

HEMATOLOGY/MEDICAL ONCOLOGY

Course Department, Number & Title: MED 811 Hematology-Oncology

Course credit or length: 2 -4 weeks

Course director and contact information: Toni Pacioles, MD, 304-399-6651

Course coordinator and contact information: Brittani Ruiz; 304-691-1739, ruizb@marshall.edu

Course location: Edwards Comprehensive Cancer Center & Cabell Huntington Hospital

Brief Course Description: This elective provide the student with experience in the diagnosis and management of hematological and oncological problems both in the inpatient and outpatient clinic setting. These include anemia, coagulation disorders and hematological and solid neoplasms. Special instruction includes the focused physical examination techniques appropriate to blood disorders and neoplasia, bone marrow aspiration under supervision, the microscopic evaluation of peripheral blood and bone marrows, and treatment planning. For students electing a longer rotation, emphasis will be on continuity of care and modalities of support appropriate to on-going disorders.

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 appropriately evaluate and manage patients with hematologic and oncologic disorders

Outcome Measure:

The student will be able to demonstrate to faculty the ability to:

1. Understand and participate in a multidisciplinary approach to cancer diagnosis and treatment.
2. Perform a complete initial history and physical exam and order appropriate diagnostic test studies.
3. Diagnose common hematological problems and formulate appropriate initial treatment plans and provide appropriate care.
4. Determine when it is time and appropriate to refer patients with end-stage or incurable disease to palliative or hospice care.

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.*

Course Objective:

The student must demonstrate the basic understanding of hematologic and oncologic disorders and apply their knowledge to patient care.

Outcome Measure:

The student will have the ability to demonstrate to faculty:

1. An appropriate knowledge and approach to patients with conditions such as cytopenias, myeloproliferative disorders lymphoproliferative disorders, hemoglobinopathies
2. An appropriate knowledge of screening and basic approach to diagnosis, staging and treatment of the more common cancers such as breast, lung, colon and prostate cancers.
3. An understanding of the indications for peripheral blood smear, bone marrow procedure, blood product transfusions, plasmapheresis, surgery, radiation therapy and chemotherapy interventions in the various common cancers.
4. An understanding of the appropriate staging work-up for the common cancers.
5. Knowledge of the indications, benefits, side effects of the major chemotherapeutic agents, biological therapy, hormonal therapy and radiation therapy.
6. Ability to integrate and synthesize all clinical data, demonstrating application of medical knowledge to the clinical situation at hand.

INSTITUTIONAL OBJECTIVE

Practice-based Learning and Improvement: *Students must demonstrate the ability to investigate and evaluate their care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning.*

Course Objective:

The student will build upon knowledge gained from patient care encounters.

Outcome Measure:

The faculty will observe the student's ability to:

1. Formulate clinical questions as they arise during patient care.
2. Recognize limitations in medical knowledge and skills, seek help from attendings and other residents as appropriate.
3. Facilitate the learning of other health care professionals.
4. Demonstrate a systematic approach to reducing errors and learning from experience.

INSTITUTIONAL OBJECTIVE

Interpersonal and Communication Skills: *Students must demonstrate interpersonal and communication skills that result in the effective exchange and collaboration with patients, their families and health professionals.*

Course Objective:

The student will be able to communicate information effectively with patients and other health care providers with regard to evaluation and management of hematologic and oncologic diseases.

Outcome Measure:

The student will be able to demonstrate to faculty the ability to:

1. Explain to patients and their families the nature of their disease and treatment recommendations.
2. Interact in an effective way with physicians and nurses participating in the care of patients with hematologic and oncologic diseases.
3. Participate actively in consultations and on rounds.
4. Participate and present at scheduled conferences.

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 ethically and professionally when caring for patients and interacting with other healthcare professionals. The student must demonstrate a commitment to carrying out professional duties with sensitivity and respect of cultural, ethnic and spiritual diversity in all interactions with patients.

Outcome Measure:

The student will be observed by faculty and evaluated for the ability to:

1. Treat team members, primary care-givers and patients with respect and empathy.
2. Understand, practice and adhere to a code of medical ethics.
3. Demonstrate a professional work ethic in adhering to work schedule to meet patients' needs.
4. Commit to self-improvement and excellence in all aspects of professional life.
5. Advocate for the highest quality of care for patients.

INSTITUTIONAL OBJECTIVE

Systems-based Practice: *Students must demonstrate an awareness of and responsiveness to the larger context and system of healthcare as well as the ability to call effectively on other resources in the system to provide optimal health care.*

Course Objective:

The student will better understand health care delivery systems and social service agencies which are critical to the care of cancer patients.

