CARROLL UNIVERSITY
DIVISION OF NATURAL AND HEALTH SCIENCES
PHYSICIAN ASSISTANT PROGRAM

PHA 517: Pediatrics
Syllabus – Fall, 2017

Course Number: PHA 517
Course Title: Pediatrics
Number of Credits: 2 Credit Hours
Day/Time: Monday, 1-2pm and Thursday, 12-1pm
*additional course time as scheduled
Prerequisites: Successful completion of Year 1 Summer Courses
Faculty: Marissa Liveris, MMS, PA-C
Office: Charles House, Rm. 105
Office Hours: Monday 10am – 12pm
Additional hours can be scheduled directly with the course director
Email: mliveris@carrollu.edu
Phone: 262-524-7402
Bob Schellinger, MD
Office: PHCMA Moreland Family Medicine
717 W Moreland Blvd
Waukesha, WI 53188
Office Hours: Available on request
Telephone: 262-370-0351
E-mail: rschelli@carrollu.edu

Course Description:
This course is an introductory pediatrics course which covers well child care, preventative pediatric medicine, and the common problems encountered in the pediatric patient. The course employs a Team Based Learning classroom setting with a system oriented, problem based approach.

Course Content:
This course is designed to provide the learner with a strong foundational knowledge of common pediatric presentations, illnesses, and diseases common to pediatric practice from the neonate through adolescence. The student will actively engage in applying information within the classroom and study setting. Case studies, lecture/powerpoint, and collaborative learning activities will be employed throughout the course. The specific systems-based objectives for this course are to be used as a guide for reading, studying, and preparing for the course examinations. Students are expected to be independent, self-directed learners.

Student Expectations
• comes to class prepared, including reviewing all pre-class study materials and guided learning activities and assignments
• demonstrates a positive attitude toward learning
• on time for all scheduled classes, including timely return from breaks
• asks relevant and understandable questions
• takes full responsibility for learning and self-directed learning activities, supplements course material with independent reading and learning when needed
• shows respect for self, other students, and faculty
• provides feedback in a constructive and respectful manner
• refrains from revealing negative feelings through tone of voice or body language
• refrains from disruptive activities during class including eating, talking, getting up and down, use of cell phone, etc.
• relies on personal resources before approaching others for help
• demonstrates cooperation with and mutual respect for peers
• responds to faculty, staff and peers readily and appropriately

**Instructor Expectations**
• demonstrates a positive attitude towards the facilitation of learning
• is on time for all scheduled classes
• should the need arise, reschedules class time with appropriate and timely notification to students, faculty, and staff
• provides appropriate course materials for class preparation prior to class
• is available for office hours or appointments to assist with questions
• responds to faculty, staff, and students readily and appropriately
• listens attentively and initiates communication which is appropriate and timely
• identifies limitations in knowledge and provides appropriate resources for student learning
• provides timely and constructive feedback for assignments and assessments
• shows respect for self, students, and other faculty
• refrains from revealing negative feelings through tone of voice or body language
• demonstrates cooperation with and mutual respect for students, faculty, and staff

**Required Text and Reading**

**Recommended Text and Reading**

Readings as noted each week in Canvas

**Grading**
The course grade for the summer semester will be based upon the following:

<table>
<thead>
<tr>
<th>Course Requirements</th>
<th>% of Final Grade</th>
<th>Due Date</th>
<th>Linked Objectives (to ARC-PA stds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam I</td>
<td>20%</td>
<td>October 2</td>
<td>B2.02, B2.03, B2.04, B2.05, B2.06, B2.08, B2.09</td>
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<tr>
<td>Exam II</td>
<td>20%</td>
<td>November 6</td>
<td>B2.02, B2.03, B2.04, B2.05, B2.06, B2.08, B2.09</td>
</tr>
<tr>
<td>Exam III</td>
<td>20%</td>
<td>December 18</td>
<td>B2.02, B2.03, B2.04, B2.05, B2.06, B2.08, B2.09</td>
</tr>
<tr>
<td>IRAT</td>
<td>20%</td>
<td>Various</td>
<td>B2.02, B2.03, B2.04, B2.05, B2.06, B2.08, B2.09</td>
</tr>
<tr>
<td>TRAT and Group Participation</td>
<td>10%</td>
<td>various</td>
<td>N/A</td>
</tr>
<tr>
<td>Peer Feedback</td>
<td>10%</td>
<td>various</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Final IRAT grade is an average of the Individual Readiness Assessment Tests each week. Lowest IRAT grade will be excluded from the final grade.

