Course Department, Number & Title: PED 812, Pediatric Gastroenterology

Course credit or length: 2-4 Weeks

Course directors and contact information: Dr. Xavier Villa, 304.691.1381, villa@marshall.edu

Course coordinator and contact information: Emily Smith, 304.691.1371, pelfrey40@marshall.edu

Course location: Marshall University Medical Center

Course Description: This elective will introduce the student to the specialty of Pediatric Gastroenterology. The student will gain knowledge of pediatric gastrointestinal diseases in children while participating in supervised clinical evaluations of patients on the hospital ward and in the outpatient setting. The student will perform supervised physical examinations in the GI clinic and learn to make the proper differential diagnosis of the patient. Patient encounters may include abdominal pain, H. pyloric infection, acute and chronic gastroenteritis, failure to thrive, obesity, irritable bowel syndrome, inflammatory bowel disease, GERD, constipation, celiac, infectious and metabolic liver diseases, biliary tract associated diseases, pancreatitis, gastrointestinal bleeding, etc. During endoscopy procedures, the students will learn the pathology of various GI diseases. There also may be the option of participating in clinical research depending on the availability of research protocols.

Additional Responsibilities of Student:
The student will attend the Marshall Health GI clinic 4 one-half days per week; attend 2 half-day endoscopy sessions at Cabell Huntington Hospital, attend all pediatric GI hospital consultations with attending and will normally be given one-half day study time during the elective. On this elective the student will perform patient examinations supervised by the attending and learn to arrive at the proper differential diagnosis. By the end of the rotation, the student will be given the opportunity to examine the patient independently with follow-up by the attending and create a treatment plan. The student is required to attend (and participate) in all scheduled resident lectures, grand rounds, case discussions, etc. while on this elective. A schedule of the weekly didactic sessions will be available for the student.

This elective does not require night call.

PEDIATRIC GASTROENTEROLOGY

Institutional Objective
Patient Care - Students must demonstrate the ability to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Course Objective
The student will be introduced to the pediatric subspecialty of gastroenterology and learn the historical, physical and laboratory findings diagnostic of pediatric GI abnormalities and the management of chronic and acute gastrointestinal problems.

Outcome Measure
The student will demonstrate the basic ability to perform a supervised age-appropriate physical examination in the GI clinic, formulate an appropriate screening testing, formulate a differential
diagnosis of the patient and treatment plan for at least three of the following common pediatric GI disorders (one of which will be randomly selected by the faculty) including but not limited to:

- Abdominal pain
- Acute and chronic gastroenteritis
- Biliary tract associated diseases
- Celiac
- Constipation
- Failure to thrive
- Gastrointestinal bleeding
- GERD
- H. pyloric infection
- Infectious and metabolic liver diseases
- Inflammatory bowel disease
- Irritable bowel syndrome
- Obesity
- Pancreatitis

The student shall also demonstrate basic ability to order and interpret laboratory and radiographic studies for those selected case presentations indicated above.

**Course Objective**
The student will learn how to diagnosis/evaluate failure to thrive in children.

**Outcome Measure**
The student will demonstrate the basic ability to explain the findings on clinical history and examination that suggest gastrointestinal disease needing further evaluation and/or treatment. Such findings include symptomatic gastro-esophageal reflux, vomiting, diarrhea, constipation, abdominal pain, hematemesis, hematochezia, melena and weight loss.

**Institutional Objective**

**Medical Knowledge**- Students must demonstrate knowledge of established and evolving biomedical, clinical, epidemiological and social-behavioral sciences, as well as the application of this knowledge to patient care.

**Basic Science Course Objective**
The student must demonstrate basic understanding of the pathophysiology of various GI diseases and become familiar with the principles and indications for endoscopy in children.

**Outcome Measure**
The Attending will assess the student’s abilities and demonstration of knowledge during the course.

**Basic Science Course Objective**
The student must demonstrate basic understanding of the preventive care and the affect that good nutritional patterns and safety habits can have upon gastrointestinal problems in children.

