

Educational Curriculum
General Medicine
Department of Kidney and
Urinary Tract Surgery
(Urology)
Kermanshah University of
Medical Sciences

Educational Content
Preparation and Editing :

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In the name of Allah

Title :

Course plan for medical students of the Department of Kidney and Urinary Tract Surgery (Urology) at Kermanshah University of Medical Sciences

Course definition :

The urology training course for medical students is a course that students are introduced to after completing basic science, semiology, and physiopathology courses through the medical school education. This course includes three theoretical courses, internship, and urology internship .

Course duration :

This course currently includes 1 theoretical unit (17 hours), 2 internship units (15 days), and 2 internship units (fifteen days) .

General Objective of the Course :

Acquire knowledge and skills in the field of common urological diseases at the level of a general practitioner

General Structure of the Course and Description of Student Duties :

–externship Course :

1 –On the first day of the course, in coordination with the training expert and the responsible assistant, students attend the department, become familiar with the regulations and duties, and perform their duties by dividing beds and grouping attendance in the clinic and operating room

- 2 –Students participate in the conference of residents, professors, and journal club programs, EBM, and case presentation on Tuesdays from 8-9 am .
- 3 –Joint conferences with other groups such as the tumor board and mortality and morbidity sessions are held on Mondays from 8-10 am based on a pre-arranged schedule. Participation of all students in the aforementioned programs is mandatory .
- 4 –From 9-11 am, with the presence of professors, assistants, interns and trainees, the clinical training program is carried out according to the clinic capacity according to the grouping. At the same time, 2-5 students are present in the room and are familiarized with urological surgical procedures .
- 5 –The student conference is presented after the patient visit in the clinic and in the presence of the relevant professor or resident in charge in the department or clinic. Presenting a conference during the course is mandatory .
- 6 –The files and student histories will be monitored by the department assistant .
- 7 –During the 15-day course, students participate in the round chart with the presence of the professor, assistant and trainee and learn the necessary

recommendations in the field of eliminating file defects and registering documents .

8 -During the 15-day course, students will learn one day in the Clinical Skills Center, digital prostate examination using a mold, how to catheterize the bladder of women and men, how to perform suprapubic aspiration, and will be familiar with wound dressing methods .

9 -The end-of-course assessment will be based on the students' activities in the ward, clinic, active participation in conferences and their presentation, and a written exam .

Internship period :

1 -On the first day of the course, in coordination with the training expert and the assistant in charge, the interns will be familiar with the regulations and duties in the ward and will perform their duties by dividing the beds based on rotation .

2 -Every day from Saturday to Thursday from 7 to 8 am, one of the professors in charge of training or assistants will be present in the rounds and visits .

3 - Journal Club and Professors' Conference and Review of the Book of Campbell Urology EBM and Case Presentation are held on Tuesdays from 8-9 am and the presence of interns in these programs is mandatory .

4 -Presenting an internship conference on one of the days of the week is mandatory .

5 –After visiting the ward in rotation at the urology clinic at 9 am, the interns will learn how to deal with outpatients in the presence of the professor and the relevant assistant. After completing the clinic, they will attend the ward and take the patient's history and write the course of the disease. The division and schedule of rotating attendance in the clinic and emergency room are done on the first visit to the ward .

6 –The presence of all interns in educational sessions, joint conferences or other groups, mortality and morbidity, and center seminars is mandatory. Joint conferences with other groups such as the tumor board and mortality and morbidity sessions are held on Mondays from 8-10 am according to a pre-established schedule . .

rofessional ethical duties :

- Selflessness: prioritizing the patient's interests over one's own .
- Pursuit of perfection: not being satisfied with the good and striving for excellence
- Continuous effort to learn new things
- Accepting the hardships of medicine as a profession that has been chosen with full awareness .
- Honesty, truthfulness, good promises, commitment to performing duties well
- Appearance in accordance with the dignity of the medical profession

- Regular attendance at the hospital

- Familiarity with the value and importance of recording documents in patient files and its legal and scientific value in developing the power

of clinical reasoning and judgment and reaching the final diagnosis of the patient

- Strictly observe the regulations related to patient safety .

- Observing the ethical codes related to the mother, fetus and newborns

- Strictly observe the regulations related to drug safety, including related chemical and non-chemical compounds .

- Observing the professional dress code .

- Comply with the regulations for working with laboratory animals .

- Be committed and adhere to their professional oath .

