**T.C. MALTEPE UNIVERSITY FACULTY OF MEDICINE**

**UNDERGRADUATE PROGRAM
2023-2024 ACADEMIC YEAR**

**EDUCATIONAL INFORMATION PACKAGE**

| **COURSE INFORMATION** |
| --- |
| **Course Name** | **Urology Clerkship** | **Course Code** | **MED 513** |
| **Phase**  | 5 | **Level of the Course** | Undergraduate | **Language of the Course** | English |
| **Mode of Delivery** | Face to face, E-Learning , hybrid | **Lesson Type** | Compulsory |
| **Practice/Laboratuary Site** | Maltepe University Medical Faculty Hospital,  | **Suggested Courses** | None |
| **Prerequisite** | 1. MED 100 2. MED 2003. MED 3004. All courses in Phase 4 | Concurrent Requirements:None |

| **ECTS**  |
| --- |
| **ECTS Credits** | **Theoretical Lecture Hours** | **Practical Hours** | **Course Duration** |
| 3 | 20 | 52 | 2 weeks |

| **COURSE COORDINATORS AND INSTRUCTORS** |
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| **Course Coordinator, Contact Details and Office Hours:** Kenan KARADEMİR, MD, Professor, Maltepe University, Faculty of Medicineakkarademir@gmail.com extension. 1022**Office Hours:** Tuesday, Thursday: 12:00-14:00 pm

| **Instructors, Contact Details and Office Hours:** Kenan KARADEMİR, MD, Professor Maltepe University, Faculty of Medicine akkarademir@gmail.com extension: 1022**Office Hours:** Tuesday, Thursday: 12:00-14:00 pm Hasan SOYDAN, MD, Professor. Maltepe University, Faculty of Medicine hsnsoydan@gmail.com extension: 1024**Office Hours:** Tuesday, Thursday: 12:00-14:00 pm |
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| **GENERAL OBJECTIVE AND CATEGORY OF THE COURSE** |
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| The acquisition of urological signs, symptoms, diagnosis and treatment modalities.

| **COURSE CATEGORY** |
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| 1. Basic vocational course
 | **x** |
| 1. Specialization / Field Course
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| 1. Support lectures
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| 1. Transferable skill courses
 |  |
| 1. Humanities, Communication and Management skill courses
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| **COURSE LEARNING OUTCOMES, SUB-SKILLS and COMPETENCIES** |
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| **Students completing this course;**

