

CARLE ILLINOIS COLLEGE OF MEDICINE

college website: <https://medicine.illinois.edu/>
college faculty: <https://medicine.illinois.edu/faculty/>

The University of Illinois at Urbana-Champaign Doctor of Medicine (MD) program is conducted on the Urbana Campus in the Carle Illinois College of Medicine. The college offers a professional, four-year MD degree program that integrates engineering concepts with the traditional pillars of medicine, namely the basic health sciences and clinical training, and prepares students for postgraduate medical education programs. This curriculum produces students who are trained and equipped to incorporate analytical and quantitative techniques, modeling and computation, innovation, and human systems approaches to advancing and delivering high quality healthcare. The curriculum emphasizes professional, compassionate, and ethical care and the utilization of team-based approaches to transform healthcare delivery and improve healthcare outcomes through the continuum of care: preventive medicine through acute care. In addition to required courses, elective rotations provide opportunities for students to explore specialized areas of interest. The educational program spans four (4) years. Students are exposed to extensive clinical training, professional development and scientific and engineering education through a case-driven active learning curriculum.

The college selects applicants with the best combination of academic and extracurricular achievement, maturity, integrity, and motivation. Selection of students is based on an assessment of all available data and an evaluation of skills and aptitude. The quality of work in all subject areas is considered, with an emphasis on quantitative methods, breadth of education, and experiences that demonstrate initiative, creativity and interest in compassionate patient care.

For more information about the University of Illinois at Urbana-Champaign MD program, including Admissions, Financial Aid, and the Curriculum, please consult <https://medicine.illinois.edu/>.

BSE Class Schedule (<https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/BSE/>)

Biomedical Sciences Engr Courses

BSE 600 Global One Health credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/600/>)
 Same as VCM 547. See VCM 547.

BSE 601 Anatomy credit: 0 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/601/>)
 Tailored to follow the organ system courses in allowing medical students to learn the structure and function of the circulatory, respiratory, renal, digestive, neuro-musculoskeletal, genitourinary and reproductive systems, as well as to ways to integrate ethical issues into the study and application of anatomy. No graduate credit. 0 professional hours. Approved for S/U grading only. May be repeated in separate semesters. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine curriculum.

BSE 612 Foundations: Molecules to Populations credit: 13 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/612/>)
 This course, which covers the fundamental elements of medical science, serves as a baseline for the rest of the medical school curriculum. Topics to be covered include foundational anatomy, cell biology, histology, physiology, integration of engineering science, systems, microbiology, pharmacology, genetics, and behavioral science, concepts of populations, social behavior, chronic disease, health care team, patient safety, statistics, big data, Patient-Centered Medical Home, palliative care, quality, compensation, and mobile health technologies. No graduate credit. 13 professional hours. Approved for S/U grading only. May be repeated up to 13 hours in the same terms, to a maximum of 39 credit hours in separate terms, with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 631 Cardiovascular credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/631/>)
 Topics include ischemic heart Dx, cardiomyopathy/CHF, aortic stenosis, atrial fibrillation, peripheral vascular disease, pediatric ASD. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 12 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 632 Respiratory credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/632/>)
 Topics include asthma -- peds, COPD, Pulmonary Fibrosis, Respiratory failure, pulmonary vasculitis. No graduate credit. 3 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 9 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 633 Renal credit: 3 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/633/>)
 Topics include UTI with pyelonephritis, urinary obstruction-BPH, acute renal failure-toxic, chronic renal failure-DM, polycystic renal disease-peds. No graduate credit. 3 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 9 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 634 Clinical Neuroscience credit: 5 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/634/>)
 Topics include neurovascular disorders, seizures, brain injury, dementia, tumors of the brain, disorders involving neuroinflammation, psychotic disorders, affective disorders, anxiety disorders, as well as disorders of the peripheral nervous system and neuromuscular junction. No graduate credit. 5 professional hours. Approved for S/U grading only. May be repeated in separate semesters, for a total of 15 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 635 Musculoskeletal and Integument credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/635/>)

Topics include primary inflammatory diseases such as rheumatoid arthritis, lupus, polymyalgia rheumatica and associated disorders, degenerative diseases of the joints such as osteoarthritis, primary diseases of muscle, primary diseases of bone such as osteoporosis and osteogenesis imperfecta as well as mechanical trauma to bone leading to fracture. The course will also cover disorders of the integumentary system. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 12 credit hours with approval from the Student Progress and Promotions Committee. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 636 Digestion, Nutrition, & Metabolism credit: 1 to 5 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/636/>)

Topics include malabsorption syndrome, vitamin D deficiency, G6PD deficiency, TPN, obesity, GERD with stricture/Barretts, Crohn's disease, peptic ulcer disease with hemorrhage, chronic diarrhea, pyloric stenosis – peds hepatitis C, and colonic polyposis. No graduate credit. 1 to 5 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 15 credit hours with approval from the Student Progress and Promotions Committee. Available for honors grade. Prerequisite: Participation in ongoing study of the digestive system. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 638 Endocrine, Genitourinary, & Women's Health credit: 1 to 10 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/638/>)

Topics include diabetes – type II, ketoacidosis, hypothyroidism, hyperthyroidism, adrenal insufficiency, Cushing's syndrome, diabetes insipidus, hypogonadism, erectile dysfunction, testicular torsion, infertility, sexual orientation, BPH, dysmenorrhea, menorrhagia, polycystic ovarian disease, cervical dysplasia, menopause – vasomotor, pelvic pain, normal delivery, breach, multiple gestation, medical illness of pregnancy – diabetes, and placenta previa. No graduate credit. 1 to 10 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 30 credit hours with approval from the Student Progress and Promotions Committee. Available for honors grade. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 642 Hematology, Oncology, Infection, and Immunity credit: 1 to 6 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/642/>)

Topics include lung cancer, colon cancer, breast cancer, renal cancer, prostate cancer, pancreatic cancer, iron deficiency anemia, sickle cell anemia, lymphoma- non-Hodgkin, acute myelocytic leukemia, chronic lymphocytic leukemia, idiopathic thrombocytopenia, pneumonia, sepsis UTI – pyelonephritis, cellulitis, HIV anaphylaxis, allergic dermatitis, and myocarditis encephalitis. No graduate credit. 1 to 6 professional hours. Approved for S/U grading only. May be repeated in separate semesters for a total of 24 credit hours with approval from the Student Progress and Promotions Committee. Available for honors grade. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 644 Multisystem Conditions credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/644/>)

The Multisystem Conditions course is a required course for students in Phase 1 of the Carle Illinois College of Medicine Curriculum. In this course, students work in small groups to approach complex diseases and conditions they may see in the clinical environment. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: Restricted to students enrolled in Phase 1 of the Carle Illinois College of Medicine curriculum.

