

**OST 523 - GENITOURINARY SYSTEM
Spring Semester, 2011**

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2. Course Introduction:

OST 523, the Genitourinary System, is an intensive multidisciplinary course designed to provide students the basic science and clinical framework for topics in nephrology and urology. The course is intense, with one week of nephrology and one week of urology topics. The course is designed to assist the student in integrating the lectures in each system. Lectures are live or recorded via Breeze. Student participation and attendance is encouraged. Students are advised to use course textbooks to reference lectures in class. The use of scribes is discouraged, and attendance in class is highly encouraged.

There are three lectures given by Dr. Patterson using presentation software. These lectures are included in Angel. The students have been allotted lecture time to review these presentations. The student is encouraged to complete these 3 lectures prior to the cases presented at 9:00 and 11:00 a.m. on March 18. During these lectures a preceptor will use case studies to apply clinically the objectives of the sodium, potassium, acid base and acute renal failure lectures. The March 18th lectures are not mandatory and there will be no extra information covered on the exam during these sessions. The sessions will be interactive, as students will be called upon to answer questions. The purpose of these sessions is to test your understanding and application of the objectives using case studies (similar to the expectations of 3rd year medical students in the clinical setting). Therefore it is highly recommended to be very familiar with the lectures prior to these sessions. There will be practice questions for his lecture in Angel.

3. Course Objectives:

Upon completion of OST 523, Genitourinary System, the student should be able to meet the following objectives:

General objectives

- Understand the anatomy and physiology of the genitourinary system to allow accurate diagnosis and treatment of disease.
- Gain appreciation of the differences in the diagnosis and treatment of adults and pediatric patients with disease.
- Understand the types and rational use of radiologic studies available to assist in the diagnosis of genitourinary tract disease.
- Be able to use the common pharmacologic agents to treat genitourinary disease, including antibiotics, alpha blockers, and 5 alpha reductase inhibitors, and anticholinergic antispasmodics, PEG-1 inhibitors, and hormone manipulation based on a comprehensive understanding.

Nephrology objectives

- Apply osteopathic principles and practice in the evaluation and management of a patient with a renal disorder
- The student will describe the basic physiology of glomerular filtration
- The student will describe the basic metabolic, homeostatic regulatory and endocrine functions of the kidney
- The student will describe the basic physiology of sodium, potassium, hydrogen ion and water excretion
- The student will describe Acid base homeostasis by the kidneys
- Given a clinical scenario, electrolytes and an arterial blood gas, the student will interpret an acid base problem
- Given a clinical scenario, the student will predict the etiology of sodium and potassium abnormalities
- The student will describe the basic physiology of blood pressure control
- The student will recognize the clinical presentation of diseases of the genitourinary system.
He/she will request and interpret appropriate initial investigations and appropriate therapy for the following diseases:
 - a. Acute Renal Failure
 - b. Acute Tubular Necrosis
 - c. Atheroembolic kidney disease
 - d. Chronic renal failure
 - e. Diabetic nephropathy
 - f. Glomerular disease
 - g. Hematuria
 - h. Hypertension
 - i. Proteinuria
 - j. Tubulointerstitial renal failure

Urology objectives

- Understand the presentation diagnosis and treatment of the following diseases:
 - Benign prostatic enlargement with obstruction.
 - Prostate cancer.
 - Kidney cancer.
 - Testis cancer.
 - Bladder cancer.
 - Penis cancer.
 - Urinary calculi.
 - Pediatric and adult urinary tract disease.
 - Primary nocturnal enuresis.
 - Hypospadias.
 - Cryptorchism.
 - Incontinence.
 - Sexually transmitted diseases.
 - Benign. scrotal diseases.
 - Acute and chronic prostatitis.
 - Male sexual dysfunction.
 - Testicular torsion.
 - Acute urinary retention.
 - Genitourinary tract trauma.

If students have questions, please send them to Mary Schneider (schnei38@msu.edu), who will forward to the appropriate lecturer.

4. Required Texts (texts are available online through www.accessmedicine.com and are free to students at this site).

Harrison's Principles of Internal Medicine, 16th ed., 2004. ISBN# 0071402357
Smith's General Urology, 17th ed., 2007. ISBN# 0071457372
OST 523 course pack

5. Examinations:

Examinations cover material from lectures plus reading assignments. List of reading assignments will be issued at a later date.