TRAT grade is an average of the Team Readiness Assessment Test as well as participation in Group Application Activities. Lowest TRAT grade will not be dropped.
<table>
<thead>
<tr>
<th>Letter</th>
<th>Conversion scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100-93</td>
</tr>
<tr>
<td>AB</td>
<td>92.99-90</td>
</tr>
<tr>
<td>B</td>
<td>89.99-83</td>
</tr>
<tr>
<td>BC</td>
<td>82.99-80</td>
</tr>
<tr>
<td>C</td>
<td>79.99-70</td>
</tr>
<tr>
<td>D</td>
<td>69.99-60</td>
</tr>
<tr>
<td>F</td>
<td>59 and below</td>
</tr>
</tbody>
</table>

Final grades will not be rounded up.

**Attendance and Professionalism**

Attendance at all class periods, laboratories, and practical experiences are mandatory unless otherwise indicated. Poor attendance (unexcused absences, tardiness, and unauthorized early departures), lack of preparation, and unprofessional behavior may result in a lower or failing grade and/or be reported to the program progression committee. If you will be absent, tardy, or need to be excused early you must notify the course director via e-mail or phone prior to the scheduled meeting time. Tardiness and unauthorized early departures will be considered unexcused absences unless prior notification is submitted. Unexcused absences of more than 10% of class time may result in a failing grade. Absences are excused only at the discretion of the course director and/or the PA Program Director. Students may be required to make up missed class time (excused or unexcused) at the discretion of the course director.

**Examinations**

There will be 3 exams during the semester, each weighted equally. Please refer to the schedule for details. Exams are multiple choice and are closed-book. Challenges to exam questions will be accepted for 1 week after the return of scores. Challenges must be submitted in writing via email with two written sources with at least one from recommended course readings.

No books, papers, notebooks, cell phones, smart phones, I-pods, I-pads, blackberry, etc. or backpacks/book bags will be allowed on/near your desk during an examination. Recommend keeping personal belongings in the back of the room or in lockers. Hats are prohibited during an exam. Cell phones, smart phones, I-pods, I-pads, blackberry, etc must be turned off during an examination.

**Assignments**

Assignments will be required and will be outlined on the course site.

**Statement on Academic Integrity**

The Carroll University Academic Integrity Policy is located in the Carroll University Student Handbook. Students are encouraged to familiarize themselves with it. If a student violates this policy in any way, the instructor(s) reserve the right to impose a sanction of failure on the assignment/assessment or failure in the course. If you have questions about appropriate citations, please ask your instructor.

**Accommodation for Disabilities**

Any requests for accommodation for physical or cognitive disability must be made through the Walter Young Disability Services Coordinator at Carroll University. Appropriate accommodations will be evaluated based on the program technical standards once notification has been received from the Walter Young coordinator. If an individual student has special needs or concerns about course requirements related to religious beliefs, cultural issues, or other issues, the student must contact the Program Director with a request for accommodation.

**Modifications to the syllabus**

The instructor and the University reserves the rights to modify, amend, or change the syllabus (schedule, course requirements, grading policy, etc.) as the curriculum and/or program require(s).
**Remediation**

Students who receive a D or an F in this or any physician assistant year 1 course will be placed on academic probation.

During the course, a student who scores more than 2 SD below the mean on an exam/assessment may be required to complete additional work. The student will be contacted by the course instructor and asked to meet to discuss the remediation requirements for that particular assessment. Remediation requirements will be determined by the course instructor. When an instructor requires remediation of a student it does not affect the exam/assessment grade, nor does it improve the semester or course grade. Remediation is required to ensure that course objectives are met. It is expected that assigned work for the purpose of remediation be completed in a thorough, professional and timely manner. Satisfactory completion of remediated work will be determined by the course instructor. Students may be required to complete additional work if the original remediation is deemed unsatisfactory.

Students should make every effort to resolve remediation issues with the course director. If a student is unable to resolve such issues s/he may request a review by the Didactic Subcommittee. All decisions made by the subcommittee are final. If remediation is not successfully completed by the end of the course/semester a grade of “Incomplete” will be given until the work is successfully completed. Please note that an incomplete course grade may delay program progression and/or graduation. Information regarding incomplete grades is available in the Graduate Catalog.