BSE 645 Synthesis & Summary credit: 6 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/645/>)

This course will review critical concepts in the areas of Behavioral Science, Biochemistry, Cells and Tissues, Human Development and Genetics, Microbiology, Immunology, Pathology, and Pharmacology, Population Health. The course will be organized around the major organ systems: Blood and Lymphoreticular System, Cardiovascular, Endocrine, Gastrointestinal, Hematology and Oncology, Musculoskeletal, Neurology, Psychiatry, Renal, Reproductive, Respiratory, Skin and Subcutaneous Tissue. No graduate credit. 6 professional hours. Approved for S/U grading only. Prerequisite: This course is restricted to Carle Illinois College of Medicine Students.

BSE 646 Synthesis & Summary - Phase 2 credit: 0 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/646/>)

An optional elective for students who are at the end of Phase 2 in the Carle Illinois College of Medicine curriculum. Designed to be student-centered. During the course, you will review how the basic science disciplines fit together, identify personal content weaknesses and work to deepen your understanding, create a Step 2 study strategy, and prepare for Step 2 in a manner that values wellness as well as growth. No graduate credit. 0 to 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine curriculum.

BSE 650 Global Studies/Service Learning Elective credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/650/>)

This course will engage the student in interdisciplinary studies or projects and demonstrate understanding of complex global events and processes of globalization. Students will learn about issues and problems in health care from a global perspective. No graduate credit. 1 to 4 professional hours. Approved for S/U grading only. May be repeated to a maximum of 28 hours. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 655 Research Elective credit: 1 to 16 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/655/>)

The goal of this course is to introduce the students to the foundations of selected multi-disciplinary research in medical/engineering field. Students will learn about the purpose for research; identifying researchable issues; finding, evaluating, and using sources effectively; recognizing methods associated with different types of data and disciplines; and writing a literature review. No graduate credit. 1 to 16 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester, to a maximum of 64 hours in separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 660 Self-Designed Study credit: 1 to 16 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/660/>)

Students will develop skills and gain experience working collaboratively with other professional through a self-designed study. Develop a self-guided study when students have an interest in an intellectual issue that is best studied through an integrative approach based in multiple academic disciplines. This course will introduce the student to a selected multi-disciplinary study or project in the medical/engineering field, addresses appropriate methodology, provides opportunities for advanced level research or other creative projects, and culminates in an integrative experience. It must be arranged between the student and an individual faculty member or external collaborator, and subsequently approved by the dean of Academic Affairs. No graduate credit. 1 to 16 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester to a maximum of 32 hours over separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 665 Special Topics credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/665/>)

Subject offerings of new and developing areas of knowledge in medicine intended to augment the existing curriculum. No graduate credit. 1 to 4 professional hours. Approved for S/U grading only. May be repeated to a maximum of 16 hours in the same or subsequent semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

BSE 666 Academic Progress I (Longitudinal) credit: 0 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/666/>)

Provides students with an opportunity to demonstrate core medical skills. The course includes assessment of students' understanding of clinical skills, professionalism, anatomy, and medical knowledge. Areas covered in the course include: cardiovascular, respiratory, renal, neurology, musculoskeletal, digestive, nutrition, metabolism, endocrine, genitourinary, oncology, hematology, infection, and immunity. No graduate credit. 0 professional hours. Approved for S/U grading only. May be repeated in separate semesters. Prerequisite: Restricted to Carle Illinois College of Medicine students.

BSE 680 Innovation, Design, Engineering and Analysis Projects (Longitudinal) credit: 0 to 6 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/680/>)

Innovation, Design, Engineering and Analysis Projects (IDEA) is a required course for students in Phase 2 of the Carle Illinois College of Medicine curriculum. In this course, students work independently and in small groups to solve challenges they are presented with in the clinical environment. No graduate credit. 0 to 6 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 15 hours. Available for honor grades. Prerequisite: Restricted to students enrolled in Phase 2 of the Carle Illinois College of Medicine curriculum.

BSE 685 Medicine - Capstone Project (Longitudinal) credit: 2 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/685/>)

Selecting one of the clinical challenges investigated during the Innovation, Design, Engineering and Analysis Projects (Longitudinal), students will work to potentially translate new approaches, technologies, and treatments in healthcare. No graduate credit. 2 to 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 professional hours. Prerequisite: Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

BSE 686 Medicine - Data Science Project (Longitudinal) credit: 2 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/686/>)

Develop skills in data science for health care through the Data Science Project. Identify an exciting data-driven question, find data sources to address the question, and access and utilize those data to improve clinical care. Students will interact with databases, utilize tools for analyzing clinical or molecular data, and learn about the immense potential of medical data science while familiarizing themselves with the issues of human subject's protection and privacy regulations around data. No graduate credit. 2 to 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

BSE 690 Research credit: 1 to 8 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/690/>)

Carle Illinois students are encouraged to participate in research in order to enhance their scientific reasoning, and fulfill the college's mission of developing "Physician Innovators". This course will allow students to engage in a broad spectrum of research experiences. Students will work closely with a research mentor at the University of Illinois at Urbana-Champaign to develop their ideas and generate a list of research outcomes. No graduate credit. 1 to 8 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 16 hours. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 700 Innovations in Problem Based Learning credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/700/>)

This elective will provide students multiple opportunities to identify compassionate innovation through problem-based learning facilitation. The students will learn how to facilitate a PBL session and how to identify moments in cases where compassionate innovation can be furthered. This will be done through creating additional probes or tasks in the cases to be used by future facilitators. Students will also have the opportunity to create notes and evaluations on first year students. These notes/evaluation will be reviewed by CIMED facilitators. The overall goal of this is not only to improve cases for current PBL students, but to assist students participating in the elective in ideation and entrepreneurship. This will help students as they create IDEA projects in the clerkships as well as preparing them for Capstone and potentially Data Science projects. Based on student interest, certain areas of this elective may be emphasized to achieve student goals. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 701 Introduction to Telemedicine credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/701/>)

This introduction to telemedicine will help students understand the role of telemedicine in various contexts such as in primary care, for underserved or rural patients, during times of crisis (disasters, pandemics) and more. Considerations include benefits & limitations, tools & technology, patient interactions & follow-up, insurance considerations, legal and regulatory issues, and research. Students will have an opportunity to research an area of telemedicine and present what they have learned. This could be new uses of telemedicine, new tools, policy/legal considerations, expanding the reach of telemedicine, or any other issue related to telemedicine. Outputs could include a literature review, program plan, roadmap, white paper or other presentation medium. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 702 Medical Spanish credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/702/>)

Carle Illinois College of Medicine strives to support physicians who want to serve diverse populations. To that end, students may enroll in a 2-week medical Spanish course. This hybrid online course allows students to increase their proficiency in Spanish, while also practicing with a standardized patient. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 703 Medical Informatics credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/703/>)

A detailed overview of biomedical and health informatics for medical students. The course provides up-to-date details on the informatics field, which includes: electronic health records, data standards and interoperability, clinical decision support, healthcare data analytics, population health, patient engagement, and telemedicine. It also describes and sets the context for new technologies, such as SMART on FHIR, machine learning, artificial intelligence, and wearables. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 704 Medicine in Literature credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/704/>)

The medical encounter between patients and physicians has been represented in literary texts such as poems, short stories and novels for centuries. In this elective, students will be given the opportunity to reflect on the medical experience through an analysis of literary texts from various time periods and cultural contexts. Particular attention will be paid to the difference in perspective by patients, physicians and other actors in the healthcare setting. Our reading of literature will be complemented by texts from the field of narrative medicine, which uses the tools of literary analysis and close reading to understand patients' histories and fine-tunes awareness of the cultural and social determinants of health. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 705 Race in Medicine credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/705/>)

This elective provides an opportunity to explore the topics of unconscious bias, history of race in medicine and effects on systemic racism in medicine. The goal is to give time to grow in personal insight and development in this area to progress to become a compassionate and unbiased health care provider. Progress towards this goal will be made through the personal journey of completing a 21 day equity challenge and reflection paper, participation in online discussion boards, and group projects looking at the history and current state of racism and social determinants of health in medicine. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois college of Medicine curriculum. The course is only available during the Discovery Learning timeframe.

