OPSEF: Didactic Themes/Objectives

Ob-Gyn, Pediatrics, Surgery, Emergency Medicine, & Family Medicine

Airway

- Evaluation of Emergent Airway
  - Gather essential information about patients and their conditions through history taking, physical examination, and the use of laboratory data, imaging studies, and other tests.(1.1)
  - Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.(1.2)
  - For a given clinical presentation, use data derived from the history, physical examination, imaging and/or laboratory investigations to categorize the disease process and generate and prioritize a focused list of diagnostic considerations.(1.3)
  - Organize and prioritize responsibilities in order to provide care that is safe, efficient and effective. (1.4)
  - Recognize a patient requiring urgent or emergent care, and initiate evaluation and management.(1.5)
  - Compare and contrast normal variation and pathological states in the structure and function of the human body across the life span. (2.1)

- General Pediatric Pulmonology
  - Recognize signs and symptoms of respiratory distress and inform differentials (1.3)
  - Identify common causes of respiratory distress and failure at different ages (2.1)
  - Identify the differences between children and adults with regards to anatomy and physiology relating to respiration (2.1)

Routine OB/Gyn

- Contraception: An understanding of contraceptive methods and associated risks and benefits is necessary to assist patients seeking to prevent pregnancy.
  - Describe the mechanism of action and effectiveness of contraceptive methods. (1.8, 2.1-2.5, 3.4)
  - Counsel the patient regarding the benefits, risks and use for each contraceptive method. (1.2, 1.6, 1.8, 2.1-2.5)
  - Describe the barriers to effective contraceptive use and to the reduction of unintended pregnancy. (1.8, 4.1, 6.3)
  - Describe the methods of male and female surgical sterilization. (1.2, 1.6, 2.1-2.5)
  - List the risks and benefits of female surgical sterilization procedures. (1.2, 1.6, 1.8, 2.1-2.5)

- **Menopause:** Women spend as much as one-third of their lives in the postmenopausal years. Understanding the physical and emotional changes caused by estrogen depletion is important for all physicians who provide health care for women.
    - Describe the physiologic changes in the hypothalamic-pituitary-ovarian axis (2.1-2.3)
    - Outline the symptoms and physical findings associated with hypoestrogenism (1.1, 1.3, 2.1-2.3)
    - Describe the long-term changes associated with hypoestrogenism (1.3, 2.1-2.3)
    - Discuss the following management strategies for menopause: hormone therapy, nutrition & exercise, and non-hormonal therapeutic options (1.2, 1.6, 2.3)
    - Outline the risks and benefits of hormone replacement therapy (1.8, 6.3)

- **Pap Smear Screening, Abnormal Cervical Cytology, and Cervical Cancer:** Understanding routine screening for cervical cancer and its precursor, specifically cervical dysplasia has changed as our understanding of the relationship between HPV and cervical cancer. Recognition and treatment of early cervical changes can prevent cervical cancer.
    - Describe recommendations for cervical cancer screening (1.9, 2.4)
    - Describe the relationship between HPV and cervical cancer (2.1-2.3)
    - Describe evaluation of an abnormal Pap smear (1.2, 2.3)
    - List treatment options for cervical dysplasia (1.2, 1.6, 2.3)
    - List the stages and clinical manifestations of cervical cancer (1.3, 2.3, 2.4)
    - List risk factors for cervical cancer (1.8, 2.4, 6.3)

- **Normal and Abnormal Uterine Bleeding:** Abnormal uterine bleeding can have many causes and is a common reason why women seek the care of a gynecologist.
    - Describe the difference between normal and abnormal uterine bleeding. (2.1-2.3)
    - List causes of abnormal uterine bleeding (2.2, 2.3)
    - Describe the evaluation of patients who present with AUB (1.2, 2.3)
    - List medical and surgical options for treatment of AUB (1.2, 1.6, 2.3)

- **Sexually Transmitted Infections:** Gain understanding of the basic epidemiology, diagnosis, and management of sexually transmitted infections.
    - Describe the organisms and methods of transmission, symptoms, physical findings, evaluation, and management of the following: (1.2, 1.3, 1.6, 2.1-2.4)
        - Gonorrhea
        - Chlamydia
        - Human papillomavirus infection
        - Human immunodeficiency virus
    - Outline the public health concerns relating to: (1.8, 6.1, 6.3)
        - Screening programs
        - Cost
        - Prevention and immunizations
    - Discuss partner evaluation and treatment plans (1.8, 6.3)