- Protect the resources and equipment they work with under all circumstances .

- Respect professors, staff, colleagues, and other learners and contribute to creating a friendly and respectful atmosphere in the workplace .

- Observe social and professional ethics when critiquing programs .

–Observe research ethics when conducting research related to the field..

Cognitive-behavioral-emotional course objectives :

At the end of the fifteen-day course, the student should have acquired the following abilities :

- 1 – Recognition (diagnosis and treatment) of common urological diseases
- 2 – Ability to take a complete and accurate history from urological patients
- 3 – Ability to analyze information
- 4 – Ability to plan differential diagnoses for urological patients
- 5 – Ability to approach common urological diseases
- 6 – Correct and ethical treatment of patients, residents and ward personnel

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..... Course Plan (Cognitive
Psychomotor Objectives) :

The training course for students in the general medical program consists of three parts :

A-Theoretical Lesson

B-Urology Internship

C-Urology Internship

A-Theoretical Lesson

In this course, students must achieve specific goals through classroom attendance and individual and group assignments. The theoretical lesson is currently defined as 1 unit equivalent to 17 hours .

At the end of this course, the student should be able to :

- a) When faced with any of the common and important symptoms and complaints :

- State its definition .

- Describe the necessary physical examinations (focused history taking and physical exam) to approach it .

- Present important differential diagnoses and suggest the necessary steps to reach the diagnosis and management of the patient's problem .

b) Regarding common and important diseases :

- Describe the definition, etiology, and epidemiology of the disease .

- Explain the problems of patients with common and important diseases .

- Describe the methods of diagnosing the disease .

- Explain the most important preventive measures at different levels, including treatment and rehabilitation of the patient, based on scientific evidence and local guidelines to the extent expected of a general practitioner .

- When faced with a scenario or description of patient cases related to these diseases, apply the knowledge learned to clinical reasoning and suggest diagnostic or therapeutic approaches .

c) Pay attention to important issues that need to be considered in the clinical setting of this field

Outline of the theoretical course on diseases of the urinary and genital tracts (urology) :

A) Dealing with common symptoms and complaints in urological diseases :

- 1 -Genitourinary tract pain (kidney pain, radicular pain, ureteral pain, bladder pain, prostate pain, penile pain and scrotal pain)
- 2 -Urinary excretion disorders (irritative and obstructive symptoms in the urinary tract, retention, incontinence, nocturia)
- 3- Sexual disorders in men (decreased sexual desire, impotence, lack of ejaculation, lack of orgasm, premature ejaculation)

B) Common and important diseases :

- 1 -Urinary stones
- 2 -Common kidney and bladder tumors ,
- 3 -Common anomalies of the genitourinary tract
- 4 -Neurogenic bladder
- 5 -Common prostate diseases: benign prostatic hyperplasia, prostate cancer
- 6 -Urinary tract diseases: strictures, anomalies (including Hypospadias, epispadias)
- 7 -Urinary tract trauma and its management
- 8 -Acute testicular problems (infection, torsion, trauma)

-Training is based on the professors' lesson plan, which is provided to students every semester before the start of the course .

B- Urology externship

In this educational rotation, trainees achieve the specified goals by participating in clinical rounds, training clinic, clinical skills center, emergency room and operating room, and completing individual and group assignments. Required theoretical training classes are held to provide theoretical knowledge. The duration of the course is currently 15 days, equivalent to 2 academic units .

At the end of this training course, the trainee should be able to :

- 1 -Communicate appropriately with clients, patients, staff and other members of the health team and demonstrate appropriate professional behavior characteristics in their interactions in a desirable manner .
- 2 -Take a history from a patient with common and important symptoms and complaints* related to this section, perform necessary physical examinations Perform, make important differential diagnoses, and suggest diagnosis and management of the patient's problem .
- 3 -Identify the problems of patients with common and important diseases** related to this department, based on scientific evidence and local guidelines, argue and suggest preventive, treatment, and rehabilitation measures for the patient to the extent expected of a general practitioner, and participate in the management of the patient's problem based on department standards under the supervision of higher levels (in accordance with department regulations) .
- 5 -Perform the necessary procedures related to this department *** while observing patient safety principles and under appropriate supervision of higher levels (in accordance with department regulations). This part of the training is carried out in the Clinical Skills Center of Imam Reza Hospital (AS) and the Urology and Emergency Department .