BSE 706 Literature Review in Pathology credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/706/>)

Pathology is a multidisciplinary science that connects theory (basic sciences) with practice (clinical sciences). This elective provides students with opportunities to explore the role of pathology in medical education. This course might be of particular interest to those who are generally interested in medical education and/or pathology as a future specialty. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled at the Carle Illinois College of Medicine.

BSE 710 Computational Genomics credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/710/>)

The first week of this elective is an intensive course for scientists and clinicians covers the basics of computational genomics, while integrating the latest technologies and computational methodologies. University of Illinois faculty and Mayo Clinic scientists teach lectures and lead hands-on lab exercises in a variety of subject areas including genome sequencing and assembly, polymorphism and variant analysis, epigenomics, and systems biology. The second week is an in-depth independent study that focuses on a project using the skills from the first week. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: This course is restricted to students enrolled in the Carle Illinois College of Medicine.

BSE 711 Climate Aware Physicians credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/711/>)

Medical students should learn how to practice medicine in the context of the current health impacts of climate change. Throughout the U.S. and globally, climate change contributes to increasing morbidity and mortality, including heat illness, respiratory and cardiovascular disease from air pollution, vector and water borne diseases, food and water insecurity, mental stress, and injuries. We highlight health threats, policies, and actions for physicians, engineering/medical researchers, and medical students. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 720 Advanced Anatomy credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/720/>)
Provides a focused concentration on gross anatomy via literature review and intensive cadaver dissection related to the student's specific clinical interest. Topics will emphasize clinical conditions that have clear anatomic correlates. Key topics will include the 3D relationships of gross anatomical structures, foundational anatomical knowledge required to interpret results of different imaging modalities, and the application of anatomical knowledge in carrying out surgical, diagnostic, or therapeutic clinical procedures. No graduate credit. 4 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

BSE 730 Introduction to Deep Learning on Healthcare Data credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/BSE/730/>)
Covers deep learning methods, healthcare data and applications using deep learning methods. Includes activities such as online lectures or video lectures, programming labs, literature review, and individual or group presentations. The overall goal is to understand basic data science workflow for healthcare data such as electronic health records, clinical notes, and medical images, to learn basic deep learning models, and to learn the structure of data science projects. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Experience with Python programming, basic machine learning, and Jupyter notebooks. Restricted to students enrolled in the Carle Illinois College of Medicine curriculum.

BSE 790 Understanding the Response to the COVID-19 Pandemic credit: 1 Hour. (<https://courses.illinois.edu/schedule/terms/BSE/790/>)
This course is designed to help students apply the principles of virology, immunology, public health, data science and population Medicine in evaluating the current public health policy responses to the COVID-19 pandemic. Since the learning activities will focus on current events and daily topics, they will be altered and refined to align with unfolding circumstances and policy decisions. The learning activities will provide students with a model foundation of competency and confidence which they would need to serve on a local, community health advisory board and provide expertise in support of the design of a coordinated response to mitigate the impact of a Covid-19 outbreak on patient health, societal well-being, business continuity and economic durability. The competency foundation will include: 1. an understanding of viral biology, host defense and infectious disease dynamics. 2. the ability to gather, understand and intelligently apply biostatistical and epidemiological data in designing practical solutions. 3. an appreciation of the different: a. political, demographic, educational, attitudinal, behavioral, socioeconomic, and cultural factors, along with the inherent disparities and preferences that impact health risk and community compliance to public health recommendations b. needs and constraints of local business owners c. barriers to public participation and communication. No graduate credit. 1 professional hour. Approved for S/U grading only. Prerequisite: Restricted to Carle Illinois professional students only.

CLE Class Schedule (<https://courses.illinois.edu/schedule/DEFAULT/DEFAULT/CLE/>)

Clinical Sciences Engr Courses

CLE 610 Faith, Medicine, and End-of-Life Care credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/610/>)
Helps students to develop their skills in taking a spiritual history and addressing issues relating to faith; skills in end-of-life care; and understanding of whole person care. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 4 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois Doctor of Medicine (MD) program.

CLE 613 Introduction to Clinical Practice (Longitudinal) credit: 0 to 6 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/613/>)
Examines and exposes to the fundamentals of clinical work including office support with basic history, vitals, understanding the team, communicating with patients, observing health care roles and processes. Additionally, this course addresses concepts of history and physical assessment, includes H&P, preoperative assessment, routine physicals. No graduate credit. 0 to 6 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Available for honors grade. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 631 Clinical Elective credit: 1 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/631/>)
This course will expose the students to a clinical specialty to learn more about treatment of disorders, lifestyle of the physicians and the experiences of the patients. Students will learn about interpersonal communication skills, gain a deeper understanding of the environment in which medical devices are used, observe therapeutic treatment in real time, and strengthen the clinical skills. No graduate credit. 1 to 4 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester to a maximum of 40 hours over separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

CLE 635 COVID Clinical Clerkship Make-Up credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/635/>)
The clinical clerkship make-ups are a two-week rotation. This course allows students whose clerkships were disrupted by COVID-19 to further explore a specialty. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated in same semester to a maximum of 4 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 640 Family Medicine Clerkship credit: 1 to 10 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/640/>)
This longitudinal clerkship provides an exciting opportunity for students to have clinical experiences within their own student clinic, as well as ambulatory practices in disciplines such as psychiatry, pediatrics, and family medicine. Students will learn the core skills and knowledge essential to the practice of primary care: diagnosis and treatment of common outpatient complaints, management of chronic medical conditions, and strategies for health promotion and disease prevention. No graduate credit. 1 to 10 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 10 hours. Available for honors grade. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 645 Internal Medicine Clerkship credit: 10 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/645/>)

The medicine clerkship is a ten-week rotation. This clerkship emphasizes the integration and application of pathophysiology to the diagnosis and management of patients in addition to the skills of history-taking, physical examination, and case presentation. The course is an apprenticeship focusing on the bedside care of patients. Students work closely with house staff members and ward attendings making daily rounds, admitting new patients, and caring for them with the team. No graduate credit. 10 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 650 Neurology Clerkship credit: 5 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/650/>)