- Breast Cancer
  - Review screening recommendations for breast cancer (1.8)
  - Describe workup for a breast mass and risk factors for breast cancer (1.2, 2.4)
  - List benign and malignant breast diseases (1.3, 2.3)
  - List common benign findings versus malignant (1.3)
  - Discuss indications for mammography (1.2, 1.9)
  - Describe the role of the community in raising awareness and fundraising for breast cancer (1.9)

Obstetrics/Neonatology

- Maternal Cardiovascular Adaptations to Pregnancy: Pregnancy causes several changes in the female body that impact circulation. Having an understanding of the physiological change helps identify and manage pregnancy related concerns.

  - Discuss the major pregnancy related changes in the female as it relates to (2.1-2.2):
    - Systemic hemodynamics (2.3, 2.4)
    - Changes in blood volume (7.2, 7.3, 8.1)
    - Uteroplacental circulation (7.2, 7.3, 8.1)
    - Changes related to labor and delivery (7.2, 7.3, 8.1)
    - Postpartum resolution (7.2, 7.3, 8.1)

- Intrapartum Fetal Surveillance: Identification of PPROM and preterm labor allows the physician to optimize the delivery conditions for a preterm infant.
  - Describe the process of evaluating a patient for PPROM and PTL. (1.2, 1.3, 1.5)
  - Describe antenatal treatments for PPROM and PTL (1.2, 1.6)
  - Discuss the complications of preterm birth as they affect mother and fetus (2.5, 4.1, 6.3)

- Gestational Hypertension and Pre-eclampsia: Complications from gestational hypertension and preeclampsia are frequently encountered during pregnancy. Prompt recognition and management is critical to the well being of the fetus and mother.
  - Describe the screening and evaluation to identify affected patients (1.2, 1.3, 1.8, 6.3)
  - Outline the management of gestational hypertension and pre-eclampsia during the pregnancy (1.2, 1.6, 2.3)
  - Discuss the risks to mother and fetus associated with gestation hypertension and preeclampsia (4.1, 4.2, 6.3)
  - List the complications that can occur at delivery as relates both gestational hypertension and preeclampsia (1.2, 2.3)

- Neonatology : The transition from intrauterine life to extra uterine independent existence is a major event – physiologically for the baby, emotionally for the family, and medically for the health care team. Physicians must have an appreciation for the physiologic changes a newborn experiences. The newborn has unique needs and vulnerabilities that are distinct from other periods of infancy.

- Describe the transition from the intrauterine to the extra uterine environment, including temperature regulation, cardiovascular/respiratory adjustment, glucose regulation, and initiation of feeding (2.1, 2.2)
- List the information from the history of pregnancy, labor, and delivery obtained from the parents or medical record that has implications for the health of the newborn (1.2, 1.3, 1.6)
- Describe how gestational age can be assessed with an instrument such as the Ballard Scale, and identify key indications of gestational maturity (1.1, 2.3)
- Describe the challenges for parents adjusting to a new infant in the home (2.5)
- Define "abnormal" crying length for an infant and review differentials for a "fussy" infant with a focus on colic as a diagnosis of exclusion (2.5)

- Neonatal Surgery: Emesis & Failure to Stool in Neonate
  - List history and physical findings important in neonatal feeding intolerance and vomiting (1.1, 1.3)
  - Describe initial workup for neonatal feeding intolerance and vomiting (1.2, 1.6)
  - List associated findings in the VATER syndrome (2.2, 2.3)
  - List differential diagnosis for neonatal obstipation (1.3, 2.3)
  - Describe workup for suspected Hirschsprung's disease (1.2, 1.6, 2.3)
  - List appropriate workup for vomiting and feed intolerance after one month (1.2, 1.6, 2.3)
  - List appropriate workup for pediatric rectal bleeding (1.2, 1.6, 2.3)
  - Discuss how to approach infantile colic as a diagnosis of exclusion (1.2, 1.6, 2.3)