Outcome Measure:

The student will demonstrate to faculty the ability to:

1. Locate and utilize resources in the system and community to maximize efficiency in patient care and assist patients in dealing with system complexities.

2. Review the outcomes of patient care in order to reflect on the approach taken in the delivery of care.
3. Utilize established practice guidelines for individual diseases to devise care strategies.
4. Identify limitation of one's medical knowledge in evaluation and management of patients with hematologic/oncologic disorders and use medical literature to address these gaps in medical knowledge.

BASIC SCIENCE OBJECTIVES

The following basic science objectives will be assessed by the faculty:

1. The student will be able to discuss the basic pathophysiology of common hematological disorders and the indications for treatment.
2. The student will be able to discuss the basic pathophysiology of the more common cancers and the indications for treatment.
3. The student will develop and refine their abilities to apply an understanding of epidemiology, study design, pathophysiology, anatomy , and clinical pharmacology, in the care of hematology and oncology patients.

Self-Directed Learning:

Medical students are encouraged to use any unstructured time as an opportunity to read about patients and research questions that arise during the day. Students should use this time to prepare case reports and for readings.

ASSESSMENT METHODS

Mid Point Evaluation

Two Week Rotations

Students will be given verbal feedback on their performance at the end of week one.

Four Week Rotations

The Course Director will evaluate student performance at the end of the first two weeks to review the student's professional, clinical and academic performance up to that point. This 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.

Case Presentation – 30%

The student will be required to give a 10-15 minute case presentation at a pre-arranged time during their clinical rotation. Students will be notified of the date and time of their presentation one week in advance. The course director will assess the presentation and assign a percentage score. Passage of the case presentation is required to successfully complete the course. Should the student not successfully present a case, the course director shall determine remediation requirements.

Preceptor Evaluation – 70%

Grading Mode: Honors/Pass/Fail

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

- Attendance and participation in tutorials
- Conference attendance
- Demonstration of basic knowledge of patient care during clinic
- Maturity and Professionalism
- Oral Case presentation/patient workup
- Participation in clinic
- Performance in Clinical Presentations
- Preparedness
- Topic Presentations

Each component (Case Presentation and Preceptor Evaluation) must be passed in order to pass the course.

ATTENDANCE

If at any time the medical student is unable to meet their clinical responsibilities they must notify the Course Director directly during working hours Monday – Friday, 8:00 am – 5:00 pm. All absenteeism will be required to be made up and may be at a rate of two days make up for every day missed.

If a student missed two or more unexcused days, the student will be required to reschedule the entire rotation. Request for an unexcused absence must be submitted in writing at least one week in advance via the Student Scheduler to the course coordinator. The request will be reviewed by the course director who will either grant or deny the request. Excused absences will not be retroactively granted.

Attendance at Medical Grand Rounds, Journal Club, Oncology Grand Rounds is mandatory.

MUJCESOM Policies: All medical students taking this course will comply with School of Medicine policies given at <http://musom.marshall.edu/students/policies>. Individual policies can be found at the following websites:

Student Infectious Material Exposure:
<http://musom.marshall.edu/ups/postexposure.asp>

MS-IV Attendance:

<https://musom.marshall.edu/students/documents/policies/Yr4attendance.pdf>

Academic Dishonesty Policy:

<https://musom.marshall.edu/students/documents/policies/Standards-of-Professionalism-and-Honor-Code.pdf>

Academic Standards Policy:

<https://musom.marshall.edu/students/documents/Policies/ASC-FINAL-POLICY.pdf>

Policy for Students with Disabilities:

<https://musom.marshall.edu/students/documents/Guidelines.pdf>

University Computing Services' Acceptable Use Policy:

<http://www.marshall.edu/ucs/CS/acceptuse.asp>

Affirmative Action Policy:

pp. 16-17

http://www.marshall.edu/catalog/Graduate/S2008/gr_sp08.pdf

Inclement Weather Policy:

<https://musom.marshall.edu/students/documents/policies/MUSOM-Inclement-Weather-Policy.pdf>

Notification of delays and cancellations of classes are posted on the Medical Education Home Page when Marshall University Main Campus is not in session

<https://musom.marshall.edu/weather>

Required Reading:

1. Washington Manual of Hematology and Medical Oncology (subspecialty consult), 2008 ed.
2. UpToDate (www.uptodate.com)-Topics as assigned.
3. Additional articles as assigned by Course Director.