

ANES 461 - Orientation to Clinical Experience
Summer 2009
Clinical Course for 1st Year Students

Faculty:

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Course Overview:

This course provides an introduction to experience in the operating room with emphasis on the fundamental procedures and techniques used in administering an anesthetic. Preoperative assessment, IV placement techniques, airway management, intraoperative patient care and postoperative management are all emphasized in this course. Basic Life Support (BLS) certification is required for course completion.

Exams and Grading:

This clinical experience course is evaluated by:

1. Systematic analysis of numerical performance evaluations and of written comments submitted by clinical instructors
2. Analysis of the trends in these comments
3. The numerical grading of a comprehensive exam given at the end of the semester

A committee of senior clinical instructors regularly (once per semester or as needed) evaluates students and can make a single letter grade adjustment (up or down) based on their unanimous and collective expertise in reviewing clinical “comments” and “trends.” Deliberations of these meetings are documented by a scribe.

Students are able to view clinical performance data online via the MSA Program computers in the MSA Student Lounge.

Course Objectives:

By the end of the summer semester, the first year MSA student should strive to be **70%** successful when performing the following tasks with *frequent assistance* (defined as “**supervision 100%** of the time and **technical support 75%** of the time given by a clinical instructor”):

1. Venous cannulation and fluid therapy on healthy adult patients
2. Airway management on anesthetized, healthy adult patients
3. Laryngoscopy and endotracheal intubation on anesthetized, healthy adult patients with Mallampati Class I or II airways
4. Timely and accurate completion of the intraoperative record with no blank spaces
5. Anesthesia machine checkout and appropriate room setup for healthy (ASA I & II) adult general anesthesia management

6. Placement of laryngeal mask airways (LMAs) in healthy adult patients

The performance checklist for the summer semester/basic science year contains the following items:

1. Successful placement of intravenous cannulas in adult patients given the following criteria:
 - An appropriate vein and catheter size should be chosen
 - The catheter must be inserted successfully by the second needle stick
 - The field should be relatively blood-free during and after insertion
 - Tubing connections should be tight with no blood or fluid leakage
 - The fluid infusion should be run at an appropriate rate
 - The work area should be cleaned as needed
 - The patient's fluid deficit and a fluid replacement plan are calculated and presented
 - The maximum allowable blood loss for the case is calculated and presented
2. Successful completion of general anesthetics on healthy adult patients managed with mask assisted spontaneous respirations given the following criteria:
 - An appropriate patient is chosen for mask maintenance
 - An appropriate mask size is chosen
 - Assisted spontaneous ventilation is achieved and managed
 - Airway obstruction is recognized and appropriate maneuvers to correct are taken
 - The student responds appropriately and promptly to changes in the patient's status (BP, HR, Sat, etc.)
3. Successful endotracheal intubation on healthy adult patients with Mallampati Class I or II airways given the following criteria:
 - An appropriately sized OETT is chosen
 - An appropriate style and size of blade is chosen
 - The tube is atraumatically inserted by the second tube pass
 - Tube placement and position is verified using at least two acceptable methods (breath sounds, capnography, etc.)
 - The tube is adequately secured to the patient in a timely fashion
 - The transition to adequate mechanical ventilation is achieved
4. Adequate completion of intraoperative records for uncomplicated cases given the following criteria:
 - The record is neat and legible
 - All drug therapy, patient intervention, vital signs, etc., are recorded accurately and completely
 - The student keeps current with charting and does not lag behind
 - No "blank spaces" inappropriately exist on the finished product
 - The records are filed in the appropriate area postoperatively
 - The student continues monitoring while charting
5. Appropriate setup of the anesthesia machine and tabletop for healthy (ASA I & II) adult general anesthetics given the following criteria:

- Check for adequate suction
 - Check O2 cylinder supply
 - Check O2 pipeline supply
 - Check vaporizer fill level
 - Calibrate O2 monitor sensor to room air
 - Check flowmeters
 - Install and check the patency of an appropriate breathing circuit
 - Verify that CO2 absorber is adequate
 - Verify the integrity of the APL valve and the scavenging system
 - Test the integrity of the ventilator
 - Check the integrity of the monitors (capnograph, ECG, pulse oximeter, temperature probe, etc.)
 - Have appropriate emergency drugs available
 - Have appropriate anesthetics and narcotics available
 - Have appropriate airway equipment available
 - Have appropriate intravenous therapy available
6. Successful placement of laryngeal mask airways (LMAs) in healthy (ASA I & II) adult patients given the following criteria:
- The LMA is placed without trauma to the teeth or pharynx
 - No leak is present after the cuff is inflated
 - The LMA is securely taped
 - Assisted spontaneous ventilation is achieved and appropriately managed

May 2009