- Lactation: Knowledge of the physiology and function of the breast during lactation allows appropriate counseling to the pregnant and postpartum patient.
  - List the normal physiologic and anatomic changes of the breast during pregnancy and postpartum. (2.1-2.5)
  - Recognize and know how to treat common postpartum abnormalities of the breast. (4.1-4.3, 1.1-1.5)
  - List the reasons why breast feeding should be encouraged. (2.2, 2.5, 4.1-4.3)
  - Describe the resources and approach to determining medication safety during breast feeding. (2.1-2.5, 6.3)
  - Describe common challenges in the initiation and maintenance of lactation (2.1-2.6)

- Pediatric Congenital Heart Disease
  - Recognize the presentation of CHD across all Pediatric age spectrums. (1.2)
  - Generate differential diagnoses from appropriate H&P findings.(1.1-1.3, 1.5, 2.3, 2.4)
  - Understand how to work-up CHD. (1.1-1.3, 1.5, 2.3)
  - Discuss how to appropriately consult Pediatric Cardiologist. (1.5, 2.3, 7.2)

Inter-disciplinary Activities/Workshops

- Discharge Planning Activity: Students will be provided with a high-risk mother-baby pair case scenario that will involve identifying discharge needs and resources for both patients. The learners will need to identify all needs, not just medical needs. During this activity the student will:

- Prepare the patients' discharge plan. (1.4, 1.6, 1.8, 2.4, 2.5, 4.1, 4.2, 6.1-6.4, 7.2)
- Identify other professionals and local/national service resources for the continuing care of a woman and her infant. (6.2-6.4, 7.2)

- **Emergent Delivery Simulation:** Student will participate in a simulation of emergency care of both mother and neonate. During this activity the learner will:
  - Evaluate the patient and suggest appropriate course of action (1.1-1.3, 1.5)
  - Interpret results of fetal monitoring strips, vital signs, and clinical data in an unexpected emergent event (1.1-1.3)
  - Demonstrate knowledge of adult and neonatal resuscitation protocols. (1.5, 1.8, 2.3, 2.4)

- **OSCE Tips:** The student will:
  - Understand how OSCEs are scored and how a passing grade is achieved. (5.7)
  - Learn common incorrect usage of medical terminology and appropriate uses of medical terms. (4.2)
  - Understand how to appropriately document the simulated clinical encounter, differential diagnoses, evidence used to support differential diagnoses, and plan. (4.4)
  - Review communication checklist. (4.1, 4.3)
  - Learn about common errors that result in losing points in the OSCE. (1.1, 1.2)

- **Vertical Integration in Clinical Education (VICE):** Students will participate in teams to work through several cases relating to congenitally acquired infections. Clinical and basic science faculty will moderate the discussion. Students will increase their collective knowledge base by elucidating and applying basic science principles to clinical presentations, diagnostic work-ups, and treatment plans. (1.1-1.4, 1.6, 2.2-2.4, 2.6, 3.1, 3.4, 5.3, 7.3).

- **Inter-professional Educational Activity with UTEP medical professional students:** One time per block you will be required to go to UTEP for case-based learning session with other professional students. Students will work through a case utilizing each profession's expertise, knowledge, and skills. The students may include (but are not limited to) OT, PT, Pharmacy, and RN students.
  - Apply knowledge of your role and the roles of other students to development an assessment and treatment plan for specific case(s) presented to you. (7.1, 7.2)
  - Function as a team member to contribute to the medical care. (7.3)
  - Recognize when you need assistance for clinical problem solving and from whom to seek assistance. Utilize new information to solve clinical challenges. (8.1, 8.5)

- **Ethics Project:** Students will be assigned roles and participate in a small group session as it relates to a Mock Ethics Committee deliberation. The activity will help students gain understanding of clinical ethical considerations.
  - Participate in small groups simulating considerations of a medical ethics committee. (1.6, 5.1-5.2, 5.4, 5.5, 5.7, 6.1, 6.3, 7.2, 7.3)
  - Present a researched perspective. (3.1, 3.4, 6.1, 8.5)
  - Collectively render a decision regarding the clinical care of the patient. (1.6, 5.1- 5.2, 5.4, 5.5, 5.7, 6.1, 6.3, 7.2, 7.3)