| **Sequence No.** | **Learning Output / Sub - Skills / Competencies** | **Education method** | **MR Method** |
| --- | --- | --- | --- |
| **1** | Define urologic symptoms and signs. | EY2,EY4, EY5 | ÖD1,ÖD3,ÖD4 |
| **2** | Perform a urologic examination. | EY2,EY4, EY5 | ÖD1,ÖD3,ÖD4 |
| **3** | Define etiology, physiopathology, symptoms and signs of urinary stone disease, diagnose urinary stone disease, make differential diagnosis, have an opinion about medical and surgical treatment of urinary stone disease, treat a patient with renal colic | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **4** | Define etiology, physiopathology, symptoms and signs of BPH, diagnose BPH, make differential diagnosis, have an opinion about medical and surgical treatment of BPH | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **5** | Make the definition of erectile dysfucntion, define etiology, physiopathology, symptoms and signs of erectile dysfunction, diagnose erectile dysfunction, make differential diagnosis, have an opinion about medical and surgical treatment of erectile dysfunction. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **6** | Make the definition of male infertility, define etiology, physiopathology, symptoms and signs of male infertility, diagnose male infertility, have an opinion about medical and surgical treatment of diagnose male infertility.  | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **7** | Define etiology, physiopathology, symptoms and signs of varicocele, diagnose varicocele, have an opinion about medical and surgical treatment of BPH | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **8** | Insert urinary catheter. | EY2,EY4, EY5 | ÖD1,ÖD3,ÖD4 |
| **9** | Define etiology, types of undescenced testis, perform physical examination, know clinical consequences of undescended testis, diagnose BPH, make differential diagnosis, have an opinion about medical and surgical treatment of undescended testis.  | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **10** | Make the definition of buried penis, define types of buried penis, know clinical consequences, type and timing of treatment. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **11** | Make the definition of hypospadias, define types of hypospadias, know clinical consequences, type and timing of treatment | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **12** | Make circumcision consultation. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **13** | Perform emergency treatment and triage of urologic neonatal emergency. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **14** | Perform physical examination of child hydrocele and ingiunal hernia andiagnose child hydrocele and ingiunal hernia and have an opinion about medical and surgical treatment of child hydrocele and ingiunal hernia. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **15** | Diagnose urologic emergency cases, perform their referral following initial intervention and emergency treatment and make triage of patients.  | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **16** | Know basic approach to urinary and genital traumas. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **17** | Define characretistics of cystic renal diseases and know clinical consequences, and follow up.  | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **18** | Know symptoms and signs of urinary tract infections, make differential diagnosis and treat infections according to their types. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **19** | Know symptoms and signs of sexually transmitted infections, make differential diagnosis and treat them according to their types. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **20** | Know symptoms, signs and diagnosis of urinary tuberculosis, make differential diagnosis. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **21** | Know risk factors, symptoms, signs, laboratory findings, imaging methods, and first treatment of testis cancer  | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **22** | Know risk factors, symptoms, signs, laboratory findings, imaging methods, and first treatment of bladder cancer  | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **23** | Know risk factors, symptoms, signs, laboratory findings, imaging methods, and first treatment of renal cancer | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **24** | Know risk factors, symptoms, signs, laboratory findings, imaging methods, and first treatment of prostate cancer | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **25** | Know risk factors, symptoms, signs, laboratory findings, imaging methods, and first treatment of upper urinary tract cancer | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
| **26** | Know neurophysiology of bladder storage and empting and types of neuropathic bladder and have and opinion about its medical treatment | EY2,EY5 | ÖD1,ÖD3,ÖD4 |
| **27** | Know types of urinary incontince and treatment options according to types of urinary incontinence. | EY2, EY5 | ÖD1,ÖD3,ÖD4 |
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| **GENERAL COMPETENCIES:** |
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| 1. Productive
2. Rational
3. Creative
4. Ethical
5. Respectful to differences
6. Sensitive to social issues
7. able to use own language effectively
8. Sensitive to environment
9. Able to use a foreign language effectively
10. Able to adapt to different social roles in various situations
11. Able to work as a team member
12. Able to use time effectively
13. Having a critical mind
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| **COURSE CONTENTS** |
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| 1. Evolution of urethral sounds, indication of urethral sound insertion, sound types, choice of urethral sound according to indication, technique of urethral sound insertion and complications.
2. Embriologic development of urogenital system and mechanism of urogenital anomalies.
3. Prostate anatomy, physiology, physiopathology of benign prostate obstruction, symptoms, signs, diagnosis, differential diagnosis and treatment methods of benign prostate obstruction.
4. Penil anatomy, erection physiology, physiopathology of erectile dysfucntion, types, risk factors, signs and symptoms of ED, importance of ED for young patient, medical and surgical treatment methods, contraindication of medical treatment.
5. Anatomy and physiology of male reproductive system, definition of male infertility, etiology of infertility according to level of disease , semen analysis, hormon profile, imaging methods, genetic investigation, evaluation of surgically correctable causes of male infertility, evaluation of medically correctable cause of male infertility.
6. Urinary Lithiasis: Etiology, Epidemiology, and Pathogenesis, signs, symptoms, imaging methods, renal colic treatment, medical and surgical treatment of urolithiasis.
7. Newborn circumcision and hypospadias consultation, differential diagnosis of hydrocele and ingiunal hernia
8. Urgent situations of urogenital tract: diagnosis, emergency treatment, and triage
9. Chracteristics, symptoms, signs, laboratory findings, imaging, prognosis, management of cystic renal diseases.
10. Urogenital traumas: mechanism, symptoms and signs, classification, emergency treatment, triage.
11. STDs: types, symptoms, signs, differential diagnosis, laboratory findings, management and prevention.
12. UTIs: subclassification, symptoms and signs, diagnosis, laboratory findings and imaging, differential diagnosis, management.
13. Urogenital tuberculosis: pathophysiology, symtoms and signs according to site of infection, diagnosis, differential diagnosis
14. Testis tumor: epidemiology, risk factors, pathology, staging, symptoms and signs, laboratory findings and imaging, management.
15. Prostate tumor: epidemiology, risk factors, pathology, staging, symptoms and signs, laboratory findings and imaging, management.
16. Bladder tumor: epidemiology, risk factors, pathology, staging, symptoms and signs, laboratory findings and imaging, management.
17. Upper urinary tract tumor: epidemiology, risk factors, pathology, staging, symptoms and signs, laboratory findings and imaging, management.
18. Renal tumor: epidemiology, risk factors, pathology, staging, symptoms and signs, laboratory findings and imaging, management.
19. Bladder neurophysiology, types of neuropathic bladder, symptoms and signs, laboratory and imaging findings, differential diagnosis, management.
20. Types of urinary incontinence, symptoms and signs, laboratory and imaging findings, differential diagnosis, management.
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| **COURSE TEXTBOOKS AND SUPPLEMENTARY READINGS** |
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| **Textbooks**Smith’s General Urology **Supplemantary Readings** Campbell – Walsh Urology,  |

