

## T6. Course Specifications (CS)

|  |  |                                       |
|--|--|---------------------------------------|
| Institution : Najran university  | Date of Report :- 37-38 H 1 <sup>st</sup> semester |                                       |
| College/Department : College of Medicine   |  |                                       |
| <b>A. Course Identification and General Information</b>                                    |  |                                       |
| 1. Course title and code: Urinary tract 471URN-4 (471 بول-4)                               |  |                                       |
| 2. Credit hours: 4 (3+1)   |  |                                       |
| 3. Program(s) in which the course is offered: Bachelor of Medicine and Bachelor of Surgery |  |                                       |
| 4. Name of faculty member responsible for the course                                       | Coordinator  | Mohammed Ansar Qureshi                |
|  | Co- coordinator                                    | Abdul Qader Binyamin                  |
| 5. Level/year at which this course is offered: level 7 /4th year                           |  |                                       |
| 6. Pre-requisites for this course (if any): According to the PBL committee laws.           |  |                                       |
| 7. Co-requisites for this course (if any): None.   |  |                                       |
| 8. Location if not on main campus: Main campus, Najran University Hospital                 |  |                                       |
| 9. Mode of Instruction (mark all that apply)   |  |                                       |
| a. Traditional classroom   | <input checked="" type="checkbox"/>                | What percentage? 70%                  |
| b. Blended (traditional and online)  | <input type="checkbox"/>                           | What percentage? <input type="text"/> |
| c. e-learning  | <input type="checkbox"/>                           | What percentage? <input type="text"/> |
| d. Correspondence  | <input type="checkbox"/>                           | What percentage? <input type="text"/> |
| f. Other   | <input checked="" type="checkbox"/>                | What percentage? 30%                  |
| Comments:  |  |                                       |

## B Objectives

### 1. What is the main purpose for this course?

**By the end of this course the students are expected to:**

- Acquire sound knowledge of the structure, function, the main problems, and diseases of the **US(complete)**.
- Describe the symptoms and signs of some common diseases, injuries and disturbances of the urinary system and their prevention.
- Develop a problem solving approach to urinary system disorders.
- Explain the pathogenesis of various urinary system disease categories and their presentation.

**Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)**

- Continuous updating of the information, knowledge and skills included in the course through the continuous search for new knowledge and skills available in recent publications (books, researches, internet and others).
- Continuous improvements in teaching methods to encourage the students to participate effectively in their various academic activities.
- Continuous evaluation of the course content, student level and establish plans accordingly.

### C. Course Description (Note: General description in the form to be used for the Bulletin or handbook should be attached)

This course includes:

- Normal structure and function of the urinary system and its disorders , diseases of urinary system and its management .
- Urine Properties & its Composition and Renal Function Tests.
- Renal Tumors, Renal failure and its Biochemical Changes.

| 1. Topics to be Covered  |              |               |
|--|--------------|---------------|
| List of Topics   | No. of Weeks | Contact Hours |
| Posterior abdominal wall (lumbar vertebrae. muscles& lumbar plexus) (Anat.)  | 0.0285       | 1(1+0)        |
| Posterior abdominal wall & pelvic peritoneum. DR                             | 0.0571       | 2(0+2)        |
| The kidneys  | 0.0285       | 1(1+0)        |
| Histology of the kidney  | 0.0285       | 1(1+0)        |
| General functions of the Kidney , renal reserve and Structure of the Nephron | 0.0285       | 1(1+0)        |
| Bony pelvis  | 0.0285       | 1(1+0)        |