- Mock RCA: Student will participate in this activity to identify and categorize the root causes and contributing factors of an adverse patient outcome.
    - Understand the use of Root Cause Analysis in evaluating adverse outcomes in patient care. (3.1-3.3, 3.5)
    - Identify root cause/contributing factors when given a case. (3.2, 3.5, 2.5, 7.3)
    - Categorize the root causes/identifying factors. (3.2, 3.5, 2.5, 7.3)
    - Suggest an action plan based on the factors he/she identified. (3.2, 3.5, 1.7, 7.3)

- Virtual and Telephone Medicine: Students will be divided into smaller groups to work together to develop a script for standardized patient encounters of either a virtual clinic vs. a telephone consult.
    - Appreciate challenges of over the phone communication (4.1)
    - Describe the benefits and difficulties in engaging in a telemedicine including challenges faced in obtaining a physical assessment from a parent over the phone (1.2)
    - Recognize a patient who requires urgent or emergent care (1.5)
    - Apply learning points to a standardized patient encounter (4.1)

- Family Centered Rounds
    - Identify examples of medical jargon and substitute more widely understood language in their place (4.1)
    - Outline the Family-Centered Rounding process at EPCH (6.1)
    - Describe characteristics of successful FCR (3.5)
    - Synthesize takeaways to improve the care of and communication with children and their families (4.3)

- Vitals signs: Recognizing when to intervene – Mapping pending
    - Discuss the relevance to identifying concerning vital signs
    - Outline the initial evaluation and management strategies to address varying unstable vital signs
    - Develop understanding about how the patient's presentation and past medical history impact initial management

- Acute Pain Management: Looking at multimodal approach to pain management – Mapping pending
    - Discuss the relevance and usage of the pain scale in acute pain management
    - Outline options for analgesia in varying patient scenarios
    - Develop an appreciation for how the patient's presentation and current pathology impact initial medication selection

Abdominal Pathology

- Abdominal Pain
    - Describe the workup for abdominal pain, including appropriate H&P exam signs and diagnostic workup for the following (1.1-1.3):
        - Appendicitis
        - Small intestinal obstruction
        - Large intestinal obstruction

        - Diverticulitis
    - Outline the appropriate components of admission and pre/post-operative orders for patients with abdominal pain (1.6)
    - Describe the initial workup of a patient with peritonitis (1.2, 1.5)

- Colorectal pathology and operative care
    - Outline the characteristics of Crohn's disease (CD) and Ulcerative Colitis (UC) (2.2, 2.4)
    - Review the pathophysiology of CD and UC (2.1, 2.2)
    - Discuss the medical management of CD and UC (1.2, 1.6)
    - Describe the relevant anatomy relating to surgical intervention for CD and UC (2.1)
    - Discuss the common abdominal and pelvic surgical interventions relating to management of UC (1.6)
    - Outline the major challenges of IBD related surgical interventions (1.6, 3.4)
    - Discuss the symptoms, evaluation, and management of anorectal crohn's disease (1.3, 2.3)

- Abdominal Aortic Aneurysm
    - Discuss the incidence and prevalence of aortic aneurysm disease (2.4)
    - Discuss the risk factors for development of AAA (2.4, 6.3)
    - Learn to perform a vascular exam, including peripheral pulses (1.1)
    - Outline the risk factors for AAA rupture (2.4, 6.3)
    - Discuss the indications for surgical intervention (1.5, 1.6)
    - Discuss the general techniques for elective repair of AAA (1.2, 1.6)
    - Describe common post operative complications following a AAA repair (2.3)

- Hepatobiliary Disorders and Jaundice
    - Describe the initial workup of a patient with right upper quadrant pain (1.2, 1.6
    - Describe the initial workup of a patient with jaundice (1.2, 1.6)
    - Outline the initial workup of a patient with epigastric pain (1.2, 1.6)
    - Describe appropriate imaging tests for patients with suspected biliary tract disease and pancreatitis (1.2, 1.3)
    - List the risk factors for cholelithiasis (1.3, 6.3)
    - List the ultrasound findings for acute cholecystitis and symptomatic cholelithiasis (1.5, 2.3)
    - List indications for surgical referral for a patient with gallstones or right upper quadrant pain (1.5, 2.3)
    - List hepatic causes of jaundice and associated risk factors (1.3)
    - Compare and contrast the clinical presentation, initial workup, and causes of acute vs. chronic jaundice (1.3, 2.2, 2.3)

