I. Genitourinary Trauma:
   1. Goal: The student will be able to demonstrate a basic clinical approach to the management & diagnosis of urologic trauma.
   2. Needs: Genitourinary organs are commonly involved in multisystem trauma & their diagnosis is not often clinically obvious. Significant morbidity can result from not recognizing these conditions.
   3. Objectives:
      a. Describe the presenting symptoms & classification of renal trauma.
      b. List the indications for imaging of a suspected renal trauma.
      c. List the presenting symptoms of bladder injury and outline the indications for a cystogram in the trauma setting.
      d. Outline the approach to diagnosing suspected urethra trauma (i.e. indications for a retrograde urethrogram).
      e. Try to observe one urologic trauma and participate in its evaluation.
   4. Methods to Achieve these Objectives:
      b. Participation in ward rounds & on call.
      c. Attend weekly urologic case rounds (Tues 7am AUI Conference Room).
      d. Attend weekly urology (resident) teaching sessions (Thurs 8-11am AUI Conference Room).

II. Male Sexual Dysfunction:
   1. Goal: The student will be able to demonstrate a general clinical approach to the treatment of male sexual dysfunction.
   2. Needs Assessment: Male sexual dysfunction is a common & underdiagnosed condition.
   3. Objectives:
      a. Describe the basic anatomy of the penis & physiology of male erection.
      b. List and classify the common risk factors for erectile dysfunction.
      c. Outline the treatment options for erectile dysfunction (both surgical & non-surgical).
      d. Assess one patient with erectile dysfunction.
   4. Methods to Achieve these Objectives:
      a. Required readings at www.urologyalberta.ca/med-undergraduate.asp (Erectile Dysfunction)
      c. Attend both general & subspecialty urology clinics.
      d. Attend the operating room for observation of the surgical management of male sexual dysfunction.
III. Scrotal Lesions:
1. Goal: The student will be able to demonstrate basic clinical knowledge pertaining to benign, infectious & malignant scrotal swellings.
2. Needs Assessment: Scrotal lesions are a common urologic diagnosis found in up to 15% of all men.
3. Objectives:
   a. Learn and perform a proper physical examination of the scrotum.
   b. Classify scrotal lesions in a logical manner.
   c. Discuss the distinguishing features of a malignant versus benign scrotal swelling.
   d. Outline the clinical evaluation of a patient with suspected testicular cancer (physical examination, lab evaluation and radiographic tests).
   e. List the differential diagnosis of acute scrotal pain.
4. Methods to achieve these goals:
   a. Required reading at www.urologyalberta.ca/med-undergraduate.asp (Testicular torsion)
   b. Selected reading: Smith’s General Urology, 16th Edition, Chapter 4 (Physical Examination of the Genitourinary Tract) & Chapter 23 (Genital Tumours).
   c. Attend urology clinics for diagnosis & evaluation of scrotal lesions.
   d. Attend operating room for the management of benign & malignant scrotal lesions.

IV. Voiding Dysfunction:
1. Goal: The student will be able to demonstrate a broad understanding of common voiding disorders encountered in urology.
2. Needs assessment: Voiding disorders are a common condition seen in all facets of clinical practice.
3. Objectives:
   a. Outline the functional classification of voiding dysfunction.
   b. Describe the basic innervation of the bladder, bladder neck & urinary sphincters.
   c. Outline the basic evaluation of an incontinent patient.
   d. Outline the treatment (medical & surgical) options of lower urinary tract symptoms (LUTS) in the older male patient.
   e. Outline the basic treatment options for stress urinary incontinence.
   f. Perform at least one male catheterization.
4. Methods to achieve these objectives:
   c. Attend one urodynamic clinic.
d. Attend general urology clinics to diagnose & medically treat incontinence & voiding disorders.