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| Renal Dynamics 1RBF  | 0.0571 | 2(2+0) |
| Urine Properties & Composition (Bio)                                   | 0.0285 | 1(1+0) |
| Bacterial UTI 1  | 0.0857 | 3(3+0) |
| Glomerulonephritis   | 0.0285 | 1(1+0) |
| Measurement of GFR practical   | 0.0571 | 2(0+2) |
| Renal Antibacterial Agents   | 0.0285 | 1(1+0) |
| UTI (MED)  | 0.0285 | 1(1+0) |
| The ureters & urinary bladder  | 0.0285 | 1(1+0) |
| Prostate, male & female urethrae                                       | 0.0285 | 1(1+0) |
| Hist. of ureter, urinary bladder, urethra and prostate                 | 0.0285 | 1(1+0) |
| Renal Handling of Electrolytes   | 0.0571 | 2(2+0) |
| Kidney, urinary bladder, prostate & urethra DR                         | 0.0571 | 2(0+2) |
| Parasitic UTI  | 0.0857 | 3(3+0) |
| histology of all parts of urinary System                               | 0.0571 | 2(0+2) |
| Infections of the Kidney   | 0.0285 | 1(1+0) |
| Renal Changes in Systemic diseases                                     | 0.0285 | 1(1+0) |
| Drugs for Urolithiasis, Renal Colic                                    | 0.0285 | 1(1+0) |
| Development of the kidney  | 0.0285 | 1(1+0) |
| Development of the urinary bladder, ureter, & urethra                  | 0.0285 | 1(1+0) |
| Congenital anomalies of the urinary system                             | 0.0285 | 1(1+0) |
| Renal Handling of Glucose, Urea, amino acids                           | 0.0571 | 2(2+0) |
| Renal Handling of H <sub>2</sub> O & mechanisms of urine concentration | 0.0571 | 2(2+0) |
| Hormones & the Kidney(Bio)   | 0.0285 | 1(1+0) |
| Renal Tumors   | 0.0285 | 1(1+0) |
| Antibilharzial drugs   | 0.0285 | 1(1+0) |
| Diagnostic Methods of bacterial and parasitological UTI                | 0.1142 | 4(0+4) |
| Management of BPH  | 0.0285 | 1(1+0) |
| Vesicouretric Reflux SDL   | 0.0285 | 1(1+0) |
| Acid Base Balance  | 0.0571 | 2(2+0) |
| Biochemical Changes in Renal Failure                                   | 0.0285 | 1(1+0) |
| Micturition and Bladder Dysfunction                                    | 0.0571 | 2(2+0) |
| Pathology of Renal Failure   | 0.0285 | 1(1+0) |
| Pharmacology of Diuretics  | 0.0571 | 2(2+0) |
| Renal Failure (med)  | 0.0285 | 1(1+0) |
| Urolithiasis   | 0.0285 | 1(1+0) |
| BPH & Prostatic Carcinoma  | 0.0285 | 1(1+0) |

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| Renal Function Tests                                 | 0.0571 | 2(0+2) |
| Congenital Anomalies of the Urinary System           | 0.0285 | 1(1+0) |
| Urinary system trauma                                | 0.0285 | 1(1+0) |
| Pathology practical lab                              | 0.0571 | 2(0+2) |
| Renal Cell Carcinoma & Bladder Carcinoma SDL         |        | 1(1+0) |
| Normal appearance of UT different imaging modalities | 0.0285 | 1(1+0) |
| Abnormal urinary tract imaging modalities            | 0.0285 | 1(1+0) |
| Pharmacology of renal problems practicals            | 0.0571 | 2(0+2) |
| SDL without topics in over all course                | 1.1714 | 41     |
| PBL in over all course                               | 0.4571 | 16     |
| SEMINAR in over all course                           | 0.2857 | 10     |

| 2. Course components (total contact hours and credits per semester): |         |          |         |           |      |       |
|--|---------|----------|---------|-----------|------|-------|
|  | Lecture | Tutorial | seminar | Practical | PBL  | Total |
| Contact Hours  | 50      | -        | 5X2     | 9X2       | 8X2  | 72    |
| Credit   | 2.77    | 0        | 0.277   | 0.5       | 0.44 | 4     |

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| 3. Additional private study/learning hours expected for students per week.   | 25 - 35 |
| 4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy |         |

Course Learning Outcomes, Assessment Methods, and Teaching Strategy work together and are aligned. They are joined together as one, coherent, unity that collectively articulate a consistent agreement between student learning, assessment, and teaching.

The **National Qualification Framework** provides five learning domains. Course learning outcomes are required. Normally a course has should not exceed eight learning outcomes which align with one or more of the five learning domains. Some courses have one or more program learning outcomes integrated into the course learning outcomes to demonstrate program learning outcome alignment. The program learning outcome matrix map identifies which program learning outcomes are incorporated into specific courses.

On the table below are the five NQF Learning Domains, numbered in the left column.

**First**, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table).

**Second**, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes.

**Third**, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain).

Every course is not required to include learning outcomes from each domain.