Two examinations will be given in OST 523, Spring Semester, 2011.

Tuesday, March 22, 2011

Mid-term Examination
7:15 - 8:50 am

Material Covered

March 14 - March 18
approximately 50 questions

Monday, March 28, 2011

Final Examination
7:15- 8:50 am

Material Covered

March 21 - March 25
approximately 50 questions

All examinations are "closed book". Therefore, you should not bring books, notebooks, palm devices, backpacks, etc. into the exam room. Please store these items in your locker. Calculators and hand-held computers are not allowed during either exam for this course.

All cell phones, pagers and other electronic devices are to be turned off and stored in your locker or at the parameter of the room during the exam.

Students arriving late (up to $\frac{1}{2}$ hour) for exams will be admitted only if no other student has finished the exam and/or departed from the exam room.

If a student misses either examination because of an unacceptable excuse, he/she will receive a zero for that examination.

If a student misses either the mid-term or the final examination with an excused absence, the format and date of the make-up exam will be at the discretion of the course coordinator.

Individual multiple-choice exam results will be sent to you via e-mail.

6. **Attendance** at GU lectures is optional; however, failure to attend class for any reason, whether for illness or an excused absence does not relieve a student from responsibility for the material covered during that absence.

7. **Policy on Excused Absences**

MSUCOM in accordance with All-University Policy on Attendance (Academic Programs) does not have a regulation requiring class attendance. However, the College understands and supports the need and the right of the faculty to expect student attendance and participation in many curricular components with consequences if the student is not attending.

In the spirit of professional behavior, MSUCOM students are expected to attend class sessions (e.g., lectures, laboratories) and take all examinations during the originally scheduled times. If it is not possible to take the examination at the regularly scheduled time, the student must obtain an excused absence.

To obtain an excused absence, students need to make the following contact, as appropriate, prior to the scheduled administration of the examination(s).

Dr. Patterson (Exam 1)	(517) 353-4734
Dr. Wartinger (Exam 2)	(517) 353-8470

8. **Missed Examinations**

No students will be excused from the examination without permission from the coordinator. Death in the immediate family or hospitalization are acceptable excuses; documentation for these absences is required. The format and date of a make-up exam will be at the discretion of the course director.

NOTE: In compliance with MSU-COM policy, exams will not be given prior to their originally scheduled time.

To obtain an excused absence, you will need to contact Mary Schneider at (517) 353-4734 or schnei38@msu.edu (Example, death in the immediate family, or hospitalization)

For additional information on absences, refer to Dr. Falls' revised "Policy on Excused Absences for Unit I and Unit II Courses" at <http://www.com.msu.edu/ss/absences.html>

If examinations are missed due to medical reasons, an attending physician's confirmation will be required for the absence to be excused.

9. **iClickers Policy**

You are expected to bring your iClicker to class regularly so that you will always be prepared when you need to use your unit. Class will proceed as planned, even if you have forgotten to bring your iClicker with you. The iClicker may be used to provide practice with concepts and principles or to stimulate discussion.

10. **Grading**

"P" - an overall average of 70% of the total points possible

"N" - an overall average of less than 70% of the total points possible

11. **Remediation**

Students receiving an "N" grade in the OST 523: The remediation format and date are at the discretion of the course coordinators.

12. **Students' Evaluation of the Course and Instructors**

Students are **required** to evaluate course content and materials. Evaluation of faculty is optional. The evaluation system for OST 523 will be turned off at 8:00 a.m. on Monday, 4/18/11. An instrument for such evaluation will be made available for your input on the web at: <http://kobiljak.msu.edu/> evaluation

13. **Academic Honesty**

If any instance of academic dishonesty (cheating, plagiarism, etc.) is discovered by an instructor, it is his or her responsibility to take appropriate action. Signing another

student's name on the attendance sheet could be considered an instance of academic dishonesty. Such action may include giving a failing grade to the student in the course and/or referring the student for judicial review and possible disciplinary action which may include disciplinary suspension from the College. Integrity of Scholarship and Grades (All-University Policy and General Student Regulations, pp. 76, and 108, Spartan Life).

