Department of Anesthesiology
Didactic Teaching

Monday Sessions: 3:00 - 5:00 p.m.:

- Most sessions taught by UMM Anesthesiology Faculty
- Residents relieved from clinical obligations
- Mandatory residents’ attendance
- 84 hours per year
- Hours divided among
  - Journal club: 12 hours
    - Mandatory for all residents (CA1s, CA2s & CA3s). CA1s are not included in 2 sessions in order to allow them to attend CA1s Board Reviews.
    - Assigned to CA-2 residents and faculty moderators
    - Articles distributed one week prior to allow active participation of all residents
    - Format: “Pros & Cons” articles related to a pertinent anesthesia topic with emphasis on evidence based medicine
    - Statistics curriculum: Predetermined statistic concept(s) is (are) presented/thought during the last ten minutes of each Journal Club.
  - Mock orals: 12 hours
    - Mandatory for all residents (CA1s, CA2s & CA3s). CA1s are not included in 2 sessions in order to allow them to attend CA1s Board Reviews.
    - CA-3 residents selected as “examinees”
    - Format follows ABA format (See power point document on departmental website)
    - Evaluation reviewed with senior examiner
  - Yearly sessions: 4 hours
    - Mandatory for all residents (CA1s, CA2s & CA3s)
    - Substance abuse seminars: 2 hours
    - Practice management: 2 hours
  - CA1 tutorials/ board reviews: 50 hours of tutorials and 16 hours of board reviews
    - Mandatory for CA1s
    - Interactive format using audience response devices
    - All items (equivalent to Key Words) from the section on “Basic Topics in Anesthesiology” of the ABA/ASA content are included (See *Tutorials Vs ABA Content Outline* posted on the departmental website).
    - *Barash et al: Clinical Anesthesia, 7th ed., c. 2013* is used as baseline textbook. Topics not well covered in *Barash et al* use chapters from the departmental list of “recommended textbooks”.

6/30/2017
Residents have to take an on-line quiz after each tutorial. Passing score is 80%. Performance on quizzes is a component of the residents overall evaluation.

Board Reviews: Eight 2 hours sessions are scheduled throughout the academic year,
- All concepts of the ABA Content Outline “Basic Topics in Anesthesiology” are divided in 8 sessions.
- Each session is organized and moderated by a faculty.
- Each session starts with a 30 minutes test covering the concepts assigned to the session. The tests are graded and results are recorded.
- The following 1.5 hours are used to go over the test questions. The participating residents are responsible for most of the discussion. The moderating faculty serves as moderator/supervisor.
- Passing score on the test is 70%. Performance on board reviews is a component of the residents overall evaluation.

CA2 tutorials: 56 hours
- Mandatory for CA2s
- Interactive format using audience response devices. “Problem Based Learning” format is encouraged.
- All items (equivalent to Key Words) from the section on “Advanced Topics in Anesthesiology” of the ABA/ASA content are included (See Tutorials Vs ABA Content Outline posted on the departmental website).
- Barash et al: Clinical Anesthesia, 7th ed., 2013 is used as baseline textbook. Topics not well covered in Barash et al use chapters from the departmental list of “recommended textbooks”.
- Residents have to take an on-line quiz after each tutorial. Passing score is 80%. Performance on quizzes is a component of the residents overall evaluation.

CA3s Board Review: 56 hours
- 1 year cycle mandatory for CA3s
- Each session lasts 2 hours.
- All concepts of the ABA Content Outline “Basic Topics in Anesthesiology” and “Advanced Topics in Anesthesiology” are divided in 28 sessions.
- Each session is organized and moderated by a faculty.
- Each session starts with a 30 minutes test covering the concepts assigned to the session. The tests are graded and results are recorded.
- The following 1.5 hours are used to go over the test questions. The participating residents are responsible for most of the discussion. The moderating faculty serves as moderator/supervisor.
- Passing score on the test is 70%. Performance on board reviews is a component of the residents overall evaluation.
Grand Rounds: Thursday 7:00 – 8:00 a.m. (6:30 – 8:00 a.m. on 3rd Thursday of the month from September to June):