**Course Goals:**
The goal of this course is to present the student with an overview of pediatric medicine. This course is designed to provide the learner with a strong foundational knowledge of common pediatric presentations, illnesses, and diseases common to pediatric practice from the neonate through adolescence.

**Learning Outcomes:**
At completion of the course, students should be able to:
- Develop a knowledge base regarding problems currently encountered in pediatric primary care
- Formulate and apply strategies for the assessment, diagnosis, and treatment of pediatric patients in the primary care setting
- Recognize professional limitation and identify situations requiring consultation and/or referral
- Identify resources for patient education and referral
- Identify personal learning issues and develop strategies for ongoing personal education.

**Course Schedule: (Schedule is subject to change)**

<table>
<thead>
<tr>
<th>Mon</th>
<th>Topic (Typically IRAT/TRAT)</th>
<th>Thurs</th>
<th>Topic (Typically Application Activity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NA</td>
<td>7-Sep</td>
<td>Intro to TBL/Group Assignments/Feedback</td>
</tr>
<tr>
<td>2</td>
<td>11-Sep Screen and Prevention</td>
<td>14-Sep</td>
<td>Screening and Prevention</td>
</tr>
<tr>
<td>3</td>
<td>18-Sep Growth, Development and Nutrition</td>
<td>21-Sep</td>
<td>Growth, Development and Nutrition</td>
</tr>
<tr>
<td>4</td>
<td>25-Sep Dermatology and Infectious Disease</td>
<td>28-Sep</td>
<td>Dermatology and Infectious Disease</td>
</tr>
<tr>
<td>5</td>
<td>2-Oct EXAM I</td>
<td>5-Oct</td>
<td>Cardiology (Dr. Schellinger)*</td>
</tr>
<tr>
<td>6</td>
<td>9-Oct Enocrine*</td>
<td>12-Oct</td>
<td>WAPA</td>
</tr>
<tr>
<td>7</td>
<td>16-Oct BREAK</td>
<td>19-Oct</td>
<td>Pulm, Allergy and HEENT*</td>
</tr>
<tr>
<td>8</td>
<td>23-Oct No class</td>
<td>26-Oct</td>
<td>Neurology (Dr. Schellinger)*</td>
</tr>
<tr>
<td>9</td>
<td>30-Oct Rheumatology, Orthopedics</td>
<td>2-Nov</td>
<td>Rheumatology, Orthopedics</td>
</tr>
<tr>
<td>10</td>
<td>6-Nov EXAM II</td>
<td>9-Nov</td>
<td>Heme Onc</td>
</tr>
</tbody>
</table>
Learning Objectives:

Upon completion of this course, the student will have knowledge in the following pediatric areas:

A. The Well Child Visit, Screening and Prevention
   a. List the regular preventative care schedule for during infancy and childhood and describe specific components of each visit. Provide appropriate anticipatory guidance based on the Bright Futures protocol.
   b. Analyze immunization records to identify the need for appropriate vaccines at various ages from infancy through adulthood
   c. Formulate a catch-up vaccine schedule for a child that is not currently up to date with vaccines
   d. Identify contraindications for vaccines
   e. Discuss evidence and responses to common vaccination resistance concerns

B. Growth and Development
   a. Demonstrate the ability to use growth charts in the longitudinal evaluation of height weight and head circumference
   b. Recognize abnormalities of growth which warrant further evaluation such as changes in velocity, and discrepancies between height, weight and head circumference. Specifically identify short stature, failure to thrive, obesity, microcephaly and macrocephaly.
   c. Differentiate between normal and abnormal gross motor, fine motor, and language development. Identify key developmental features of specific developmental conditions including cerebral palsy, language delay, and autism
   d. Define and compare the following: developmental surveillance, screening, and assessment.
e. Identify developmental screening tools and referral resources available for developmental concerns
f. Recognize normal and abnormal patterns of growth at different pediatric age ranges.
g. Review Tanner staging in males and females.
h. Calculate height target using the midparental height calculation.

