Special Permission Required

Course Description

This surgical residency preparatory course offers the 4th year medical student intensive training in the clinical skills, technical skills and medical knowledge needed during the first year of surgical residency. Using simulation-based medical education and supervised patient care, the course teaches the knowledge and skills necessary to successfully assess and manage an airway, place peripheral and central venous access, assess trauma patients in a team collaborative, perform a pre-operative evaluation, perform common technical surgical skills, inclusive of suturing and basic laparoscopy, and deal with common clinical situations on the wards.

Patient Care and Medical Knowledge (Based off the ACS/APDS/ASE Goals and Objectives of Surgery Resident Prep Curriculum)

- Demonstrate understanding of routine lab values and how to manage electrolyte abnormalities
- Write orders for electrolyte replacement and IV fluid administration
- Assess an airway and apply their understanding of airway compromise by demonstrating the ability to secure an airway
- Demonstrate an understanding of shock physiology and how to initially manage a patient in shock
- Describe and discuss the landmark anatomy and complications of central venous line placement
- Identify a patient with sepsis and initiate timely orders
- Demonstrate knowledge of radiographic findings consistent with common surgical pathology
- Describe and discuss standard pre-operative evaluation and prophylactic medications
- Write orders for admission, preoperative, postoperative, and discharge
- Write a complete and concise H&P, Progress note, Operative Note, and Discharge Summary

Interpersonal and Communication Skills

- Identify areas of uncertainty and demonstrate knowledge of who to contact for help
- Demonstrate effective communication with patients and families, patient care teams, and other healthcare providers
- Demonstrate collaborative and inter-disciplinary teamwork for evaluation of trauma patients

Course Objectives



Medical Professionalism/Ethics

- Deliver difficult news to patients and families
- Perform a comprehensive informed consent

Technical Skills (Based on the ACS/APDS Surgery Resident Skills Modules)

- Demonstrate understanding and practice of sterile technique
- Describe and discuss the basic set up and technology of laparoscopy
- Perform fundamental laparoscopic skills
- Safely place a central venous catheter while maintaining sterile conditions
- Safely place peripheral venous line
- Safely place an arterial line
- Safely place a urinary catheter
- Safely place a nasogastric tube
- Safely place a thoracostomy tube
- Safely perform surgical beside procedures: biopsies, incision and drainage, etc.
- Perform orotracheal intubation
- Perform cricothyrotomy
- Correctly associate the type of suture need for tissue closure
- Perform fascial and skin closures
- Correctly tie square knots

Lectures/Modules: 10 hours per week

Simulation: 20 hours per week Clinical: 12-16 hours per week

To be gain the most from the course, the student will be expected to study 1

hour for every hour of lecture

Course Activities

The student will be expected to attend all lectures, simulations, and clinical activities. There will be on average 1-3 lectures or modules for independent learning four days per week. Each lecture or module will be followed by a simulation to practice and hone the skill/knowledge presented. On lecture and simulation days the student will be present from 0800 to 1600 with an hour break for lunch and 10-minute breaks between lectures and simulations. On non-lecture and simulation days the student will be shadowing a PGY1 or PGY2 for the duration of that residents shift with the expectation that the student will be released to work within the confines of the work hour restrictions by LCME.

Course Schedule Requirements

There is no on-call requirement for this course. Students will be expected to be available Monday-Thursday from 8:00 am till 4:00 pm and on Friday from 5:00 am till 5:00 pm.



Duration	2 Weeks	Location	ECHI Robotics Lab/Vidant Medical Center		
Designation	Elective: Sp	Elective: Special Permission Required			12/05/2018

