

NEONATOLOGY PED 805

Course Department & Number & Title: PED 805, Neonatology

Course credit or length: 2 Weeks. This elective is available to one or two students at a time. Additional weeks can be taken as an elective.

Course directors and contact information: Dr. Cynthia Massey, 304.691.1371, ghareeb3@marshall.edu

Course coordinator and contact information: Ashley O'Neill, 304.691.1371, oneill15@marshall.edu

Course location: Neonatal Intensive Care Unit, 5th Floor, in the North Tower at Cabell Huntington Hospital.

Course Description: The student will observe and participate in the management of the high risk newborn in the Neonatal Intensive Care Unit with neonatologists, nurse practitioners, and pediatric residents. Emphasis will be placed on recognizing and assessing the high risk newborn, instituting acute therapeutic emergency measures, requisitioning appropriate laboratory studies and therapy under direct supervision. Daily assessment of nutritional needs and growth and development of the high risk infants will be among the student's responsibilities. Reading and participation in selected diagnoses and/or management reports related to the patients in the unit is expected.

Additional Responsibilities of Students: The student is to report to the Neonatal Intensive Care Unit at approximately 7:00 AM Monday through Friday unless otherwise instructed by attending or resident. The student will participate on patient rounds, including contributing to the treatment plan and communicating with consultants. The student will attend deliveries of high risk patients and learn various techniques of neonatal resuscitation. Bed-side teaching rounds are conducted daily with attending physicians and residents where problems and management of the patients will be presented. Review of recent literature and evidence-based medicine will be discussed as it relates to the treatment of the patient in addition to cost effectiveness of care. 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.

The student will work at least one day each weekend and take one 24 hours call during the elective.

NEONATOLOGY

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 able to recognize and assess the high risk newborn and institute acute therapeutic emergency measures under direct supervision.

Outcome Measure:

The student will orally discuss with the faculty the management of critically ill newborn patients in an intensive care setting.

Course Objective

The student will demonstrate the ability to accurately assess a high risk newborn, construct a thorough differential diagnosis and develop an appropriate diagnostic and therapeutic management plan.

Outcome Measure:

The student will orally present at least three critically ill newborn cases to a designated Attending. The patient cases must be one in which the student was directly involved. During this presentation, the student must demonstrate the basic ability to formulate a differential diagnosis as well as develop an investigatory plan, utilizing appropriate and cost-effective laboratory and radiological studies. Finally, an appropriate treatment plan must be formulated.

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.*

Outcome Measure

The student will orally discuss with the faculty the management of critically ill newborn patients in an intensive care setting.

Basic Science Course Objective

The student will demonstrate familiarity with fetal and neonatal growth and development and nutritional requirements of the high risk infant.

Outcome Measure

The student will orally discuss with the faculty member fetal and neonatal growth and development and nutritional requirements of the high risk infant. The student will address the concept of fluid, electrolyte principles, assessment of fluid and electrolytes status, and nutritional and parenteral and enteral nutrition requirements.

Basic Science Course Objective

The student will recognize changes in physiology at the time of birth.

Outcome Measure

The student will orally discuss with the faculty member basic concepts of the changes in physiology at the time of birth.

Basic Science Course Objective

The student will demonstrate the ability to apply knowledge of pathophysiologic states to the management of critically ill infants.

Outcome Measure

The student will orally demonstrate to a faculty member the application of knowledge of pathophysiologic states to the management of critically ill infants.

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, 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
- 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, and social workers to better understand the role of ancillary staff that is critical to the care of newborn 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 newborn
- 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

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

Preceptor Evaluation- 75%

Grade Mode: Pass/Fail

The preceptors' evaluation will be based upon, but are not limited to, the following factors:

- Attendance and participation in tutorials
- Conference attendance
- Maturity and Professionalism
- Oral Case Presentation/Patient Workup
- Participation in call
- The demonstration of basic knowledge of critically ill patient care.

Exam- 25%

The student will be required to take an exam at the end of this course. The final exam will be given on the last Friday of the elective starting at 1:30pm in the small conference room (3606) beside Ashley's office. You will have 45 minutes to answer 25 questions. Make sure that you meet with Dr. Massey before the exam for a review. Should a student not score at least a 75% on the first attempt, the student will be given an opportunity to retest. If a 75% passage is obtained on the second attempt, the student's exam score will be comprised of the average of both exam score. If passage is not obtained on the second attempt, the student will complete a written report on a topic selected by the clerkship director.

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>.

Reading: www.UpToDate.com As per assignment by faculty and Chief Residents