The neurology clerkship is a four-week introduction to clinical neurology, the specialty of medicine devoted to patients with diseases of the nervous system. The clerkship emphasizes the basic clinical methods of bedside neurology. Based on the history and examination, students develop skills at neuroanatomical localization and clinical reasoning. Students learn to interpret clinical findings, develop a differential diagnosis, and formulate a plan of evaluation. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 655 Psychiatry Clerkship credit: 5 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/655/>)

The Psychiatry Clerkship is a four week rotation. All students evaluate and follow patients on inpatient and outpatient services, participating in their patients' care with close attending and resident supervision. The acquisition of clinical skills is emphasized: conducting an interview to obtain a psychiatric history and mental status examination; organizing, recording, and presenting the findings to generate a differential diagnosis; and formulating a treatment plan in accordance with the biopsychosocial model. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 660 Obstetrics & Gynecology Clerkship credit: 5 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/660/>)

The obstetrics and gynecology clerkship is a five-week rotation. The main objective is to familiarize students with the signs and symptoms of normal and abnormal reproductive function and to teach the basic examinations in obstetrics and gynecology. The course will emphasize and reinforce skills for taking an appropriate history, performing a physical and pelvic examination, formulating a differential diagnosis as well as a treatment plan, and properly managing patients. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 665 Pediatrics Clerkship credit: 5 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/665/>)

The Pediatrics Clerkship is a five week rotation. The rotation is divided between inpatient and outpatient experiences. The emphasis is on learning to care for children and families in a variety of patient care settings and developing the clinical skills, diagnostic reasoning, and basic management strategies core to the practice of pediatrics. Attending physicians emphasize normal child development as well as the role illness plays in the lives of children and families. No graduate credit. 5 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 667 Academic Progress II credit: 0 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/667/>)

Students will be given an opportunity to demonstrate core medical skills through objective structured clinical examinations. This will include history taking, physical examinations, interpreting common test results, entering orders and prescriptions, giving oral presentations and collaborating as part of an interprofessional team. No graduate credit. 0 professional hours. Approved for S/U grading only. May be repeated, students may repeat this course, with approval from Carle Illinois Academic & Student Affairs. Prerequisite: Restricted to Carle Illinois College of Medicine Phase II or III students.

CLE 670 Surgery Clerkship credit: 10 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/670/>)

The Surgery Clerkship is a ten-week rotation. The clerkship is designed to provide clinical experience that improves skills in overall patient care as students apply their knowledge of the basic sciences and expand their knowledge base through exposure to the wide variety of patients and procedures that fall into the realm of general surgery. Students become a valued member of the team as they assume responsibility for the overall care of their patients preoperatively and postoperatively and assist in the operating room. No graduate credit. 10 professional hours. Approved for S/U grading only. Available for honor grades. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 675 Adult Reconstruction - Hip and Knee credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/675/>)

The student will be involved in the daily activities of caring for patients with hip and knee degenerative conditions, as well as potential hip or knee injuries such as hip fractures or periprosthetic fracture. The student will work 1:1 with primary faculty in both clinic and the OR. In clinic, the student will have increasing autonomy to perform history and physical exams on this adult population as appropriate. This begins with shadowing and builds to independent H&P taking with evaluation of pertinent studies. The OR experience begins with scrubbing and shadowing, but will go on to include patient positioning, assisting with draping, application of dressings, and other activities the faculty feels appropriate based on the student knowledge and performance. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate terms up to a maximum 8 hours. Prerequisite: Completion of Phase 1 and OR Orientation class. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 680 Family Medicine Continuity Clinic credit: 1 to 3 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/680/>)

The Family Medicine Clinic is a required course for students in Phase 2 of the Carle Illinois College of Medicine curriculum. The Family Medicine Clinic is structured to prioritize longitudinal relationships for continuous management of chronic disease. With graduated responsibility, medical students perform the functions of a primary care physician for their patient panel. Students are assigned to the clinic one evening per week. No graduate credit. 1 to 3 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Family Medicine Clerkship. Restricted to students enrolled in Phase 2 of the Carle Illinois College of Medicine curriculum.

CLE 681 General Surgery Sub-Internship credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/681/>)

Carle Illinois students are required to complete at least one Sub-Internship rotation during their fourth year. In the General Surgery Sub-Internship, students will work with faculty in advanced clinical application of their medical knowledge gained from their core surgery clerkship. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated to a maximum of 8 hours. Prerequisite: Successful completion of the Carle Illinois core clinical clerkships. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 683 Pediatrics Sub-Internship credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/683/>)

The four-week sub-internship in Pediatrics provides Phase 3 students supervised responsibility for patient care in general pediatric inpatient, pediatric intensive care, and neonatal intensive care. Each sub-intern will gain an awareness of the advanced knowledge, skills, values and attitudes the hospitalists/intensivists and ER physicians strive to acquire and maintain throughout their professional lives. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated for a maximum of 8 hours. Prerequisite: Completion of Carle Illinois core clerkships. Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine curriculum.

CLE 684 Internal Medicine Sub-Internship credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/684/>)

Carle Illinois students are required to complete at least one Sub-Internship rotation during their fourth year. In the Internal Medicine Sub-Internship, students will work with faculty in advanced clinical application of their medical knowledge gained from their core Medicine clerkship. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 685 Anesthesiology Sub-Internship credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/685/>)

Provides a more in-depth experience and preparation for the knowledge and procedures performed when working with patients who require sedation anesthesia and pain management for various reasons. Anesthesia fellowships typically encompass experiences in perioperative/peri-procedural locations. This experience will thus aim to provide the student with exposure to these areas where anesthesiologists typically work. It will be an opportunity to build trust with providers over the four weeks so that they may possibly recommend the student for future work in this field. The experience will teach the student how to interact with patients undergoing anesthesia, allowing practice in communicating treatment plans, and discussing concerns with the patients undergoing such procedures. Additionally, it will be a chance for the student to gain more experience in some of the more advanced skill sets required for work in these fields. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Successful complete of all Carle Illinois Core Clerkships. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine.

CLE 686 Neurology Sub-Internship credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/686/>)

Illustrates the advanced responsibilities and activities that students are expected to demonstrate and participate as an integral member of a neurology team during this advanced clinical rotation. The overall goal for the Neurology Sub-Internship is to give further depth exposure to neurology, with the goal of treating the student on this rotation as more like a resident. Students will conduct further, in depth on EEGs, imaging interpretation, and differential diagnosis. This experience is to provide students with advanced clinical skills necessary for their future role as a resident and be exposed to activities that continue their development according to the Core Entrustable Professional Activities (EPAs) for entering Residency related to Neurology. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 687 Obstetrics and Gynecology Sub-Internship credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/687/>)

Illustrates the advanced responsibilities and activities that students are expected to demonstrate and participate as an integral member of an Obstetrics and Gynecology team during this advanced clinical rotation. The overall goal for the Obstetrics and Gynecology Sub-Internship is to give further depth exposure to obstetrics, with the goal of treating the student on this rotation as more of a resident, carrying more patients. Further in depth on differential diagnosis, treatment options, and fetal heart monitor interpretation. This experience is to provide students with advanced clinical skills necessary for their future role as a resident and be exposed to activities that continue their development according to the Core Entrustable Professional Activities (EPAs) for entering Residency related to Obstetrics and Gynecology. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 690 Clinical Research credit: 1 to 8 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/690/>)

