Course Description
This elective provides students with an introduction to the multidisciplinary management of benign and malignant disease of urogenital system.

5 semester credits Repeatable credit: no

Prerequisites: Completion of SURG 302.

Competencies & Objectives
The KCUMB educational program has identified specific broad areas that students should develop during their training. These help ensure that the students are able to demonstrate and/or develop specific skills. These overarching competencies and objectives specifically addressed in the Urology clerkship are denoted in bold:

1. Demonstrate basic knowledge of osteopathic philosophy and practice and osteopathic manipulative treatment;

2. Demonstrate medical knowledge through one or more of the following: passing of course tests, standardized tests of the NBOME, end-of-clerkship tests, research activities, presentations, and participation in directed reading programs and/or journal clubs; and/or other evidence based medical activities;

3. Demonstrate interpersonal and communication skills with patients and other health care professionals;

4. Demonstrate knowledge of professional, ethical, legal, practice management, and public health issues applicable to medical practice;

5. Demonstrate the ability to effectively treat patients, provide medical care that incorporates the osteopathic philosophy, patient empathy, awareness of behavioral issues, the incorporation of preventive medicine, and health promotion.

6. Demonstrate the ability to critically evaluate their methods of clinical practice, integrate evidence-based medicine into patient care, show an understanding of research methods, and improve patient care practices.

7. Demonstrate an understanding of health care delivery systems, provide effective and qualitative patient care with the system, and practice cost-effective medicine.

General Course Objectives
Medical Knowledge
- Review the development of the renal and reproductive systems
- Review the surgical anatomy of the renal and reproductive systems
- Review the causes and distinguishing features of urolithiasis
- Review the TNM staging for renal cell carcinoma, transitional cell carcinoma of the bladder, and prostate cancer
• Describe the innervations of the detrusor smooth muscle, the bladder neck smooth muscle and the voluntary urethral sphincter.
• Describe the effects of anticholinergic, alpha-adrenergic antagonist medications on voiding function.
• Review the neurologic control of penile erection and detumescence including neurotransmitters released by intracavernosal nerve terminals
• Describe the mechanism of action of sildenafil including side effects and possible drug interactions
• Review the pathophysiology of germ cell testis tumors.

Patient Care
• Describe the typical voiding problems of a patient with:
  o Sacral spinal cord injury
  o Supra-sacral spinal cord injury
  o Parkinson disease
  o Stroke
  o Brain tumor
• Describe the 4 broad categories of urinary incontinence
• Describe the 2 broad categories of urinary retention in an adult male
• Describe typical symptoms of benign prostate hyperplasia (BPH)
• List 4 indications for surgical resection of the prostate in men with BPH
• Develop a differential diagnosis for an elevated PSA in a 60-year-old male
• Describe 2 mechanisms underlying stress urinary incontinence in women
• Describe 4 broad categories of erectile dysfunction
• Develop a differential diagnosis of a painless scrotal mass in an adult

Interpersonal and Communication Skills
• Work as a team member with other health professionals

Evaluation
An evaluation will be provided at the end of the elective.

GRADES
This elective is grade Satisfactory/Unsatisfactory

REQUIRED TEXTBOOKS and Other Resource Material


COURSE SCHEDULE

The Urology elective is typically a 4-week experience. A detailed schedule will be provided at the clinical site and will be specific to that site. Students should register through the KCUMB Web Portal and provide the name of the preceptor by the end of the day 5.

Patient Log (Encounter Sheet/Clinical Worksheet): If required by preceptor, each student should complete the encounter sheet by the end of the rotation.

Lectures: students should attend any student, resident, or preceptor lecture held in the Surgery Department.

POLICIES
**Student Identification**

While performing duties related to patient care, all students must clearly identify themselves as a medical student both verbally and by wearing their KCUMB picture identification badge in addition to any hospital issued identification. Misrepresentation of oneself as a licensed physician is both illegal and unethical. Should the KCUMB identification badge become lost or broken, the student should contact Student Affairs immediately to order a replacement. A charge of $5.00 may apply.

**Dress Code**

Students are expected to wear clean, pressed, white lab coats, required identification badges and dress in a professional manner on all clinical experiences. Professional dress for males includes a shirt, tie and slacks. For female students, this includes a professional dress or skirt (knee length or longer), or slacks and professional shirt. Men and women should wear socks or stockings at all times. No open-toed shoes or sleeveless shirts are allowed during the performance of patient care. With the exception of the surgical suite, tennis shoes are not allowed.

**Hospital Rules & Regulations**

Each hospital/health care system has individual rules and regulations. Medical students must familiarize themselves with and adhere to these protocols during training.

At no time should a medical student alter, remove or otherwise tamper with medical records. Specific rules and regulations with respect to student entries in medical records must be clarified during orientation or on the first day of the clinical experience.

Students must respect and follow all policies regarding the use of hospital facilities, housing, and equipment. All hospital equipment including library materials, pagers, and keys must be returned before leaving a clinical experience. Students are financially responsible for any damage to or loss of hospital property. As a result, it is strongly recommended that students obtain and retain a receipt as proof that property was returned and/or damage was not incurred.