| Every course is not required to include learning outcomes from each domain. |  |   |  |
|---|--|---|--|
|   | NQF Learning Domains<br>And Course Learning Outcomes   | Course Teaching<br>Strategies   | Course Assessment<br>Methods   |
| 1.0   | Knowledge : By the end of this course, the student should be able to:  |   |  |
| 1.1   | Recognize normal and the abnormal structure, function, development , infections and metabolic activity of the urinary system and its relevant disorders. | 1) Lectures.<br>2) Seminars and tutorials.<br>3) PBL sessions.<br>4) Practical classes  | Continuous assessment. (Seminars, quizzes & BPL assessment sheets)<br>2) End of course examination. (MCQs and OSPE)    |
| 1.2   | Identify the role of the laboratory investigations and imaging techniques of the Urinary diseases.   |   |  |
| 1.3   | Describe the pharmacological role in the management of the Urinary system disorders.   |   |  |
| 2.0   | Cognitive Skills : By the end of this course, the students should be able to:  |   |  |
| 2.1   | Interpret the patient history, examination, radiological and lab results in an organized and informative manner.   | 1) Interactive lectures.<br>2) Seminars and tutorial.<br>3) PBL sessions<br>4) Practical classes that include brain storming problem solving questions. | 1) Continuous assessment. (Seminars, quizzes & BPL assessment sheets)<br>2) End of course examination. (MCQs and OSPE) |
| 2.2   | Discuss the management of UTI and urinary system disorders   |   |  |
| 3.0   | Interpersonal Skills & Responsibility: By the end of this course, the students should be able to:  |   |  |
| 3.1   | Behave ethically in with the staff, colleagues in classes, seminars, and PBL and environment like  | 1. Seminars.<br>2. PBL sessions   | Continuous assessment. (seminars , PBL & assessment  |

|            |  |   |   |
|------------|--|---|---|
|            | instruments, benches, and laboratory material.   |   | sheets)   |
| <b>4.0</b> | <b>Communication, Information Technology, Numerical : By the end of the course the student should be able to:</b>  |   |   |
| 4.1        | Demonstrate efficiently the capacity to use the different available knowledge resources. Manipulate the laboratory results mathematically and statistically. | 1. Group seminars.<br>2. PBL sessions.  | Continuous assessment. (seminars , PBL & assessment sheets) |
| <b>5.0</b> | <b>Psychomotor : By the end of the course, the students should be able to:</b>   |   |   |
| 5.1        | Perform basic clinical assessment of the urinary system.   | 1. Practical classes.<br>2. Skills lab. | End of course exam (OSPE/ OSCE).                            |
| 5.2        | Perform the practical part of the basic medical sciences in urinary system.  |   |   |

| <b>5. Schedule of Assessment Tasks for Students During the Semester</b> |   |                      |                                |
|---|---|----------------------|--------------------------------|
|   | Assessment task (e.g. essay, test, group project, examination, speech, oral presentation, etc.) | Week Due             | Proportion of Total Assessment |
| 1   | First quiz MCQs   | 2 <sup>nd</sup> week | 20 %                           |
| 2   | Second quiz MCQs  | 3 <sup>rd</sup> week |                                |
| 3   | Third quiz MCQs   | 4 <sup>th</sup> week |                                |
| 4   | Seminar   | Week 2, 3, & 4.      | 5%                             |
| 5   | PBL sessions  | 4 weeks              | 5 %                            |
| 6   | End of course exam<br>MCQs(50%)<br>OSPE/ OSCE (20%)   | Week 5               | 70%                            |

#### **D. Student Academic Counseling and Support**

|   |
|---|
| 1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week) |
| 1) Allocation of office hours by the departments  |
| 2) Academic supervision.  |
| 3) Academic surveillance.   |

## E. Learning Resources

### 1. List Required Textbooks

#### 1. List of Required Text Books

##### A. Anatomy, Embryology And Histology:

- Clinical anatomy by systems 13<sup>th</sup> edition 2006. Richard S Snell. Lippincott Wilkins and Williams. ISBN – 978078179164-9
- Junqueira: Basic Histology 4th ed.
- Text and atlas 2016 Antony L Mescher McGraw-Hill Companies Inc. ISBN-978-0-7-184270-9
- Langman medical embryology 13<sup>th</sup> edition 2015. TW Saddler Wolters Kluwar Health ISBN-978-1-4698-9780-6

##### B. Physiology:

- Ganong review of medical physiology

##### C. Pharmacology:

- Basic & Clinical Pharmacology by B.G. Katzung.

##### D. Biochemistry:

- Clinical chemistry - 6<sup>th</sup> edition -2010. Michael L. Bishop By Lippincott Willams ISSN 987654321

##### E. Microbiology:

- Manual of Clinical Microbiology. Murray PR, et al. ASM Press. Latest Edition.
- Parasitology by Blacklock.Jawetz, Meinick , and Adelberg's Medical parasitology.

##### F. Surgery:

- Bailey & love's: short practice of surgery.

##### G. Medicine:

- Davidson's principles and practice of medicine.