Carle Illinois students are encouraged to participate in research in order to enhance their scientific reasoning, and fulfill the college's mission of developing "Physician Innovators". This course will allow students to engage in a broad spectrum of research experiences. Students will work closely with a research mentor at the University of Illinois at Urbana-Champaign to develop their ideas and generate a list of research outcomes. No graduate credit. 1 to 8 professional hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 691 Translational Research credit: 1 to 8 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/691/>)

Carle Illinois students are encouraged to participate in research in order to enhance their scientific reasoning, and fulfill the college's mission of developing "Physician Innovators". This course will allow students to engage in a broad spectrum of research experiences. The research will be translational in nature. Students will work closely with a research mentor at the University of Illinois at Urbana-Champaign to develop their ideas and generate a list of research outcomes. No graduate credit. 1 to 8 professional hours. Approved for S/U grading only. May be repeated in separate terms to a maximum of 16 hours. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 692 Immersion in Clinical Practice - Phase 2 credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/692/>)

Provide students and clinicians a chance to meet, in a non-classroom environment, to discuss in topics that impact clinical practice. Examples of these topics include: Domestic Violence, Burnout, Cultural Competence, and Legal Issues in Medicine. Students will be given readings, websites, and videos prior to each session. In addition, students will write brief essays on these topics based on their experience during their clerkships and other electives. Each session, over a dinner, will last approximately two hours. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 693 Self-designed Clinical Elective credit: 1 to 16 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/693/>)

This elective will allow students to develop clinical skills and gain clinical experience under close supervision of clinical faculty through modifying a standing clinical elective to better match their interests or customize a clinical experience. It must be arranged between the student and an individual faculty member or external collaborator, and subsequently approved by the Assistant Dean for Curriculum. No graduate credit. 1 to 16 professional hours. Approved for S/U grading only. May be repeated up to 16 hours in the same semester to a maximum of 32 hours over separate semesters. Prerequisite: This course is restricted to Carle Illinois College of Medicine students.

CLE 694 Career Boot Camp credit: 5 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/694/>)

A preparatory course which helps prepare graduating students to transition to residency. The course utilizes a series of interactive lectures, hands-on workshops, a variety of simulation methods for skills training in procedures and clinical scenarios. Besides topics that span the practice of medicine and caring for patients, there will also be an emphasis on career planning and life outside of work. No graduate credit. 5 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 10 hours. Prerequisite: Completion of Phase 2. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine.

CLE 702 Anesthesiology credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/702/>)

The student will be introduced to various anesthesia techniques, including management of the patient's airway. The student will gain experience in administration of anesthetic drugs, management of critical life functions such as hemodynamics monitoring, blood and fluid therapy and acute pain management (both postoperatively and in Obstetrics). A pre-test will be given to assess student's existing knowledge of anesthesia and other clinical material. This will help the student understand the scope of study during the rotation. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine. Students must be in Phase 2 or Phase 3 of the curriculum.

CLE 704 Dermatology credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/704/>)

The student is exposed to the private and clinical practice of general dermatology and is instructed in diagnosis and treatment. Emphasis is placed on the care of the patient and the student is expected to function as a member of the office team. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 706 Emergency Medicine credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/706/>)

This elective is to provide exposure to the specialty of emergency medicine. The student will gain experience through the process of assessing a patient by history taking, physical exam and diagnostics. By the end of the 4 week elective the student should be able to obtain a complaint based history with review of system, complete a physical exam and start to formulate a differential diagnosis based upon the chief complaint. Stress will be placed on the development of the differential diagnosis. The experience will include learning appropriate laboratory and radiographic testing as well as treatment options for illnesses/disease that most commonly present to the emergency department. The student will commonly get exposure to patients with chest pain, abdominal pain, neurological disorders, undifferentiated malaise, early pregnancy complaints, STI, sepsis and trauma. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Internal Medicine or Surgery Clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois Curriculum.

CLE 713 Palliative Care – Introduction credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/713/>)
Healthcare providers must be able to provide compassionate patient-centered care that optimizes well-being and alleviates suffering. Students will gain experiences caring for patients with advanced, chronic, and progressive illness that may be facing high symptom burden, complex treatment decisions, or may be near the end of life. The student will gain experience in the sub-specialty of Palliative Care through seeing patients on the inpatient consult services, outpatient primary palliative care clinic, embedded sub-specialty clinics, nursing home visits, and home visits. Student will participate in interdisciplinary rounds and work in a multidisciplinary team to optimize patient care. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Internal Medicine Clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois curriculum.

CLE 714 Ambulatory Cardiology credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/714/>)
The student will be exposed to the outpatient management of common cardiovascular disorders including coronary artery disease, valvular heart disease, vascular disease, heart failure, and atrial fibrillation as well as to the work-up of common referrals in an ambulatory setting such as chest pain, shortness of breath, edema, palpitations, dizziness, syncope, abnormal ECG, and preoperative risk assessment. The student will also learn basic ECG interpretation and have the opportunity to observe stress testing, nuclear imaging, and echocardiography. The goal is that the student develops his or her history taking and physical exam skills as it relates to the cardiovascular system by integrating the basic sciences with the art of medicine. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Restricted Carle Illinois students in Phase 2 or Phase 3 of the curriculum.

CLE 715 Adult Intensive Care credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/715/>)
The goal of this elective is to expand the student's knowledge and understanding of intensive care issues affecting hospitalized patients, primarily focusing on appropriate diagnostic and therapeutic interventions and to provide the opportunity for the student to assume a more primary role in the responsibility of directing care of a patient in a team setting. Inherent in this experience is an opportunity for in-depth learning in the areas of professionalism and systems-based practice. The elective will encompass the learning of integrative skills, procedures and how to handle basic clinical scenarios including codes. The student will partner with their attending to develop the diagnostic and therapeutic plans for his or her patients, the student will engage in a formative experience designed to prepare him/her for the future care of patients in critical care. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Internal Medicine Clerkship, General Surgery Clerkship, or Neurology Clerkship. Restricted to students enrolled in Carle Illinois College of Medicine. Students must be in Phase 2 or Phase 3 of the curriculum.

CLE 716 Hematology/Oncology credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/716/>)
The goal of this elective to serve as an introduction to the internal medicine subspecialty of hematology and oncology. In the outpatient setting, the students will be exposed to various hematological and oncological conditions which are managed primarily as an outpatient and exposure to infusion center etc. where chemotherapy is administered. They will be asked to attend tumor board conferences whenever possible to understand the multidisciplinary management of an oncological problem. They will also get some inpatient experience where they will be introduced to management of oncological complications when patients present to the hospital. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine curriculum.