**Special Accommodations**

The University will not discriminate against disabled individuals who are otherwise qualified, while expecting students to meet certain minimal technical standards. In adopting these standards, the University believes it must keep in mind the ultimate safety of the patients for whom its graduates will eventually care. The technical standards reflect what the University believes, in its professional, academic judgment, are the minimum expectations of osteopathic medical students (and physicians) necessary for the safe, efficient and effective delivery of medical care. Technological compensation can be made for handicaps when applicable, but a student must be able to perform in a reasonably independent manner.

Reasonable and appropriate accommodations are provided for students with documented disabilities. The intent of the policy is to provide each student with an opportunity to excel academically, while creating an equitable environment conducive to learning while maintaining patient safety. The policy will be administered consistently, fairly and in a non-discriminatory manner. The policy complies with the Americans with Disabilities Act (ADA) of 1992 and any other applicable state and/or federal laws. (For additional information see Clinical Clerkship Manual).

**Procedures for Requesting Special Accommodations**

Requests for accommodations are made by the student according to the procedures outlined in the Student Handbook. Applications may be submitted at any time during the academic year. An application for accommodations is a request for only the academic year in which it was submitted. If an accommodation is granted during the first academic year, a renewal application...
must be submitted the following year should the student desire continuation of the granted accommodations. Requests for special accommodations do not signify privilege until official notice is received from the appropriate college dean.

All requests for special accommodations due to a physical, psychological or learning disability must contain appropriate documentation and be directed to the Academic Accessibility Committee, which makes recommendations to the appropriate college dean, who makes approval decisions. COM students needing special accommodations will need approval of both the clinical training site and KCUMB. If a request for accommodations impacts multiple clinical training sites, each site must be in accordance with the accommodation requested for training accomplished at that site. KCUMB cannot assure that approval of accommodations by KCUMB for MSI and MSII students, or endorsement of accommodations for MSIII and MSIV students for clinical experiences will be accepted by clinical training sites.

**Exposure to Blood-born Pathogens**

Students who are exposed to blood and/or body fluids should follow the policy of the institution where the incident occurred. A copy of the completed incident report should be sent to the Office of Community Clinical Education (OCCE).

**Any expense incurred due to exposure to blood and/or body fluids is the student’s responsibility and should be billed to his or her personal health insurance.**

**Didactic Conferences & Reading Assignments**

Didactic conferences and reading assignments are critical components of the medical education process. While the focus of years three and four is hands-on experience, didactic conferences and reading assignments are often provided as an adjunct to this learning process. Attendance at didactic conferences and completion of reading assignments imposed by KCUMB, the core site hospital, clinical experience service or preceptor must be followed without exception.

**Work/Call Schedule**

The work and call schedule during clinical experiences is at the discretion of the core site hospital, service and/or preceptor. Students generally follow the same schedule as their preceptor, however, if the preceptor is on vacation, or scheduled away from the office/hospital, additional arrangements must be made for completion of the clinical experience. If this occurs, contact your KCUMB Student Administrator immediately. Additional call time may be required on evenings, weekends or holidays. Students should clarify work and call schedules during orientation. Work/call scheduling imposed by KCUMB, the core site hospital, clinical experience service or preceptor must be followed without exception. **FEDERAL LAWS RESTRICTING INTERN/RESIDENT WORK HOURS DO NOT APPLY TO MEDICAL STUDENTS.**

**Medical Ethics**

All medical students are expected to conduct themselves in a professional manner demonstrating an awareness and compliance with the ethical, moral and legal values of the osteopathic medical profession. In observing the principles and practices of medical ethics, students will:

- Place primary concern on the patient’s best interests
- Be available to patients at all reasonable times as expected by the preceptor/core site
- Perform medical activities only within the limitations of a medical student’s capabilities and within the guidelines determined by the site and/or preceptor
- Strictly maintain patient and institutional confidentiality

**Physical Examinations**
During the third and fourth-year clinical experiences, students are routinely expected to see and examine intimate parts of patient bodies. It is necessary that all intimate examinations of patients be appropriately structured, supervised, and consented in the interests of all parties, including the patient, student and attending physician.

Students must wear their KCUMB picture identification badge and introduce themselves to patients as a medical student. Patient consents for a student to perform an intimate examination must always be voluntary. Consent for an intimate examination must be either verbal and/or written. Irrespective of the gender of the examining student and the patient being examined, a chaperone, defined as another medical professional, preferably the preceptor is required during all intimate examinations. A chaperone is not an accompanying person i.e. friend or relative of the patient. A chaperone, similarly, is not another medical student. Students are highly encouraged to record the date, time, and the results of the examination as well as the name of the chaperone in the medical record.

PROCEDURES

Absence from Clinical Experiences

ANY ABSENCE MUST BE REPORTED TO BOTH THE CORE SITE OR PRECEPTOR AND THE KCUMB STUDENT ADMINISTRATOR PRIOR TO THE START OF AN ASSIGNED SHIFT. Failure to report an absence to the core site or preceptor and the KCUMB Student Administrator will be considered abandonment of duties and the student will face appropriate disciplinary action. (For additional information see Clinical Clerkship Manual).

KCUMB FACULTY CONTACT INFORMATION

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