##### H. Pathology:

- Muir's Textbook of pathology
- Uroradiology Text and Atlas Bipin V Daga, Suresh M Baklen Published by Jaypee Brothers Medical Publishers (P) Ltd., 2010

#### List of Essential Reference Text Books

1. Gray's Anatomy for Medical Students 3<sup>rd</sup> ed 2004. R Drake, A Wayne Vogl, Adam W Mitchell. Churchill Livingstone ISBN-978070251319

2. Essential clinical anatomy 5<sup>th</sup> edition 2006 RL Moore, Arthur F Dalley, Lippincotts Williams and Walkins ISBN- 0-7817-3639-0.
3. The developing human: clinically oriented anatomy 13<sup>th</sup> edition 2015. R Moore, T V Perseus, Mark Terchia. Saunders. ISBN:9780323313384.
4. Harper illustrated biochemistry –28<sup>th</sup> edition-2009 by Mc Graw Hill ISSN 1043-9811
5. Manual of Clinical Microbiology. Murray PR, et al. ASM Press. Latest Edition.
- Bailey and Scott's Diagnostic microbiology. Latest edition.
6. Current Medical diagnosis & treatment.
7. Textbook of Uroradiology Fifth Edition by [Reed Dunnick MD](#) (Author), [Carl](#)

### 3. List Recommended Textbooks and Reference Material (Journals, Reports, etc);

1. Rang and dales pharmacology
2. Essentials of medical pharmacology by KD tripathi
3. Guyton Textbook of medical physiology.
4. Medical Microbiology and Immunology by warren Levinson.
5. Medical Microbiology and Immunology by Warren Levinson & Ernest Jawetz, Examination Board Review.
6. Harrison's principles of internal medicine.
7. Genitourinary Imaging: Case Review Series, 2e 2nd Edition by [Ronald J. Zagoria MD FACR](#) (Author), [William W. Mayo-Smith MD](#) (Author), [Julia R. Fielding MD](#)
8. Genitourinary Radiology: Radiology Requisites Series 2nd Edition by [Ronald Zagoria](#).

### 1. List Electronic Materials (eg. Web Sites, Social Media, Blackboard, etc.)

- Saudi Digital Library
- WWW.WHO.org
- WWW.CDC.org
- WWW.ASM.org
- WWW.BSAC.org
- WWW.clsi.org
- WWW.microbelibrary.org
- [WWW.pubmed.gov](http://WWW.pubmed.gov)
- <http://www.uptodate.com/home/index.html>
- <http://www.ipeds.com>
- <http://pediatrics.aappublications.org>



- [www.pathmax.com](http://www.pathmax.com)

- [www.webpath.com](http://www.webpath.com)

5. Other learning material such as computer-based programs/CD, professional standards or regulations and software.

#### F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

1) Lecture room suitable for students.

2) Laboratory (dissection room-DR, physiology, biochemistry, microbiology, pathology, pharmacology and clinical skills) suitable for students.

3) Teaching hospital for bedside teaching.

2. Computing resources (AV, data show, Smart Board, software, etc.)

Computers, multimedia in lecture room, PBL room and laboratories.

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

Library supplied with reference text books, electronic resources.

#### G Course Evaluation and Improvement Processes

1 Strategies for Obtaining Student Feedback on Effectiveness of Teaching

1) Continuously throughout the block by direct interviewing of the students.

2) End of block questionnaire

2 Other Strategies for Evaluation of Teaching by the Program/Department Instructor

1) Feedback from colleagues.

2) Class observation by supervisors.

3 Processes for Improvement of Teaching

1) Continuous updating of course contents.

2) Regular meetings where problems are discussed and recommendations made.

3) Workshops on teaching methods.

4) Review of recommended teaching strategies.

4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)

1) Arrange with another institution to have common test items included in an exam and compare marks given.

2) Invitation of an external examiner on regular bases.

5 Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement.

- 1) We should justify The departments academic hours in the course (normal distribution of course lectures and practical).
- 2) There will be at least 3 to 6 actual hours of surgery bed side teaching.
- 3) Activation of the others modes of instructions.
- 4) We should increase the practical hours.
- 5) We must reconsider in the PBL sessions evaluation.
- 6) We must reconsider in the PBL sessions, seminars and SDL actual hours; is it practical or theoretical hours.
- 7) There will be a suitable examinations room.
- 8) There will be an evaluation at the end of the block to assess the course execution, outcome and feedback from different sources to arrive at an appropriate modifications needed.

**Faculty or Teaching Staff: Mr. Mohammed Ansar Qureshi** - – Course coordinator

**Signature:** \_\_\_\_\_ **Mohammed ansar qureshi** \_\_\_\_\_ **Date Report Completed:** \_\_\_\_\_

**Received by:** \_\_\_\_\_ **Dean/Department Head**

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_