C. Endocrine Disorders
   a. Formulate the differential diagnosis for tall stature, short stature, delayed puberty, and precocious puberty and identify key historical and physical findings useful in evaluation.
   b. Develop an appropriate diagnostic workup for tall stature, short stature, delayed puberty, and precocious puberty.
   c. For each of the following topics, describe the epidemiology, etiology, clinical manifestations, diagnosis, treatment/patient education, prognosis, and complications including the appropriate diagnostic/laboratory workup and appropriate followup and monitoring of interventions and therapies.
      i. Constitutional growth delay
      ii. Nutritional growth retardation
      iii. Growth Hormone Deficiency
      iv. Klinefelter Syndrome
      v. Marfan Syndrome
      vi. Delayed puberty
      vii. Precocious Puberty (central and peripheral)
      viii. Turner Syndrome
      ix. Prader-Willi Syndrome
      x. Hypothyroidism

D. Failure to Thrive
   a. List the definition of failure to thrive. Differentiate between organic and non-organic failure to thrive.
   b. Describe the evaluation and management of an infant and toddler with failure to thrive.
   c. Formulate a specific workup for a child with failure to thrive.
   d. Discuss interventions for a child with failure to thrive

E. Pediatric Exanthems and Dermatology Topics
   a. List common pediatric exanthems along with treatment recommendations
   b. For each of the following topics, describe the epidemiology, etiology, clinical manifestations, diagnosis, treatment/patient education, prognosis, and complications including the appropriate diagnostic/laboratory workup and appropriate followup and monitoring of interventions and therapies.
      i. Varicella
      ii. Erythema Infectiosum
      iii. Rubeola/Measles
      iv. Mumps
      v. Roseola
      vi. Rubella
      vii. Herpangina
      viii. Hand, foot and mouth
      ix. Molluscum Contagiosum
      x. Verrucae
      xi. Bacterial Skin Infections
      xii. Superficial Fungal Infections
      xiii. Congenital Nevi
      xiv. Infantile Hemangiomas
      xv. Drug Eruptions

F. Fever
   a. Describe the evaluation and management of the febrile infant from 0-3, 3-36 months of age and children older than 3.
b. Identify the criteria that place infants at low or high risk for serious bacterial infection. List the definition of serious bacterial infection.

c. Formulate a differential diagnosis, including viral exanthems, for the child presenting with a fever.

G. Cardiology
a. Describe the normal anatomy and physiology of the heart and great vessels. Describe the normal fetal and newborn circulation.
b. Discuss the pertinent historical and physical examination related to the cardiac system including normal and abnormal heart sounds.
c. List the common cardiac abnormalities found with the following genetic syndromes: Down, Turner, Edward, and Marfan.
d. Formulate and interpret an appropriate workup with the selection of initial and subsequent diagnostic or laboratory tests weighing the cost effectiveness related to cardiac murmurs and cardiac complaints.
e. Formulate an appropriate differential diagnosis in light of data collected by subjective and objective methodology related to the cardiac system.
f. List the indications for SBE prophylaxis and the appropriate medications/regimens used for this purpose.
g. Discuss the importance of specific historical and physical findings of a pre-participation sports physical related to the cardiac system and appropriate workup or clearance for abnormal findings.
h. For each of the following topics, describe the epidemiology, etiology, clinical manifestations, diagnosis, treatment/patient education, prognosis, and complications including the appropriate diagnostic/laboratory workup and appropriate follow up and monitoring of interventions and therapies.
   i. Still’s Murmur
   ii. Venous Hum
   iii. Peripheral Pulmonary Stenosis
   iv. Pulmonary ejection murmur
   v. Atrial Septal Defect
   vi. Ventricular Septal Defect
   vii. Patent Ductus Arteriosus
   viii. Coarctation of the Aorta
   ix. Tetralogy of Fallot
   x. Transposition of Great Vessels

H. Neurology
a. Describe the clinical features of seizure variants (ex. tonic clonic, absence, atonic, etc.)
b. Describe the clinical characteristics, appropriate workup, treatment, and prognosis of febrile seizures.
c. List possible causes of seizures.
d. Identify the appropriate indications for EEGs, CT scans, MRI or other diagnostic studies for seizures.
e. Describe the clinical manifestations and treatment for breathholding spells.
f. Identify the common pharmacologic agents used in the treatment of seizures and treatment strategies.
g. Discuss activity restrictions for those with seizure disorders.
h. Differentiate between and formulate an approach to diagnosis and management of migraine and tension headache in the pediatric population.
i. For each of the following topics, describe the epidemiology, etiology, clinical manifestations of each of the following:
   i. Infantile Spasm
   ii. Benign Rolandic Epilepsy
   iii. Juvenile Absence Seizures
   iv. Juvenile Myoclonic Epilepsy
   v. Status Epilepticus