- Pancreatitis
    - List the risk factors and causes for acute pancreatitis (1.3, 6.3)
    - Describe the Ranson's scoring system for acute pancreatitis (1.3, 1.5)
    - Describe early treatment of acute pancreatitis (1.6)
    - Describe complications of severe acute pancreatitis (2.1, 2.2)
    - List indications for operation on acute pancreatitis (1.5, 2.3)

- Surgical Anatomy for Hepatobiliary Procedures
  - Recognize relevant surgical anatomy (2.1)
  - Outline the common laparoscopic general surgery operative technique (1.6, 2.3)

- Common Pediatric GI Concerns: Children frequently present to the pediatrician with GI issues.
  - Describe common GI issues in children and adolescents (2.1-2.5)
  - Recognize signs and symptoms associated with common GI disorders (1.1, 1.3, 1.5)
  - Describe the initial work-up and treatment for common GI disorders (1.2, 1.4, 1.6, 1.8)

- Bariatric Surgery
  - Discuss the trends of obesity in the United States (2.4)
  - Define obesity (2.1)
  - Delineate indications for weight reduction surgery (1.6, 2.3)
  - Recognize the important postoperative notational considerations in patients undergoing bariatric surgery (1.2, 6.3)

Endocrinology & Diabetes

- Endocrine Diseases in Surgery
  - Gather essential information about patients and their conditions through history taking, physical examination, and the use of laboratory data, imaging studies, and other tests.(1.1)
  - Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.(1.2)
  - Locate, appraise and assimilate evidence from scientific studies related to patients' health problems.(3.4)

- Pediatric Endocrinology (Everything but diabetes) - Mapping pending
  - Understand the presentation of common endocrinopathies other than diabetes mellitus (2.1)
  - Understand the differential diagnoses and work-up for common endocrinopathies other than diabetes. (1.1-1.3, 2.2-2.4)

- Diabetes in Pregnancy: Gestational diabetes is frequently encountered in pregnancy.
  - Describe the screening and evaluation to identify patients with gestational diabetes (1.2, 1.3, 6.3)
  - Describe the medical management of gestational diabetes (1.2, 1.6, 2.3)
  - Outline the risks to mother and fetus associated with gestational diabetes (4.1, 4.2, 6.3)
  - List complications that can occur at delivery as it relates to gestational diabetes (1.2, 2.3)

- Diabetes in Pediatrics
  - Recognize the presentation of Diabetes Mellitus across all Pediatric age spectrums (2.1)

- Understand the appropriate work-up for diagnosing Diabetes Mellitus in children (1.1-1.3, 2.2, 2.4)
- Understand the impact on the family of having a child with Diabetes Mellitus (1.6, 1.7, 2.5)

Trauma

- Trauma Workshop
  - Describe the primary survey of the trauma patient (1.1, 1.3)
  - Outline how to evaluate the mental status in trauma patient (AVPU) (1.1, 1.3)
  - Describe the secondary survey of trauma patient (1.1, 1.3)
  - Describe the associated injuries after a fall from height (1.3)
  - Describe the associated injuries after a motor vehicle crash (1.3)
  - Outline the adjunctive evaluation of the abdomen, including eFAST, CT scan, and DPL. Discuss the indications and determination of positive findings for each. (1.2)
  - List steps in initial resuscitation of a trauma patient in shock (1.5)
  - Describe the difference between the following shock states – hemorrhagic, obstructive, distributive, septic, and neurogenic (1.3, 2.2)
  - Perform a history and physical exam using primary and secondary survey on a trauma patient (1.1)
  - Discuss the traumatic etiology, history and physical findings, and differential diagnosis of obstructive shock in a trauma patient (1.3)
  - Compare and contrast the findings of tension pneumothorax and cardiac tamponade in a trauma patient (1.3, 2.2, 2.3)
  - List the treatment options for cardiac tamponade (1.5, 1.6)
  - List the treatment options for tension pneumothorax (1.5, 1.6)
  - Discuss the triage decisions involved when multiple trauma victims are present (1.4, 1.5)
  - Outline the criteria for transferring a trauma patient to a site for definitive care (1.5)

