Facilitation (1 - 2 units)

Description: This elective offers fourth-year medical students the opportunity to learn and practice small-group facilitation skills by participating as a "Student Facilitator" in the Clinical Reasoning Course. The Clinical Reasoning Course is a required, longitudinal course that takes place across the medical school Preclerkship curriculum. Clinical reasoning is fundamental to the practice of medicine and is the process employed by all physicians when making diagnoses and treatment decisions for their patients. During this elective, the fourth-year medical student will be paired with one core faculty facilitator. Under the supervision of the faculty facilitator, the student will practice and develop skills to facilitate small group sessions, guiding the students through a minimum of four cases during a single longitudinal block of the Clinical Reasoning Course. Students can also help facilitate eight cases for additional credit. The student will also be responsible for advance preparation prior to each case. Students are required to complete FERPA training in order to participate in the elective. Students facilitating four cases will earn 1 unit; students facilitating eight cases will earn 2 units. All students are required to develop one case regardless of how many cases they help facilitate.

Grading basis: Pass/Fail **Career:** Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Field trip: None

Description: he PASS Step 1 course is designed to encourage students to:1. Identify and implement study strategies that will support long-term retention and application of knowledge on high stakes exams including the USMLE Step 1. 2. Work with study partners to efficiently quiz through study material.3. Use study resources effectively to enhance and reinforce content knowledge.4. Explain and demonstrate how ¿boards-style; questions can be used most effectively as tools for study and review.5. Practice and implement test-taking strategies that will aid in successful preparation for the USMLE Step 1. Format: The course is designed to provide students with study techniques and strategies that will promote success on USMLE Step 1. The course will be conducted as a series of interactive workshops/study sessions related to study strategies, active engagement with content, and test taking skills. Year 2 Block content will be used as the vehicle to practice and implement these skills and strategies. Students will be

expected to work individually and with partners to apply their knowledge in novel contexts with a flexible mindset. The directors of the course will provide students with a schedule, study tools,

MED 896P: PASS Step 1 - Savvy Boards Preparation Methods and Strategies (1 unit)

Grading basis: Regular Grades

Career: Medical School

Course Components: Seminar Required

quizzes and handouts to further guide Step 1 study.

Course typically offered: Main Campus: Fall, Spring

Recommendations and additional information: Medical students only.

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 896T: Principles and Practice of Medical Education (1 unit)

Description: Course is available to students participating in the Medical Education distinction track. Goals/Objectives: The goal of this course is to introduce students to key concepts and practices in the field of medical education. Format: Interactive lecture/discussion-based course. As much as possible, each session will be team-taught by an instructor with experience teaching medical students/physicians and an instructor with expertise in education. The underlying structure of all sessions will be for students to complete background reading before class and while in class, perform the associated activity. Writing assessable learning objectives and valid and reliable multiple choice questions as well as reflective practice will be integrated into every session. Participation is required at a minimum of 10 sessions. The materials students create through their participation in the course will form the basis of a teaching portfolio.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Lecture Required

Course typically offered: Main Campus: Spring

MED 898: Medical Education Distinction Track Capstone (2 - 4 units)

Description: This course is only available to students enrolled in the Medical Education Distinction Track (MEDT). The Medical Education Distinction Track helps medical students who are interested in pursuing careers in academic medicine to develop knowledge and experience in both the theory and the practice of education. The Capstone Project is a scholarly project that allows the student to explore deeply into a focused question in medical education, think creatively, and demonstrate mastery of key concepts in the field. The student should discuss possible topics for the Capstone Project with his/her MEDT Mentor. The student must submit a completed Project Proposal Form for approval by the Director and Steering Committee of the track. After the student's proposal has been approved, the student should regularly discuss the project with his/her MEDT Mentor, including design or planning and progress. The student must also submit progress reports to the Steering Committee by specific dates. The final written report and presentation are due during March of the student's MS4 year.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Field trip: N/A

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 898B: Integrative Medicine Distinction Track Capstone (4 units)

Description: This course is only offered to students enrolled in the Integrative Medicine Distinction Track. Integrative Medicine is a healing-oriented medicine that takes into account the whole person, including all aspects of lifestyle. It emphasizes the therapeutic relationship between practitioner and patient, is informed by evidence, and makes use of all appropriate therapies. This elective is for students wishing to obtain an in-depth understanding of an area of interest in Integrative Medicine. After enrollment, the student will meet with the faculty advisor to discuss areas of interest and possible topics for the Capstone Project.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required

Course typically offered: Main Campus: Fall, Spring

Field trip: None

MED 899: Independent Study (1 - 16 units)

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 99 times.

Course typically offered: Main Campus: Fall, Spring

MED 899A: Applicant Cycle Secondary Screener and Evaluator (1 - 2 units)

Description: During this course, students will participate in the secondary application screening and interview processes. Students will be trained in the proper understanding and scoring of applications utilizing provided rubrics and samples from past secondary applications as well as evaluation training and refresher training before each MMI session. Trainings are offered as both manuals and live training.

Grading basis: Clerkship S,HP,P,F

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 2 times.

Course typically offered: Main Campus: Fall, Spring

Field trip: N/A

-SA represents a Student Abroad & Student Exchange offering

-CC represents a Correspondence Course offering

MED 899B: Pass Step 2 (2 - 8 units)

Description: Prerequisites: 1. Completion of Step 1 and required third year rotations.2. Approval by Director of the Office of Student Development. Goals/Objectives: 1. To develop an individualized study plan based on students' medical knowledge, and historical performance aligned with best practices in learning and UACOM educational policy.2. Identify and implement individualized learning methods based in evidence supporting long-term retention and application of knowledge for USLME Step 2 exam.3. To develop sound skills necessary to activate resources effectively to enhance and reinforce learning and understanding of content.4. To develop, practice, and implement best practices in test taking skills that will aid in successful performance on the USMLE Step 2. Format: The course is designed to provide students with learning tools, methods, and strategies to promote success on passing USMLE Step 2. The course will incorporate a series of interactive workshops, one-on-one coaching, practice assessments, and personal planning and time-management strategies. In addition, the course will include question-directed learning to actively engage with content, and develop sound learning skills based on best practices. Also, students will work on testing strategies and identify areas to improve their testing skills. Clerkship content will be a portion of the medium used to practice and implement skills and strategies. Students will be expected to work individually and with partners to apply their knowledge in novel contexts to demonstrate content mastery of clinical knowledge necessary to pass USMLE Step 2 licensing exam. The director of the course will work with students to develop an individualized schedule, identify study tools, materials and resources to further guide Step 2 preparation, and support individuals' development as life-long learners. Evaluation Methods: Faculty will evaluate the student on:- Weekly attendance -Progress on completing content material- Percent completion of student's question bank-Percent correct on student's question bank- Adherence to study plan and methods, adequate goal setting, and implementation of time-management strategies- Completion of at least one practice exam under timed conditions with a passing score of one standard deviation above the passing score- Student's commitment to taking responsibility for their own learning and performance outcome as demonstrated by the above indicatorsThe course is Pass/Fail. Attendance at all sessions throughout the semester is required to earn 2-4 units of credits. which will accrue towards graduation units. Student performance will be assessed based on participation in all activities and assignments, and completion of a survey to evaluate student's level of preparedness for the exam before and after taking the PASS Step 2 elective.

Grading basis: Regular Grades

Career: Medical School

Course Components: Independent Study Required **Repeatable:** Course can be repeated a maximum of 2 times.

Course typically offered: Main Campus: Fall, Spring

⁻CC represents a Correspondence Course offering