C- Urology Internship

In this educational rotation, interns, through participation in providing health services in related areas (hospital, clinic, clinical skills center, emergency room, and operating room), attendance at designated training sessions, and individual study, develop the necessary capabilities to independently perform services related to this department in the field of general medicine appropriate to the They obtain the expected competencies of general practitioners. The duration of the course is currently 2 units, equivalent to 15 mandatory days, and 2 units, equivalent to 15 optional days .

At the end of this training course, the intern should be able to :

- 1 -Cooperate with staff and other members of the health team in a competent manner .
- 2 -Demonstrate appropriate professional behavior characteristics in their interactions in a desirable manner. Especially in different clinical situations, show that they have acquired the responsibility, competence, and self-confidence necessary to perform professional duties .
- 4 -Take a history from a patient with common and important symptoms and complaints* in this section, perform the necessary physical examinations, list important differential diagnoses, and take the necessary measures to diagnose and manage the patient's problem to the extent expected of general practitioners and in accordance with the standards of the clinical department where the training is being conducted, under the supervision of the relevant professor .
- 4 -Diagnose the problems of patients with common and important diseases** in this section, argue and suggest preventive measures, including treatment and rehabilitation of the patient to the extent expected of a general practitioner, based on scientific evidence and local guidelines, and Manage and treat the patient's problem based on department standards with supervision from higher levels (in accordance with department regulations) :

5- Perform necessary procedures related to this department***, observing patient safety principles, independently with appropriate supervision (in accordance with department regulations).

Course resources :

1 -Reference book for the pre-internship exam, which is announced every year by the Secretariat of the Medical Education Council (the latest edition of the General Urology book - Dr. Simfrosh)

2 -Selected topics from the book Campbell Urology

Assessment methods :

- Theoretical unit :

The theoretical unit is assessed with a four-choice test .

- externship period :

1 -At the end of the period, a written exam is held, and 90% of the questions are presented based on the educational objectives set in the course plan, and 40% of the total score is allocated to the written exam (8 points) .

2 -60% of the score is allocated to internal performance, which is monitored for pre-internship and evaluated by the assistant in charge

of training the trainees with the supervision of the professor in charge of training the trainees and in cooperation with the training expert .

The assessment of acceptance performance is based on the following components :

Regular attendance in the ward (2 points)

Regular attendance in the clinic (2 points)

Quality of conference presentation (2 points)

Activity within the ward with theoretical knowledge (correct answers to professors' questions) (2 points)

Taking a targeted history, writing about the progress of the disease, and conducting a systematic examination (2 points)

Appearance and observance of professional etiquette (2 points)

- Internship period :

1 –At the end of the period, a written or oral exam is held, and 90% of the questions are presented based on the educational objectives determined in the course plan. And 40% of the total score is allocated to the written exam (8 points) .

2 –The other 60% is allocated to the performance within the ward, which is supervised by the assistant in charge of intern training with the supervision of the professor in charge of interns and the cooperation of the education expert .

***Common and important urinary symptoms and complaints :**

- Genitourinary tract pain (kidney pain, radicular pain, ureteral pain, bladder pain, prostate pain, penile pain and scrotal pain)
- Irritative symptoms (frequency, nocturia, dysuria, urgency)
- Obstructive symptoms (decreased urinary pressure, dribbling of urine, intermittent urination, straining)
- Male sexual dysfunction (decreased sexual desire, impotence, lack of ejaculation, lack of orgasm, premature ejaculation)
- Urinary retention
- Urinary incontinence
- Nocturia
- Hematospermia

- Pneumouria
- Ductal discharge
- Fever and chills

****Common and important urological diseases :**

Must Know : ()

- Urinary stones
- Common kidney and bladder tumors ,
- Common genitourinary tract anomalies
- Urinary tract trauma and its management
- Neurogenic bladder
- Benign prostatic hyperplasia
- Prostate cancer
- Urinary tract diseases: strictures, anomalies (including hypospadias, epispadias)
- Acute testicular problems (infection, torsion, trauma)

Better to Know Preferred Cases : (

- Testicular anomalies (cryptorchidism, varicocele)
- Testicular tumors

*****Essential urological procedures :**

- Simple dressings
- Complex dressings with simple debridement (participation)
- Insertion and removal of bladder catheter
- Suprapubic puncture
- Special urological examinations
- Circumcision (preferred and taught in the operating room under the supervision of professors and residents)