- Recognition and Treatment of Child Abuse: Children are uniquely vulnerable to emotional, sexual, and physical abuse and neglect. Legislatures have introduced statutes for the protection of children. The costs of child abuse are high in terms of morbidity, mortality, and cost to society for failure to protect children.
  - Describe the signs and symptoms of child sexual abuse and physical abuse/neglect (1.1-1.4)
  - Understand your role as a mandated reporter. (4.2, 5.5, 6.2, 8.1)
  - Describe the stress that a diagnosis of abuse carries for the child and family. (2.5, 4.1, 4.3)
  - Understand the importance of meticulous documentation of all positive and negative findings in the medical record. (4.4)
  - Understand the short-and long-term morbidity that results from child abuse. (2.3-2.5)
  - Understand the steps needed for care and management of the abused child. (5.5)

- Work up and Resuscitation of Pediatric Trauma and Pediatric Shock

- Gather essential information about patients and their conditions through history taking, physical examination, and the use of laboratory data, imaging studies, and other tests.(1.1)
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.(1.2)
- For a given clinical presentation, use data derived from the history, physical examination, imaging and/or laboratory investigations to categorize the disease process and generate and prioritize a focused list of diagnostic considerations.(1.3)
- Organize and prioritize responsibilities in order to provide care that is safe, efficient and effective.(1.4)
- Recognize a patient requiring urgent or emergent care, and initiate evaluation and management.(1.5)
- Compare and contrast normal variation and pathological states in the structure and function of the human body across the life span.(2.1)

- Orthopedic Emergencies – Objectives/Mapping pending
  - TBA

- Plastic Surgery
  - Gather essential information about patients and their conditions through history taking, physical examination, and the use of laboratory data, imaging studies, and other tests.(1.1)
  - Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment.(1.2)
  - For a given clinical presentation, use data derived from the history, physical examination, imaging and/or laboratory investigations to categorize the disease process and generate and prioritize a focused list of diagnostic considerations.(1.3)
  - Recognize a patient requiring urgent or emergent care, and initiate evaluation and management.(1.5)

- Cultural Sensitivity
  - Identify cultural barriers which lead to health care disparities (2.4)
  - Determine when and how to use an interpreter (3.3)
  - Apply principles of cross-cultural communication to every patient encounter (3.2, 3.5)
  - Appraise and respond to cultural cues in the clinical setting (3.2, 3.5)

Nephrology

- Urinary Incontinence: Patients with conditions of pelvic relaxation and urinary incontinence present in a variety of ways. The physician should be familiar with the types of pelvic relaxation and incontinence and the approach to management of these patients.
  - Outline the predisposing factors for pelvic organ prolapse and urinary incontinence (1.1-1.8, 2.1-2.6)
  - Discuss the anatomic changes, fascial defects, and neuromuscular pathophysiology relate to pelvic prolapse and urinary incontinence (2.1-2.3)
  - Identify the signs and symptoms of pelvic organ prolapse, including cystocele, rectocele, enterocele, and vaginal vault/uterine prolapse (1.3, 2.1-2.3)

- **Urinary Tract Infection in Children and Pediatric Glomerular Disease:** UTIs are a common infection in infants and children, and can lead to serious disease. Nephrotic and nephritic diseases are common reasons for referral to a Pediatric Nephrologist.
    - Recognize the signs and symptoms of UTIs in children (1.1, 1.3)
    - Understand the principles of evaluation and management of urinary infections (1.2-1.6, 2.3)
    - Recognize the signs and symptoms of glomerular disease in children (1.1, 1.3)
    - Understand the evaluation and treatment of pediatric glomerular disease (1.1-1.6, 2.3)