I. Asthma and Allergy
a. Describe the epidemiology of asthma, respiratory allergies, eczema, and food allergies including the risk factors associated with the diseases.
b. Discuss the pathogenesis and pathophysiology of asthma, allergies, and eczema.
c. Recognize the relationship of asthma and RSV, including the prognosis for these children.
d. Discuss the clinical manifestations and diagnosis of asthma, allergies, and eczema.
e. Classify asthma severity.
f. Interpret spirometry results related to obstructive airway disease.
g. Formulate and implement clinical interventions through understanding of the indications, contraindications, and complications of procedures and pharmacologic interventions based on current asthma guidelines. Develop a treatment plan and intervention for hospital admission related to asthma.
h. Provide patient counseling and education for asthma, including development of an asthma action plan.
i. Identify the appropriate indications for a referral for specialty care.

J. HEENT and Pulmonary
   a. Describe the development, anatomy, and physiology of the upper respiratory tract, including development of the sinuses.
   b. Formulate a differential diagnosis for cough, wheezing, and stridor in pediatric patients of all ages.
   c. Develop a differential diagnosis for ear pain.
   d. Discuss the epidemiology and risk factors related to otitis media, sinusitis, and upper respiratory infection.
   e. Discuss the importance of appropriate diagnosis and treatment of upper respiratory infection, otitis media and sinusitis. Relate the microbiology of the disease and the resistance rates.
   f. List the indications for referral to ENT for tympanostomy tubes
   g. Formulate an appropriate treatment plan for a pediatric patient of any age with URI.
   h. For each of the following topics, describe the epidemiology, etiology, clinical manifestations, diagnosis, treatment/patient education, prognosis and complications including the diagnosis/laboratory workup and appropriate followup:
      i. Bronchiolitis
      ii. Croup
      iii. Pertussis
      iv. Pneumonia
      v. Cystic Fibrosis
      vi. Otitis Media- acute, chronic, effusion, and perforation
      vii. Otitis Externa
      viii. Cholesteatoma
      ix. URI

K. Oral Health
   a. Describe the normal anatomy and development of teeth, gingiva, mouth and tongue
   b. Discuss normal preventative health care for children including schedule of oral examinations, sealants, fluoride, and prevention of caries.
   c. For each of the following, describe the epidemiology, etiology, clinical manifestations, diagnosis, treatment/patient education, prognosis, and complications including the appropriate diagnostic/laboratory workup and appropriate follow up and monitoring of interventions and therapies.
      i. Ankyloglossia
      ii. Cleft palate
      iii. Epstein’s pearls
      iv. Natal teeth
      v. Dental Caries

L. Ophthalmology
   a. Describe and differentiate methods of vision screening in pediatric patients.
   b. Describe the identification and management of strabismus.
   c. Describe the pathophysiology and clinical implications of amblyopia.

M. Musculoskeletal/Rheumatology
   a. Describe the approach to the child presenting with an acute/subacute limp
   b. For each of the following topics, describe the epidemiology, etiology, clinical manifestations, diagnosis, treatment/patient education, prognosis, and complications including the appropriate diagnostic/laboratory workup and appropriate followup and monitoring of interventions and therapies.
i. Kawasaki’s Disease
ii. Joint and limb pain
iii. Juvenile Idiopathic Arthritis (include common subtypes)
iv. Avascular necrosis (Legg-Calve Perthes)
v. Slipped Capital Femoral Epiphysis
vi. Developmental Dysplasia of the Hip (newborn)
vii. Osgood Schlatter

N. Heme/Onc
   a. Describe the underlying pathologic processes or pathways including anatomy and physiology
      including normal development. Develop appropriate diagnostic evaluations and treatment including
      referrals for the following:
   b. Neutropenia
   c. Anemia associated with lead poisoning
   d. Leukemia (ALL, AML, CML)
   e. Lymphoma (Hodgkin’s, nonHodgkin’s)
   f. Astrocytoma
   g. Neuroblastoma
   h. Wilms’ Tumor
   i. Bone Tumors (Osteosarcoma, Ewing’s sarcoma)
   j. Rhabdomyosarcoma