**Outcome Measure**
The Attending will assess the student’s abilities and demonstration of knowledge during the
Basic Science Course Objective
The student must demonstrate basic understanding of the Normal vs. Abnormal (Gastroenterology and Nutrition) and be able to differentiate between normal and pathological states related to gastroenterology.

Outcome Measure
The Attending will assess the student’s abilities and demonstration of knowledge during the course.

Institutional Objective
Interpersonal and Communication Skills - Students must demonstrate interpersonal and communication skills that result in the effective exchange of information and collaboration with patients, their families, and health professionals.

Course Objective
The student will be able to communicate information effectively with members of the health team, including other physicians, nurses, physician and medical assistants, psychologists, school personnel and social workers.

Outcome Measure
The student will be able to demonstrate to faculty:
- The ability to communicate effectively with others
- The ability to perform concise oral case presentations
- The ability to work as a team member and leader

Institutional Objective
Professionalism - Students must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles.

Course Objective
The student will behave in an ethical, responsible, reliable and dependable manner and be able to accept constructive feedback to improve performance. The student must demonstrate professionalism in interacting with other medical students and health care providers.

Outcome Measure
The student will be directly observed and assessed as part of the final grade by faculty to determine ethical behavior, reliability and level of dependability of the student and the student’s ability to accept criticisms or suggestions. The student will also be evaluated by faculty on:
- Professional behavior toward colleagues and other health care professionals
- Exhibition of integrity and honesty
- Acceptance of responsibility one’s own actions and decorum
- Sensitivity to gaps in knowledge exhibited by colleagues
- Ability to work effectively as a team member

Institutional Objective
Systems-based Practice - Students will be able to recognize and better understand the role of other health care professionals in the overall care of the patient.

Course Objective
The student will practice interacting with the health team, including other physicians, nurses, physician and medical assistants, school personnel and social workers to better understand the role of ancillary staff that is critical to the care of pediatric GI patients.

**Outcome Measure**
The student will orally demonstrate to faculty the ability to:
- Understand the concept of interdisciplinary teams to improve patient care
- Understand the multidisciplinary resources necessary to care optimally for patients
- Understand the need to collaborate with other members of the health care team to assure comprehensive patient care
- Understand the use of evidence-based, cost-conscious strategies in the care of patients
- Learn to evaluate the family’s biosocial problems to determine the appropriateness of referrals.

**Self-Directed Learning**
As a medical student, you are encouraged to use any unstructured time to read about your patients, research questions that arise during the day, prepare for case conferences, and prepare for student-faculty rounds. Preceptors have been specifically asked to look for evidence that you have read articles and books between clinic sessions. Use this time to build your knowledge of medicine and learn from your patients.

**ASSESSMENT METHODS**

**Mid Point Evaluation**
In accordance with LCME standard ED-30, the Course Director will evaluate student performance at mid-point to review the student’s professional, clinical and academic performance up to that point. The formative evaluation must be reviewed with the student and the student will have an opportunity to discuss with the Course Director. The form must be signed by the student and returned to the Course Director. The Course Director shall then forward a copy of the form to the Office of Academic Affairs. The form will NOT however be included in the student’s official academic record. For two week electives, oral feedback shall be provided at the end of the first week.

**Preceptor Evaluation- 100%**
The preceptors’ evaluation will be based, but not limited to, upon the following factors:
- Attendance and participation in assigned activities
- Demonstration of knowledge and skills
- Maturity and Professionalism
- Oral Case presentation/patient workup
- Informal oral case discussions and presentations
- Self-directed learning

**Grade Mode:** Honors/Pass/Fail

Each component mentioned above must be passed in order to successfully complete the course.

**MUJCESOM Policies:** All medical students taking this course will comply with School of Medicine policies given at [http://musom.marshall.edu/students/policies](http://musom.marshall.edu/students/policies).
**Required Reading:** Student is expected to read about the most common diagnoses in Gastroenterology including constipation, diarrhea, failure to thrive, inflammatory bowel disease, J. pylori, abdominal patient, etc.

Recommended text for this required reading is Nelson’s Textbook of Pediatrics; [www.UpToDate.com](http://www.UpToDate.com)  As per assignment by faculty and Chief Residents