CLE 717 Infectious Disease credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/717/>)
The goal of this elective is to give students exposure to the field of infectious disease, including differential diagnosis, treatment options, and management strategies. Students should be able to manage 1-2 patients and independently devise plans for new consults. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 12 hours. Prerequisite: Carle Illinois Internal Medicine core clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine.

CLE 730 Clinical Genetics credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/730/>)
This elective course introduces medical students to the diverse practice of clinical genetics. The focus is on basic and applied genetics, genetic risk assessment, and genetic counseling as they relate to prevention, diagnosis, treatment, and management of disease. The course will serve as the basis for the healthcare professional to holistically integrate genetic/genomics, epigenetics, and scientific concepts into personalized health care. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated for a maximum of 4 hours. Prerequisite: Completion of Internal Medicine Clerkship, Pediatric Clerkship, or Family Medicine Clerkship. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 732 Neurosurgery I credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/732/>)
Designed to provide an introduction into different subspecialties of neurosurgery. It forms the basis for a strong foundation of knowledge of neurological diseases and how they are managed both surgically and non-surgically. Students will be immersed in day-to-day service, functioning essentially as a supervised intern, while working closely with our cohesive group of mid-level providers and attendings in the inpatient, outpatient and operating room settings. The goal of this neurosurgery elective is designed to familiarize students with the essential elements of neurosurgical evaluation and care so that they are able to provide exceptional frontline management. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine who are in Phase 2 or 3 of the curriculum.

CLE 733 Neurosurgery II credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/733/>)

Designed to provide an in-depth experience into different subspecialties of neurosurgery. It builds on the the foundation of knowledge of neurological diseases and how they are managed both surgically and non-surgically from CLE 732. Students will be immersed in day-to-day service, functioning essentially as a supervised intern, while working closely with our cohesive group of mid-level providers and attendings in the inpatient, outpatient and operating room settings. Students will be responsible for composing an oral presentation on a patient encountered during their elective and research assignment assigned by faculty of neurosurgery. No graduate credit. 4 professional hours. Approved for S/U grading only. Available for honors grades. Prerequisite: CLE 732: Neurosurgery I. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine who are in Phase 2 or 3 of the curriculum.

CLE 736 Urogynecology credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/736/>)

This elective is for students interested in pursuing the field of obstetrics and gynecology who seek deeper knowledge and responsibility in the field of urogynecology. This will provide students a more complete experience in the clinical practice of urogynecology, surgery, urodynamics and clinical assessment of pelvic floor disorders. No graduate credit. 2 professional hours. Approved for S/U grading only. May be repeated to a maximum of 12 hours.

CLE 737 Gynecologic Oncology credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/737/>)

This elective is for students interested in the field of Obstetrics and Gynecology and/or medical surgical oncology. The experience is for students who seek deeper knowledge and responsibility in the field of gynecologic oncology. The rotation will provide the student with a complete exposure to the clinical practice of gynecologic oncology. Students will perform initial workup and evaluation and staging of patients presenting with malignancy. Working with a provider, they will determine candidacy for surgery and assist with surgical procedures. Students will also follow patients during recovery and surveillance. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of CLE 660. Restricted to students enrolled in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 738 Reproductive Medicine credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/738/>)

This rotation is designed for the Phase 3 medical student who is well versed in Obstetrics and Gynecology and is possibly interested in pursuing a residency in OB/GYN. Activities will revolve around the workup of the infertile couple and the monitoring and management and treatment of reproductive problems. Time will be spent in the office setting, with office ultrasounds, consultations as well as management of ovulation induction cycles and monitoring of ovarian hyperstimulation for IVF. Observation of IVF procedures and assisting in other surgeries would be expected. Additional time in the andrology and IVF labs observing may be available. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of Phase 2 clerkships. Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine.

CLE 739 Advanced Obstetrics credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/739/>)

This rotation is designed for the Phase 3 medical student who is well versed in Obstetrics and Gynecology and is possibly interested in pursuing a residency in OB/GYN. Activities will revolve around the work up of pregnancy and pregnancy-related complications. Time will be spent on Labor and Delivery, Antepartum, the Outpatient Maternal Fetal Medicine clinic, and the Outpatient Midwifery Clinic. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Successful completion of all Phase 2 clerkships. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 740 Introduction to Ophthalmology credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/740/>)

This 2-week course will serve as an introduction to Ophthalmology. During this rotation, students will gain a better understanding of the structure and function of the human eye, including an introduction to tools and testing for proper diagnosis and treatments. Students will also start learning about various ocular diseases including co-management of ocular and systemic diseases. This will also include understanding when and why to refer to other specialties. This course will be split between Optometry 25% and Ophthalmology 75%. This elective will culminate with a brief oral presentation to the preceptor on one idea to improve the field or one case that stuck with them. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Medicine Clerkship. Restricted to students enrolled in Phase 3 of the Carle Illinois College of Medicine.

CLE 741 Advanced Ophthalmology credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/741/>)

This 4-week course give students a deep dive into the field of Ophthalmology. This includes a deeper understanding of the structure and function of the human eye including both common and uncommon disease states. Students will be given instruction on how to use tools for diagnosing common diseases. After diagnosis, students will create and propose a treatment plan, including possible referrals, to their preceptor. This course will be split between optometry 25 % and ophthalmology 75%. This elective differs from the introduction to Ophthalmology as it provides more autonomy in examining patients and in assisting with procedures such as cataract retain or lid surgery. In addition, this course will culminate in a brief (15 minute) research presentation on an area of interest in Ophthalmology or a current case. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate semesters to a maximum of 8 hours.

CLE 742 Plastic and Reconstructive Surgery credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/742/>)

Each four-week rotation will consist of familiarization with general plastic and reconstructive surgery. Emphasis will depend upon the current office and surgical case load. The student will assist in all facets of the practice and have an opportunity to view a wide range of cosmetic plastic surgery. The clinical and surgical experience will provide a solid foundation for innovative ideas in plastic and reconstructive surgery. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 743 Orthopedic Trauma credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/743/>)

An advanced clinical elective focusing on the management of patients sustaining major orthopedic injuries and their sequelae. Students will be involved in all aspects of the continuum of care, including initial emergency management, non-operative and surgical treatment of injuries, inpatient care, and the outpatient management of patients sustaining fractures and dislocations of the extremities and pelvis. Students will work with faculty daily and are expected to have direct participation in all activities. The application of basic science foundations in anatomy, cell biology/systems physiology, and fundamental biomechanical principles will be emphasized as they relate to the treatment of fractures and optimizing fracture healing. Students may, with approval of faculty director, create a proposed innovated solution to an orthopedic trauma situation. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Core Clerkship. Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine.