- UMM Faculty represent approximately 30% speakers
- Other speakers are:
  - Senior residents and fellows: approximately 13% speakers
  - Visiting professors: approximately 13% speakers
  - Faculty & residents presenting morbidity and mortality cases represent approximately 23% speakers
- The last 21% of Grand Rounds are allocated to Divisions Meetings/Residents Study Halls
- Residents relieved from clinical obligations
  - Mandatory residents’ attendance
  - 51 hours per year

Simulation Lab: Tuesday 2:00 – 3:00 p.m. and 3:00 – 4:00 p.m.: Skill Task Training/Testing

- Sessions organized by faculty with training and expertise in simulation
- Sessions led by faculty with expertise in specific skills
- 3 residents from any level assigned to a one-hour session
- Performance (evaluated with a check list) is a component of the residents overall evaluation
- September sessions dedicated to CA1s for “Vascular Access with Ultrasound Guidance”

Simulation Lab: Wednesday 2:00 – 4:30 p.m.: Multidisciplinary Scenario

- Sessions developed and directed by faculty with training and expertise in simulation
- Multidisciplinary scenario (3 different scenarios per academic year)
- 3 residents from different levels assigned to each session
- Pre-test and post-test posted on Blackboard
- Performance is a component of the residents overall evaluation

Chairman Conference: Tuesday 6:30 – 7:00 a.m. (Weinberg 3 Classroom)

- Format defined by chairman
- Mandatory attendance (except for residents rotating at Kernan, Pain Service, and assigned to cardiac ORs)
CA1s Curriculum (50 hours of Tutorials and 20 hours of Board Reviews)

The first year curriculum is aimed at the CA1 residents. It covers the “Basic Topics in Anesthesiology” of the ABA/ASA content outline that will be tested on Part I-A of the ABA exam. It is organized, as much as possible, to follow Barash’s ‘Clinical Anesthesia’ textbook (7th edition).

1. Mathematic Principles (part 1)
2. Mathematic Principles (part 2)
3. Vascular Access
4. The Ultrasound Machine
5. Basic Principles of Clinical Pharmacology (part 1)
6. Basic Principles of Clinical Pharmacology (part 2)
7. Cardiac Anatomy & Physiology
8. Cardiac Pharmacology
9. Circulation
10. Dysrhythmias (Treatment & Anesthetic implications)
11. Respiratory System: Anatomy & physiology
12. Preoperative Pulmonary Evaluation & Preparation
13. Fluid & Electrolytes
14. Hemostasis and Transfusion Medicine
15. Acid-base (part 1)
16. Acid-base (part 2)
17. Autonomic Nervous System: Anatomy & Physiology
18. Electrical Safety
19. Inhalation Anesthetics: Pharmacokinetic (part 1)
20. Inhalation Anesthetics: Pharmacokinetic (part 2)
21. Inhalation Anesthetics: Pharmacology (part 1)
22. Inhalation Anesthetics: Pharmacology (part 2)
23. Neuromuscular Blocking Agents (part 1)
24. Neuromuscular Blocking Agents (part 2)
25. Intravenous Anesthetics & Opioids
26. Local Anesthetics & Anatomy of Extremities
27. Radiology
28. Preoperative Evaluation & Medications
29. Physics & Anesthesia Delivery Devices (part 1)
30. Physics & Anesthesia Delivery Devices (part 2)
Second Year Curriculum (56 hours)

The second year curriculum is aimed at the CA2 residents. It covers the “Advanced Topics in Anesthesiology” of the ABA/ASA content outline that will be tested on Part I-B of the ABA exam. It is organized, as much as possible, to follow Barash’s ‘Clinical Anesthesia’ textbook (7th edition).