V. Urologic Malignancy:
1. Goal: The student will be able to demonstrate a broad working knowledge of common urologic malignancies involving the prostate, bladder & kidney.
2. Needs Assessment: Urologic malignancies are common & highly treatable conditions requiring knowledge of current diagnostic & therapeutic options.
3. Objectives:
   a. List the risk factors for bladder and prostate cancer
   b. Classify and stage bladder, prostate & renal neoplasms.
   c. Describe the common presenting symptoms of bladder cancer, prostate cancer & renal cancer.
   d. Outline the basic treatment options for a solid renal lesion.
   e. List the guideline for PSA screening in detecting, following and treating prostate cancer.
   f. Discuss the basic treatment options for early & advanced bladder and prostate cancer.
   g. Perform a digital rectal examination (DRE).
4. Methods to achieve these goals:
   c. Attend clinics for the diagnosis, evaluation and treatment of prostate & renal cancer.
   d. Attend the operating room for the operative management of prostate, renal & bladder cancer.
   e. Attend cystoscopy clinics for the diagnosis, evaluation and management of bladder cancer.

VI. Urinary Tract Infection:
1. Goal: The student will be able to demonstrate a broad working knowledge of urinary tract infection.
2. Needs Assessment: Urologic infection is a common medical problem with over 150 million cases per year in North America. Proper diagnosis & treatment of this condition is essential.
3. Objectives:
   a. Outline the diagnosis and treatment of bacterial cystitis, pyelonephritis, epididymitis, and prostatitis.
   b. List the most common antimicrobials used to treat urologic infection.
   c. Learn the importance of early diagnosis & management of acute obstructive pyelonephritis.
d. List the clinical features of Fournier’s gangrene.

4. Methods to achieve these goals:
   a. Required reading at www.urologyalberta.ca/med-undergraduate.asp (Acute uncomplicated urinary tract infection in women)
   c. Attendance of general urology clinics to diagnose & treat common urologic infections.
   d. Participation in urologic call to learn to assess acute urologic infection.

VII. Urinary Calculus Disease:
   1. Goal: The student will be able to demonstrate a working knowledge of urinary calculus disease.
   2. Needs Assessment: Urinary stone disease is the third most common urologic affliction.
   3. Objectives:
      a. Describe the most common risk factors for urinary calculus disease.
      b. List the symptoms & diagnosis of an acute stone episode (renal colic).
      c. Outline the management of renal and ureteral calculus disease in relation to the treatment options for renal calculi, ureteral calculi & vesical calculi.
      d. Understand the role of extra-corporal shock wave lithotripsy (ESWL), ureteroscopy & percutaneous nephrolithotrispy (PNL) in treating urinary calculi.
      e. List the basic principles of stone prevention.
   4. Methods to achieve these goals:
      c. Attend subspecialty & general clinics to diagnose & manage urinary stone disease.
      d. Attend extra-corporal shock wave lithotripsy clinics to learn the non-surgical management of urinary stone disease.
      e. Attend the operating room to understand the surgical management of stone disease.
      f. Participate in urologic call to diagnose & manage acute renal colic.

VIII. Pediatric Urology:
   1. Goal: The student will be able to demonstrate a working knowledge of common pediatric urologic conditions.
   2. Needs Assessment: Urologic conditions are common presenting illnesses throughout childhood.
   3. Objectives:
      a. Outline the diagnosis & management of vesicoureteral reflux.
b. Outline the management of acute testicular pain & know the importance of promptly diagnosing acute testicular torsion.
c. Recognize the common conditions affecting the prepuce including balanitis, phimosis & paraphimosis.
d. Outline the basic management of common congenital urologic conditions (ureteropelvic junction obstruction, hypospadias, & hydrocele).

4. Methods to achieve these goals:
   c. Attend pediatric urology clinics to assess, diagnose & manage common pediatric conditions.
   d. Attend pediatric operating room to understand the surgical management of pediatric urologic disease.

IX. Hematuria:
   1. Goal: The student will be able to evaluate & manage a patient with hematuria.
   2. Needs Assessment: Hematuria is a cardinal symptom of urologic disease and requires evaluation.
   3. Objectives:
      a. Outline the evaluation of microscopic and gross hematuria.
      b. Outline the management of acute bladder hemorrhage.
      c. List a differential diagnosis of hematuria.
      d. List a differential diagnosis of a urinary filling defect.
   4. Methods to achieve these goals:
      c. Attend urology clinics diagnose & manage a patient with hematuria.
      d. Participate in call duties to learn the management of acute bladder hemorrhage.
      e. Attend cystoscopy clinics to diagnose & observe causes of hematuria.