14. **Professionalism**

Students in OST 523 will be expected to conduct themselves in a professional manner. See policy on professionalism <http://www.com.msu.edu/aa/COMProfDoc.pdf>. At all times students are to conduct themselves in a respectful manner toward faculty/instructors and each other as well as MSU/COM staff.

Students should also check e-mail and the Angel web site on a daily basis for changes and other time sensitive information.

GENITOURINARY SYSTEM LECTURE SCHEDULE 2011

Monday, March 14

8:00 - 8:50	Course Intro	Wartinger & Patterson
11:00 - 11:50	Renal Pathophysiology: Renal Blood Flow and Glomerular Filtration Water and Osmolarity	Sparks
1:00 - 1:50	Renal Pathology I	Siew
2:00 - 2:50	Renal Pathology II	Siew

Tuesday, March 15

8:00 - 8:50	Renal Pathophysiology: Sodium, Potassium and Calcium Ions	Sparks
9:00 - 9:50	Renal Pathophysiology: Renal Handling of H ⁺ and HCO ₃ ⁻	Sparks
10:00 - 10:50	Pharmacology of Diuretics	Thornburg
11:00 - 11:50	Hypernatremia and Hyponatremia - Sodium Disorders (on-line Breeze lecture)	Patterson
1:00 - 1:50	Hyperkalemia and Hypokalemia - Potassium Disorders (on-line Breeze lecture)	Patterson
2:00 - 2:50	Acid Base Disorders (on-line Breeze lecture)	Patterson

Wednesday, March 16

11:00-11:50	Renal Pathology III	Siew
1:00 - 1:50	Renal Pathology IV	Siew
2:00 - 2:50	Renal Handling and Nephrotoxicity of Drugs	Thornburg
3:00 - 3:50	Geriatric Pharmacology - Case Studies	Thornburg

Thursday, March 17

8:00 - 8:50	Antimicrobial Pharmacology of GU Infections	Thornburg
9:00 - 9:50	Approach to Patients with Renal Disease: Major Syndromes in Nephrology (Breeze, on-line)	Gulick
10:00 - 10:50	Nephrotic Syndrome (Breeze, on-line)	Gulick
11:00 - 11:50	Acute Renal Failure (Breeze, on-line)	Gulick

Friday, March 18

8:00 - 8:50	Chronic Renal Failure	Gulick
9:00 - 9:50	Sodium, Potassium, Acid Base Disorders Case Studies (from MUC)	Patterson
10:00 - 10:50	Pharmacology of the Bladder and Prostate	Thornburg
11:00 - 11:50	Acute Renal Failure Cases (from DMC)	Patterson

Monday, March 21

8:00 - 8:50	GU Neoplasms I (normal and enlarged prostates with benign disease)	Wartinger
9:00 - 9:50	GU Neoplasms II (prostate cancer)	Wartinger
10:00 - 10:50	Genitourinary Radiology	Aben
11:00 - 11:50	Urinary Tract Calculi	Rizer

Tuesday, March 22

7:15 - 8:50	Exam 1 (covers 3/14-3/18)	Patterson
9:00 - 9:50	GU Emergencies	Rizer
10:00 - 10:50		
11:00 - 11:50	Renal Pathology V	Siew
1:00 - 1:50	Benign & Malignant Penile-Scrotal Disease with benign disease)	Harding
2:00 - 2:50	Urinary Incontinence/Retention	Harding

Wednesday, March 23

11:00 - 11:50	Sexually Transmitted Diseases	Gulick
1:00 - 1:50	Hypospadias and Cryptorchidism	Bartkowski
2:00 - 2:50	Pediatric UTI/Reflux Nephropathy/Enuresis	Bartkowski

Thursday, March 24

8:00 - 8:50	Erectile Dysfunction	Ratchford
9:00 - 9:50	Urinary Tract Infections/Prostatitis	Gulick
10:00 - 10:50	Testes, Kidney, Penile Cancers I (Breeze, on-line)	Gulick
11:00 - 11:50	Testes, Kidney, Penile Cancers II (Breeze, on-line)	Gulick

Friday, March 25

8:00 - 8:50	Self Study	
9:00 - 9:50	Self Study	
10:00 - 10:50	GU Neoplasms III (on-line, NCI website)	Wartinger
11:00 - 11:50	Self Study	

Monday, March 28

7:15 - 8:50	Final Exam (covers 3/21 - 3/25)	Wartinger
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