1. Pharmacologic Principles
2. Malignant Hyperthermia and Other Pharmacogenetic Disorders
3. Autonomic Nervous System: Pharmacology

4. Anesthesia for Trauma and Burn Patients
5. Anesthesia for Patients with Coexisting Diseases: Hematological Diseases
6. Anesthesia for Patients with Coexisting Diseases: Neuromuscular Diseases
7. Ambulatory Anesthesia and Office-Based Anesthesia
8. Anesthesia Provided at Alternate Site

9. Epidural & Spinal Anesthesia
10. Peripheral Nerve Blockade: Head, Neck & Trunk
11. Peripheral Nerve Blockade: Upper Extremity
12. Peripheral Nerve Blockade: Lower Extremity
13. Management of Neurological Critical Care Conditions
14. Neurovascular Diseases: Anesthetic Considerations
15. Special Problems of Anesthesia for Neurosurgery (part 1)
16. Special Problems of Anesthesia for Neurosurgery (part 2)
17. Special Techniques: Controlled Hypotension, Controlled Hypothermia, High Altitude
18. Endocrine Disorders: Anesthetic Considerations

19. Respiratory system: Anatomy & Physiology
20. Respiratory diseases: Anesthetic Considerations
21. Anesthesia for Thoracic Surgery
22. Pulmonary Hypertension & Lung Transplantation

23. Cardiovascular Monitoring
24. Echocardiography
25. Coronary Artery Diseases: Anesthetic Considerations
26. Cardiopulmonary Bypass & Circulatory Assist Devices
27. Valvular Heart Diseases: Anesthetic Considerations
28. Heart Failure, Cardiomyopathies, Heart Transplant: Anesthetic Considerations
29. Other Cardiovascular Diseases: Anesthetic Considerations
30. Anesthesia for Vascular Surgery and the Older Patient

31. The Pregnant Patient: Anesthetic Considerations
32. Problems during Pregnancy
33. Anesthesia for Vaginal Delivery (part 1)
34. Anesthesia for Vaginal Delivery (part 2)
35. Anesthesia for Cesarean Section
36. Problems at Term and during Delivery

37. Basics of Pediatric Anesthesia
38. Pediatric Respiratory Physiology & Anesthesia Circuits
39. Pediatric Cardiovascular Physiology & Cardiac Surgery (part 1)
40. Pediatric Cardiovascular Physiology & Cardiac Surgery (part 2)
41. Pediatric Premedication & Induction Techniques
42. Pediatric Pain Management & Sedation
43. Neonatal Anesthesia
44. Anesthetic Implications for Common Non-neonatal Pediatric Subspecialty Surgeries

45. Gastrointestinal Disorders, Obesity, Anesthesia for Laparoscopic Surgery & Plastic Surgery
46. The Renal System and Anesthesia for Urologic Surgery
47. The Liver and Transplant Anesthesia
48. Diabetic Patients & Anesthesia for Pancreas Transplantation
49. Anesthesia for Ophthalmologic Surgery
50. Anesthesia for Otolaryngologic Surgery
51. Anesthesia for Orthopedic Surgery

52. Management of Acute Postoperative Pain
53. Chronic Pain Management
54. Miscellaneous Blocks

55. Anesthesia and Critical Care Medicine (part 1)
56. Anesthesia and Critical Care Medicine (part 2)

---

Third Year Curriculum (56 hours)

The third year curriculum is aimed at the CA3 residents. It covers all the “Basic Topics in Anesthesiology” and the “Advanced Topics in Anesthesiology” of the ABA/ASA content outline (see the 112 topics above). It is organized, as much as possible, to follow Barash’s ‘Clinical Anesthesia’ textbook (7th edition). The content is covered in a “Board Review” format.

---

Yearly Sessions: 4 Hours per Year

1. Substance Abuse Seminar (2 hours)
2. Practice Management (2 hours)