| **COURSE ASSESSMENT AND EVALUATION SYSTEM** |
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| **Studies during the year** | **Percent grade** |
| --- | --- |
| **Clerkship Examination**  | **50** |
| **Structured Oral Examination**  | **50** |
| **ICE (İş Başı Değerlendirme)** | - |
| **OSCE (Structured Subjective Clinical Examination)** | - |
| **Attendance**  | - |
| **Laboratory** | - |
| **Clinical Practice** | - |
| **Field study** | - |
| **Lesson Specific Internship** (if there is)  | - |
| **Homework** | - |
| **Presentation** | - |
| **Project** | - |
| **Seminar** | - |
| **Problem Based Learning** | - |
| **Others** | - |
| **TOTAL** | **100** |

**NOTES:**Assessment and Evaluation System is organized according to T.C. Maltepe University Faculty of Medicine Education and Training Regulations. |

| **ECTS STUDENT WORKLOAD TABLE** |
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| **Activities** | **Number** | **Duration****(hours)** | **Total work load** |
| --- | --- | --- | --- |
| **Lectures** | **20** | **1** | **20** |
| **Laboratory** | **-** | **-** | **-** |
| **Practice** | **52** | **1** | **52** |
| **Lesson specific internship** (if there is)  | **-** | **-** | **-** |
| **Field study** | **-** | **-** | **-** |
| **Lesson study time out of class** (pre work, strengthen, etc) | **-** | **-** | **-** |
| **Presentation / Preparing seminar** | **-** | **-** | **-** |
| **Project** | **1** | **5** | **5** |
| **Homework** | **1** | **5** | **5** |
| **İnterval examinations** | **-** | **-** | **-** |
| **Clerkship Examination**  | **1** | **8** | **8** |
| **Total work load**  | **90** |