O. Genitourinary/Renal
   a. Describe the development, anatomy, and normal physiology of the renal/urinary system and voiding
      habits.
   b. Describe the anatomy and methods examining the female and male genitalia.
   c. Discuss appropriate workup of renal complaints and interpret commonly ordered labs such as CBC,
      UA, serum electrolytes, BUN, Cr, Ultrasounds, and nuclear medicine scans.
   d. Define abnormal voiding conditions, their workup, complications, and describe the treatment and
      interventions for each (ex. enuresis, dysfunctional voiding)
   e. Discuss the differential diagnosis of vaginal bleeding in a prepubertal girl.
   f. Formulate a differential diagnosis and diagnostic approach to hematuria, proteinuria, and hypertension
      in pediatric patients.
   g. Describe the clinical manifestations of UTI, workup, treatment, and appropriate followup.
   h. Identify the appropriate workup, followup, and surgical indications for vesicoureteral reflux
   i. For each of the following topics, describe the epidemiology, etiology, clinical manifestations,
      diagnosis, treatment/patient education, prognosis, and complications including the appropriate
      diagnostic/laboratory workup and appropriate followup and monitoring of interventions and therapies.
      i. Acute Glomerulonephritis (Post Strep, IgA nephropathy, henoch sholein purpura)
      ii. Nephrotic syndrome
      iii. Asymptomatic microhematuria
      iv. Renal tubular acidosis
      v. Hemolytic uremic syndrome
      vi. Hypertension
      vii. Phimosis/Paraphimosis
      viii. Varicocele
      ix. Testicular torsion
      x. Hernia
      xi. Labial adhesions
      xii. Vulvovaginitis

P. Newborn Care
   a. Discuss the normal early routine procedures to be carries out in the assessment of the newborn
      physical examination, and screening including gestational age assessment.
   b. Describe care pathways of newborn care in the hospital including conditions such as prematurity,
      hypoglycemia, group B streptococcus, hepatitis B/HIV exposure, and maternal illicit drug use.
c. Describe the physical characteristics of full-term infants including normal and normal variant findings.

d. Describe and provide anticipatory guidance for newborn screening tests, routine health maintenance and promotion including nutrition, vitamin D, immunization, voiding and stooling, safe sleep.

e. Discuss the AAP recommendations regarding indications for circumcision.

f. Discuss the diagnosis, workup, and management of the following during the newborn period:
   i. Newborn jaundice
   ii. Weight loss
   iii. Acute respiratory distress
   iv. Cyanosis
   v. Hypospadia
   vi. Cryorchidism
   vii. Hydrocele
   viii. Retinoblastoma

Q. Genetics
   a. For each of the following topics, describe the epidemiology, etiology, clinical manifestations, diagnosis, treatment/patient education, prognosis, and complications including the appropriate diagnostic/laboratory workup and appropriate followup and monitoring of interventions and therapies.
      i. Congenital Hypothyroidism
      ii. Cystic Fibrosis
      iii. Trisomy 21
      iv. Kleinfelter Syndrome
      v. Trisomy 13
      vi. Trisomy 18
      vii. Turner Syndrome
      viii. Glycogen Storage Diseases
      ix. Galactosemia
      x. Phenylkeonuria
      xi. Homocystinuria
      xii. Hurler Syndrome
      xiii. Niemann-Pick Disease
      xiv. Gaucher Disease
      xv. Tay-Sachs Disease

R. Gastrointestinal
   a. Describe the normal anatomy, development, and function of the gastrointestinal tract.
   b. Discuss normal stooling for infants, newborns, toddlers and children.
   c. Develop a differential diagnosis and diagnostic approach to a patient with abdominal pain, diarrhea, or vomiting.
   d. List the signs and symptoms of dehydration (mild, moderate, and severe) and implement an appropriate treatment plan for a dehydrated infant or child.
   e. For each of the following topics, describe the epidemiology, etiology, clinical manifestations, diagnosis, treatment/patient education, prognosis, and complications including the appropriate diagnostic/laboratory workup and appropriate followup and monitoring of interventions and therapies.
      i. Constipation
      ii. Acute infectious diarrhea
      iii. Chronic diarrhea
      iv. Gastroesophageal reflux and GERD
      v. Pyloric stenosis
      vi. Volvulus
      vii. Intussusception
      viii. Meckel diverticulum
      ix. Cow's milk intolerance