- **General Pediatric Nephrology:** Human beings need an uninterrupted supply of water, electrolytes, and energy. Excessive or diminished fluid intake or losses may lead to severe physiologic derangements, including morbidity and mortality.
    - Recognize the signs and symptoms of dehydration and discuss indications for oral vs parental rehydration therapy (1.2)
    - Discuss how to estimate fluid deficit (1.3)
    - Distinguish the causes of acute kidney injury (AKI) (2.1)
    - Formulate diagnostic approach and management of AKI, including how to calculate maintenance and rehydration requirements (1.5)
    - Apply preventative measurements of AKI (2.3)
    - Recognize current trials relating to AKI (3.4)
    - Outline the common electrolyte imbalances noted in acutely ill patients (1.5)

Peri-Operative Care

- Initial X-ray Interpretation
    - Learn basic interpretation of plain abdominal x-rays in large and small intestinal obstruction (1.3, 2.2)
    - Demonstrate understanding between normal and abnormal x-rays findings (1.3, 2.2)
    - Learn techniques on how to approach interpretation of common x-ray images (2.3)

- Perioperative Complications
    - Identify the most common causes of post-operative fever (1.5)
    - Discuss the most common complications of laparoscopic gyn surgery (1.8)
    - Describe complications that should be mentioned when consenting a patient for surgery (1.4).

- Post-op care
    - List pre-op risk factors for surgical patients for post-op respiratory and cardiac problems (2.2, 2.3)
    - Recognize the goals of the treatment of pain, maintenance of homeostasis and the early detection and prevention of complications in the management of the post-op patient (1.6, 2.3)
    - Detail the categories of post-op complications and preventative measures to minimize their occurrence (2.3)

- List appropriate items to be included in a post-op note (1.7, 4.4)
- Write appropriate IV fluid orders on a pre-op, post-op patient and daily maintenance IV orders (1.6)
- Write orders for DVT prophylaxis (1.6, 1.8)
- List causes of post-op fever and appropriate workup (1.3, 1.6, 2.3)
- Describe care of a Jackson Pratt closed suction drain (1.6)

Heme/Oncology

- **Evaluation of Ovarian Mass:** Adnexal masses are a common finding in both symptomatic and asymptomatic patients. Management is based on determining the origin and character of these masses.
  - Discuss the evaluation of a patient with an adnexal mass (1.1-1.4, 1.6, 2.3)
  - Outline the characteristics of the following (2.1-2.3): Functional cysts, Benign neoplasms, Carcinomas
  - Outline the evaluation and management of ovarian carcinoma, specifically relating to the symptoms, physical findings, risk factors, and histologic classification. (1.1-1.4, 2.1-2.4, 6.3)
  - Discuss the impact of staging on management and prognosis of carcinomas (1.1-1.4, 1.6, 1.8)

- **Anemia**: Anemia is a common disorder in children and has key presenting sign. It is important to differentiate the benign from the serious causes.
  - Describe the pathophysiology of anemia (2.1-2.3)
  - Recognize the clinical manifestation of anemia (1.1, 1.3)
  - Discuss the differential diagnoses for anemia in children (1.1-1.3, 1.5, 2.1)
  - Articulate the principles of medical management for anemia in the pediatric population (1.2-1.6, 2.3-2.6)

Growth and Development Assessment

- **Growth and Development:** Children must grow and develop over the course of childhood from newborn through adulthood.
  - Assess physical growth and development through all stages of childhood. (1.1, 1.3, 2.1-2.3)
  - Provide anticipatory guidance for all ages of childhood (1.8, 4.1, 4.3)
  - Discuss the key immunization related preventive efforts offered to decrease the likelihood of diseases (1.8)

- **How to Recognize a Sick Child:** Children are difficult to evaluate. Early recognition of the child at risk for rapid deterioration can allow treatment and prevent critical illness or death, and/or allow time to activate appropriate systems to respond.
  - Demonstrate proficiency with a focused pediatric history and physical examination (1.1, 1.4)
  - Identify normal vital signs for all ages (1.3-1.5; 2.3)
  - Identify abnormal vital signs and assess the degree of severity of abnormality in all age groups (1.3-1.5; 2.3)

- Identify common pediatric emergencies (1.1-1.5)

- Infectious Rashes: Many children present in the ambulatory service with a rash and are admitted to the hospital for further workup. It is important to understand the key rashes and their respective evaluation/treatment plan.
  - Identify relevant rashes related to their frequency and importance for the pediatric patients (1.3, 2.1-2.3)
  - Discuss the evolution and transcendence of the rash.