

PRE-MEDICINE

Courses

MED 210. Premed Community Health Experience. 0-1 Hours

This course focuses on healthcare for under-served populations and provides students with the broader context around social and health inequities. Students meet for class most weeks of the semester and shadow and volunteer at a local medical clinic. Students will learn about the complexities of providing healthcare to under-served populations and develop interpersonal skills to be empathetic and informed advocates for patients. Students must complete some pre-semester requirements. Prerequisites: Sophomore status.

MED 220. Hospital Elder Life Program. 0-1 Hours

This course provides an experiential opportunity to volunteer with the Hospital Elder Life Program at Miami Valley Hospital. HELP is an innovative program designed to improve the hospital experience for older patients. Student volunteers will be trained to carry out bedside interventions and experience a high level of patient contact and responsibility. Students must complete all elements of the pre-semester training program, which includes online modules and a day-long orientation at MVH before the semester begins. Prerequisites: Sophomore status.

MED 230. Community Pre-Dental Experience. 1 Hour

This course focuses on healthcare for under-served populations and provides students with the broader context around social and health inequities. Students meet for class most weeks of the semester and shadow and volunteer at a local dental clinic. Students will learn about the complexities of providing health and dental care to under-served populations and develop interpersonal skills to be empathetic and informed advocates for patients. Students must complete some pre-semester requirements. Prerequisites: Sophomore status.

MED 299. Sophomore Seminar. 1 Hour

This course will orient students to the career options available for MED/DEN majors, and guide students in planning for matriculation to health professional school. Prerequisite(s): Sophomore status.

MED 339. International Medical Experience. 1 Hour

Exploration of global health issues in preparation for an international experience with a partnering organization. Students must apply through the Center for International Programs and comply with requirements specific to the travel location and partnering organization. Prerequisites: SPN 101 (may be taken concurrently) or equivalent language placement.

MED 351. Healthy Children: Addressing Social Needs to Improve Health Outcomes. 1 Hour

Examination of the social needs of pediatric patients and families' social needs that most affect children's health. Will include methods of helping families connect with community resources that can assist in meeting these needs. Prerequisite(s): Sophomore Standing, basic orientation to healthcare or human service industries.

MED 401. Global Regulatory and Legal Framework of Quality in Industry and Business. 3 Hours

This course will provide an overview of regulations for the pharmaceutical, medical device, biotech, animal health, and consumer goods industries. Students will be introduced to fundamental concepts in the regulations related to clinical trial development, management, ethics, data integrity, data security, privacy, change control and validation.

MED 402. Product Development and Validation in Life Sciences. 3 Hours

This course will give students an understanding of the processes used in the pharmaceutical, medical device, and pharmaceutical industries for the development of new products. Students will learn the scientific principles used in such developments that ensure that products meet quality standards. Prerequisites: MED 401.

MED 403. Risk and Failure Analysis in Quality Science. 3 Hours

Through the use of historical risk analysis techniques, such as FMEA, Fault Tree, and 5 Why's, students will analyze a holistic set of data (in-production, across product lines, across equipment, human variability, on-market, on-stability, validation studies, change control, etc.) and identify effective corrective and preventative actions (CAPA). Prerequisites: MED 401.

MED 477. Honors Thesis Project. 3 Hours

First of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approval of University Honors Program.

MED 478. Honors Thesis Project. 3 Hours

Second of two courses leading to the selection, design, investigation, and completion of an independent, original Honors Thesis project under the guidance of a faculty research advisor. Restricted to students in the University Honors Program with permission of the program director and department chairperson. Students pursuing an interdisciplinary thesis topic may register for three semester hours each in two separate disciplines in consultation with the department chairpersons. Prerequisite(s): Approved 477; approval of University Honors Program.

MED 480. Pre-Medicine Capstone. 0-1 Hours

Seminar focuses on reflection and analysis of a clinical experience course, and preparation for applying to health professional school. Course offered in Spring semester. Junior or Senior status. MED or DEN major. Prerequisites: MED 210 or MED 220 or MED 230 or MED 339.