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| **RELATIONSHIP BETWEEN UROLOGY COURSE LEARNING OUTCOMES AND MEDICAL EDUCATION PROGRAMME KEY LEARNING OUTCOMES** |
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| **No** | **Curriculum competencies /Output**  | **Contribution level[[1]](#footnote-0)\*** |
| --- | --- | --- |
| **1** | **2** | **3** | **4** | **5** |
| **1** | To describe normal structure and function of the organism  |  | **X** |  |  |  |
| **2** | To describe the pathogenesis, clinical and diagnostic properties of the diseases  |  |  |  | **X** |  |
| **3** | To be able to take the history of the patient and to do the general or systemic based examinations  |  |  |  |  | **X** |
| **4** | To be able to treat life threatening emergency diseases and to refer the patient when necessary.. |  |  |  |  | **X** |
| **5** | To be able to perform basic medical intervention for diagnosis and treatment of the diseases.  |  |  |  |  | **X** |
| **6** | To be able to perform the preventive medicine and legal medicine applications. |  |  | **X** |  |  |
| **7** | To have the general knowledge concerning structuring and functioning of National Health System  |  |  | **X** |  |  |
| **8** | To be able to describe the legal responsabilities and ethical principles  |  | **X** |  |  |  |
| **9** | To be able to perform the first-line treatment of frequent diseases in the community with effective methods based on scientific data.  |  | **X** |  |  |  |
| **10** | To organize scientific meetings and conduct projects  |  |  | **X** |  |  |
| **11** | To speak a foreign language to keep up with the current medical literature. To know statistical and computing methods in such extent to evaluate scientific studies  |  | **X** |  |  |  |

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| **PHASE 5 MED 513 UROLOGY CLERKSHIP COURSE LIST AND RANKING** |
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| **No** | **Lecture/ Competencies/Practice** | **Lecturer** |
| --- | --- | --- |
| 1 | Bladder catheters ( Lecture, 1 hour) | Hasan SOYDAN |
| 2 | Embriology and congenital anomalies ( Lecture, 1 hour) | Hasan SOYDAN |
| 3 | Urinary tract infections ( Lecture, 2 hours) | Hasan SOYDAN |
| 4 | STDs/ Urinary Tuberculosis ( Lecture, 1 hour) | Hasan SOYDAN |
| 5 | Cystic renal diseases ( Lecture, 1 hour) | Hasan SOYDAN |
| 6 | Benign prostate hyperplasia ( Lecture, 1 hour) | Hasan SOYDAN |
| 7 | Male infertility( Lecture, 1 hour) | Hasan SOYDAN |
| 8 | Erectile Dysfunction( Lecture, 1 hour) | Hasan SOYDAN |
| 9 | Urinary stone disease ( Lecture, 1 hour) | Hasan SOYDAN |
| 10 | Emergencies in urology ( Lecture, 1 hour) | Hasan SOYDAN |
| 11 | Genitourinary traumas ( Lecture, 1 hour) | Hasan SOYDAN |
| 12 | Paediatric urology ( Lecture, 1 hour) | Hasan SOYDAN |
| 13 | Kidney cancer ( Lecture, 1 hour) | Kenan KARADEMİR |
| 14 | Testis cancer ( Lecture, 1 hour) | Kenan KARADEMİR |
| 15 | Bladder and upper urinary tract cancer ( Lecture, 1 hour) | Kenan KARADEMİR |
| 16 | Prostate cancer( Lecture, 1 hour) | Kenan KARADEMİR |
| 17 | Female urology ( Lecture, 1 hour) | Kenan KARADEMİR |
| 18 | Urinary incontinence ( Lecture, 1 hour) | Kenan KARADEMİR |
| 19 | Neuropathic bladder( Lecture, 1 hour) | Kenan KARADEMİR |
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| **PHASE 5 MED 513 UROLOGY CLERKSHIP SCHEDULE** |
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| 1. Week |
| Days | Monday  | Tuesday | Wednesday | Thursday | Friday |
| 8.30-9.30 | Clinic visit | Clinic visit | Clinic visit | Clinic visit | Clinic visit |
| 9.30-10.30 | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room |
| 10.30-11.30 | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room |
| 11.30-12.30 | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room |
| 12.30-13.30 | Lunch | Lunch | Lunch | Lunch | Lunch |
| 13.30-14.30 | Lecture: Bladder Catheters | Lecture:BPH | Lecture:Male infertility | Lecture:Traumas | Lecture:Prostate cancer |
| 14.30-15.30 | Lecture: Embriology and congenital anomalies | Lecture:ED | Lecture:Urinary stone disease | Lecture:Emergencies in urology | Lecture:Renal Cancer |
| 15.30-16.30 | Lecture:Cystic kidney diseases | Lecture:STDs | Lecture:UTI-1 | Lecture:UTI-2 | Lecture:Neuropathic bladder |
| 16.30-17.30 | Clinic visit | Clinic visit | Clinic visit | Clinic visit | Clinic visit |
|  |  |  |  |  |  |
|  |
| 2.Week |
| 8.30-9.30 | Clinic visit | Clinic visit | Clinic visit | Clinic visit | EXAM |
| 9.30-10.30 | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | EXAM |
| 10.30-11.30 | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | EXAM |
| 11.30-12.30 | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | EXAM |
| 12.30-13.30 | Lunch | Lunch | Lunch | Lunch | Lunch |
| 13.30-14.30 | Lecture:Bladder cancer and Upper urinary tract cancer | Lecture:Paediatric urology | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | EXAM |
| 14.30-15.30 | Lecture:Testis cancer | Lecture:Urinary tuberculosis | Outpatient clinic/ Operation room | EXAM | EXAM |
| 15.30-16.30 | Lecture:Urinary incontinence | Outpatient clinic/ Operation room | Outpatient clinic/ Operation room | EXAM | EXAM |
| 16.30-17.30 | Clinic visit | Clinic visit | Clinic visit | Clinic visit | EXAM |
|  |  |  |  |  |  |