CLE 744 Oral & Maxillofacial Surgery I credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/744/>)

Provides exposure to the field of Oral & Maxillofacial surgery. Students will gain experience in the full scope of this surgical specialty including traditional outpatient ambulatory surgery, craniomaxillofacial trauma, orthognathic/reconstructive surgery, cleft lip and palate surgery, and maxillofacial oncology. The student will gain experience in head and neck surgical anatomy, imaging, and principles of management of these subspecialty areas. Additionally, students will gain exposure in the application of technology to these clinical problems such as the role virtual surgical planning. No graduate credit. 2 professional hours. Approved for S/U grading only. Available for honors grading. Prerequisite: CLE 670: Surgery Clerkship. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 745 Oral & Maxillofacial Surgery II credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/745/>)

Provides exposure to the field of Oral & Maxillofacial surgery. Students will gain experience in the full scope of this surgical specialty including traditional outpatient ambulatory surgery, craniomaxillofacial trauma, orthognathic/reconstructive surgery, cleft lip and palate surgery, and maxillofacial oncology. The student will gain experience in head and neck surgical anatomy, imaging, and principles of management of these subspecialty areas. This advanced course will allow for increased involvement in the day to day management of patients in the clinic, emergency room, in-patient setting, and the operating room. No graduate credit. 4 professional hours. Approved for S/U grading only. Available for honors grading. Prerequisite: CLE 670: Surgery Clerkship. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 746 Otolaryngology - ENT credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/746/>)

This elective is designed for the student seriously considering a career in otolaryngology or seeking a deeper knowledge of ENT. Emphasis on diagnosis and treatment of common head and neck disorders. Students will experience ENT patients in ambulatory, surgery, and in-patient settings. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Med and OR Orientation. Restricted to students enrolled in the MD program at Carle Illinois College of Medicine in Phase 2 or Phase 3 of the curriculum.

CLE 748 Surgical Pathophysiology credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/748/>)

Underlying modern diagnosis and treatment of complex surgical disease is a fascinating and complex pathophysiology. In the context of current practitioner training, it has become challenging to address these fundamental concepts in detail that is sufficient to initiate long-term interest in the scientific underpinnings of surgical science. This rotation allows student a 'deep dive' into the underlying physiology and medical history of modern diagnosis and treatment. Students will meet surgical patients, whose disease will initiate investigations of the historical and basic science underpinnings of modern surgical care. Potential areas of investigation may include classic medical physiology such as the treatment of hyperkalemia in a surgical patient with particular attention to the associated cellular processes and electrophysiology, the mechanisms of non-cytotoxic systemic cancer therapy such as immunotherapy and gene or protein directed therapy or the physiology of systemic inflammatory response and the (largely failed) attempts to intervene in that pathologic process on the cellular level. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 750 Developmental Pediatrics credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/750/>)

This clinical rotation is designed to provide a student with a comprehensive preview of the commonplace developmental and behavioral problems experienced by up to 15% of children in our community. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 751 Neonatal Intensive Care credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/751/>)

The student enrolled in this elective will be exposed to caring for neonates in the Carle Neonatal Intensive Care Unit (NICU). Students will participate and present in daily rounds, attend deliveries, and assist with procedures. Students will learn basic principles of neonatal care, as well as the diagnosis and management of common neonatal pathology. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 752 Pediatric Pulmonology & Sleep Medicine credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/752/>)

The goals of the Pediatric Pulmonology & Pediatric Sleep Medicine elective rotation are to delve into common pediatric pulmonary and sleep diagnoses (asthma, cystic fibrosis, insomnia, snoring) and become familiar with less common conditions. Students will learn to further develop the differential diagnosis and use it to generate a plan of care. In addition, pharmacology, physiology, radiographic imaging, pulmonary function testing, and polysomnography will be discussed as they relate to the various pulmonary and sleep diagnoses. No graduate credit. 4 professional hours. Approved for S/U grading only. May be repeated in separate terms up to a maximum 8 hours. Prerequisite: Restricted to students enrolled in Phase 2 or 3 or the Carle Illinois Curriculum.

CLE 764 Physical Medicine and Rehabilitation credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/764/>)
Provide students with an introduction to in-patient physical medicine and rehabilitation. Students will consult with patients in the hospital for possible admission, admit the patient, perform a history and physical, and round daily with attending physicians. Student will learn about different types of care provided through the physical medicine and rehabilitation service including: Rehabilitation, electrodiagnosis, general outpatient and musculoskeletal rehabilitation, and non-healing wound care rehab. Students will have an opportunity to work with a physician, to determine the goals and objectives of patient rehabilitation. Students will have the opportunity to observe and interact with other rehabilitation team members including physical and occupational therapists, speech-language pathologists, rehabilitation social work, case management, nutrition, and psychology. Outpatients are seen for musculoskeletal problems. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Medicine. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 771 Addiction Medicine credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/771/>)
This unique elective offers students direct access to the rapidly developing field of addiction medicine. Students will take part in direct patient care at an outpatient addiction specialty clinic with a multidisciplinary team of providers. They will also have the opportunity to attend a drug court in Champaign County and participate in a needle exchange program through the Champaign County Public Health Department. On satisfactory completion, students will have gained a better understanding of the evidence-based treatment options of individuals living with substance use disorders. They will also have firsthand experience combating one of the greatest challenges facing modern medicine - the opioid epidemic. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 773 Radiation Oncology credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/773/>)
Radiotherapy is an integral part modern multidisciplinary cancer care. This clinical elective is designed to introduce students to the field of Radiation Oncology and use of radiotherapy. We will provide direct experience with evaluation and management of patients with malignant disease, as well as occasional benign conditions regarding radiotherapy. Students will learn epidemiology, pathophysiology, and staging of cancer patients, and then utilize evidence-based approaches for their treatment. This will include opportunities to learn basic information about radiobiology and physics to inform their understanding of radiotherapy planning and treatment delivery. Students will augment direct patient care interactions with attendance of multidisciplinary tumor conferences with other oncologic specialties, as well as departmental quality assurance rounds. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Medicine Core Clerkship. Restricted to students enrolled in Phase 2 or 3 of Carle Illinois College of Medicine.

CLE 774 Simulated Clinical Ultrasound credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/774/>)
The Simulated Ultrasound elective enables students to develop skills related to clinical ultrasound. Utilizing a SonoSim and the associated online modules, students will have the opportunity to enhance their understanding of this imaging tool, and prepare for clinical environments that could benefit from point-of-care ultrasound. Students will learn ultrasound principles and acquisition skills through an online self-paced module. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 775 Point of Care Ultrasound credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/775/>)
The Clinical Ultrasound elective enables students to explore specialties where point-of-care ultrasound can be utilized. Students will learn ultrasound principles and acquisition skills through an online self-paced module. Students will further learn through observing sonographers, providing students with opportunity to refine their skills through observation and questions. Students will work with attending providers (up to four) in different inpatient specialties to assess and care for patients, identifying cases where ultrasound imaging may be useful. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students in Phase 2 or Phase 3 of the Carle Illinois curriculum.