NOTE: Prepare this table for each week of your course.

| **EDUCATIONAL METHODS GUIDE** |
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| **CODE** | **METHOD NAME** | **EXPLANATION** |
| --- | --- | --- |
| **EM1** | Amphitheatre lesson | These are the courses applied in preclinical education where the whole class is together. |
| **EM2** | Class lesson | These are courses applied in small groups during the clinical period. |
| **EM3** | Lab application | These are laboratory courses applied in the preclinical period. |
| **EM4** | Skill Training App | It is the work that the student does on a model or mannequin before meeting with the real patient, which will be done in the Virtual Clinic or other environment. |
| **EM5** | Clinic Education | These are activities that provide clinical competence by applying bedside training with real patients or models under the supervision of trainers. |
| **EM6** | Independent Study Hours | These are the periods in the curriculum for the student to repeat what they have learned and to prepare for new lesson sessions. |
| **EM7** | Community Based Education Application | Field practices, non-unit professional practices, etc. includes. |
| **EM8** | Problem Based Learning | Problem based learning. |
| **EM9** | Private Study module | These are applications that will enable the student to gain in-depth knowledge about a subject individually or as a group. |
| **EM10** | Scientific Research study | These are applications aimed at improving the scientific research competence of the student. |
| **EM11** | Other | If this code is used, the training method should be written in detail. |

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| **MEASUREMENT EVALUATION METHODS GUIDE** |
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| **CODE** | **METHOD NAME** | **EXPLANATION** |
| --- | --- | --- |
|  **ME1** | Theoretical Exam ( Multiple Elective , Multiple Optional etc Questions containing ) | The committee is the exam used in the final exams. |
|  **ME2** | Practical exam | It should be used for laboratory applications. |
| **ME3** | Classical Verbal |  |
| **ME4** | Structured Oral | It is an oral exam in which questions and answers are prepared on a form beforehand. |
| **ME5** | OSCE | Objective Structured Clinical Examination |
| **ME6** | CORE | Clinical Act Execution Exam |
| **ME7** | ICE ( Business head Evaluation ) | It is the evaluation made by the trainer on the student at the bedside or during the practice. |
| **ME8** | Other | A statement must be made. |

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1. \*1 lowest, 2 low, 3 moderate, 4 high, 5 highest.as indicated [↑](#footnote-ref-0)