CLE 776 Diagnostic Radiology and Non-Cardiac Nuclear Medicine credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/776/>)
Students will observe both acquisition and interpretation of diagnostic exams. These will include, but are not limited to, plain film, fluoroscopy, computerized axial tomography and magnetic resonance imaging. In addition, the student will observe both ultrasonography and nuclear medicine procedures including ultrasound of thyroid and abdominal structures. Nuclear Medicine interpretations will include bone scans, thyroid scans, PET/CT. Students will review films correlated to their clinical experiences and future residency plans, read assigned material dealing with basic diagnostic and fundamental radiology, and attend conferences related to the imaging service. Students will observe invasive diagnostic procedures occurring in the Imaging Department. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Student must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 777 Vascular and Interventional Radiology credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/777/>)
Students will observe and work with the Vascular and Interventional radiology team at Carle foundation Hospital. Students will observe and participate in clinical management of patient with a disease and pathophysiology involving the entire human body and all organ systems. Student will learn basic imaging principles and how they are applied to the management and treatment of disease with special attention to minimally invasive, imaging guided techniques. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 778 Imaging in Critical Care credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/778/>)

This elective focuses on remote learning of imaging in the ICU. The primary focus will be interpretation of chest x-ray and chest CT. This starting point will allow students to pursue individual learning goals regarding critical care such as infectious disease, pulmonology, cardiology, and physics. Students will be given a chance to “follow” the patients through their time in the ICU by viewing their images and all other records. This will allow students to become facile with the electronic medical record system. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Family Medicine Clerkship. Restricted to students in Phase 2 or Phase 3 of the Carle Illinois College of Medicine curriculum.

CLE 779 Bariatric Surgery credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/779/>)

The goal of this rotation is to recognize the importance of obesity as a disease and the strong impact it has in patients' health, also to describe the management of obesity and understand the pathophysiology of obesity. It will mainly focus on the pre-op assessment of bariatric patients by a multidisciplinary team, surgical procedures to treat obesity as well as the postoperative care of bariatric patients. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 780 Hand Surgery credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/780/>)

The student participating in this elective will gain initial exposure to Orthopedic Hand Surgery both in the clinic setting and in the operating room. The student will work 1:1 with the faculty in the operating room and clinic in the care of Hand Surgery patients. This elective can be tailored to the individual student's needs, interest, and educational level. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Student must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 781 Vascular Surgery credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/781/>)

This rotation seeks to expose the medical student to the specifics of evaluation and diagnosis of surgical vascular disease, and surgical interventions for vascular disease. Students will be involved and evaluate patients in both the inpatient and outpatient settings. Emphasis will be placed on history, physical and diagnostic results, a rich discussion of noninvasive vascular studies including venous duplex, arterial doppler, and arterial duplex, as well as advanced imaging results. The student will participate in the operating room and scrub into cases to assist with the surgical team. This rotation is designed to expose and educate medical students about the breath of vascular surgery interventions and develop an understanding of a global assessment of a patient with vascular disease. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: General Surgery Clerkship. Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 782 Rural Surgery credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/782/>)

The rotation in Rural surgery is designed to provide the student with exposure to the practice of general surgery in a rural setting at a smaller community hospital. The practice includes the evaluation and management of common general surgical conditions as well as significant exposure to flexible endoscopy – both EGD and colonoscopy. The students will be responsible for seeing new consults, writing a history and physical note, and presenting them to the preceptor. They will round on our patients daily. They will assist in all procedures. Additionally, the student will be exposed to the unique environment of a small community hospital, including the decision-making process regarding types of procedures which can be effectively completed versus those which require transfer. During this rotation, student will work one-on-one with the faculty preceptor and be provided with graded responsibility. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students in Phase 2 or Phase 3 in the Carle Illinois curriculum.

CLE 783 Colon and Rectal Surgery credit: 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/783/>)

This is an advanced surgical elective focused on surgical disorders of the lower gastrointestinal tract. Students will become part of our team as we care for inpatients and outpatients with colon, rectal, and anal disorders. The student will have the opportunity to evaluate patients in the hospital, office, endoscopy suite, operating theater, and participate in several multidisciplinary conferences. No graduate credit. 4 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to students in Phase 2 or Phase 3 in the Carle Illinois curriculum.

CLE 784 Pediatric Surgery credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/784/>)

Pediatric surgeons care for children (birth to age 18) with surgical concerns. These can be either congenital problems (birth defects such as anorectal malformations, Hirschsprungs disease, intestinal atresias, etc) or acquired conditions that present during childhood (pyloric stenosis, hernias, appendicitis). Care is provided in both the inpatient and outpatient settings and involves both planned and emergent procedures. The student will participate in the operating room, scrubbing into cases to assist with the surgical team. Students will be active participants in both inpatient and outpatient care and will also have 1 on 1 lectures to learn about surgical care and common pediatric surgical conditions. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Surgery Clerkship. Restricted to Carle Illinois College of Medicine students. Students must be in Phase 2 or Phase 3 of the curriculum.

CLE 786 Introduction to Urology credit: 2 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/786/>)

Participation in the outpatient and inpatient management of urological problems. These include urological neoplasms (prostate, bladder, renal, and testicular), urinary calculi, and management of urinary incontinence. The student will actively examine patients in the office and assist with surgery. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Students must be in Phase 2 or Phase 3 of the curriculum. This course is restricted to students enrolled in the MD program at Carle Illinois College of Medicine.

CLE 793 Quality Improvement & Patient Safety credit: 2 Hours.

(<https://courses.illinois.edu/schedule/terms/CLE/793/>)

In this elective, students will gain experience with the various aspects of health care quality and patient safety. This could include participation in continuous quality improvement plans (CQI), literature reviews to inform hospital practice, policy and protocol development, and collaborating with health care administrators to respond to community health issues. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in the Carle Illinois College of Medicine.

CLE 794 Values in the Physician-Patient Relationship credit: 2 Hours.

(<https://courses.illinois.edu/schedule/terms/CLE/794/>)

Constant changes in healthcare settings, coupled with rapid advancements in technology, lead to increasingly complicated ethical dilemmas: Who decides what—patients, doctors, or family members—and on what basis? Should patients' autonomy always be respected, or can physicians act paternalistically towards their patients? What are the ends and norms of the medical profession and how are they determined? Can physicians deviate from these ends and norms and refuse to provide treatment, for example, for conscientious reasons? In this course, we will attempt to answer these (and other) pressing normative questions. In doing so, we will attain an understanding of the complicated network of values at play in the physician-patient relationship. No graduate credit. 2 professional hours. Approved for S/U grading only. Prerequisite: Restricted to students enrolled in Phase 2 or 3 of the Carle Illinois College of Medicine.

CLE 799 Advanced Clinical Electives credit: 0 to 4 Hours. (<https://courses.illinois.edu/schedule/terms/CLE/799/>)

Phase 2 and Phase 3 students are eligible to participate in short-term elective opportunities that can enhance their medical education. These electives include clinical opportunities, away rotations, away electives, clinical rotations, and visiting opportunities. Each elective is offered by participating host institutions in the U.S. and around the world. Elective opportunities are available in teaching hospitals, community clinics, and urban or rural sites and are open to clinical or final-year students, as determined by the host institution. No graduate credit. 0 to 4 professional hours. Approved for S/U grading only. May be repeated up to 20 hours in the same semester if topics vary, and separate semesters to a maximum of 32 hours. Prerequisite: Restricted to students enrolled in the MD program at Carle Illinois College of Medicine.