

**University of Florida College of Medicine
Department of Anesthesiology Medical Education**

**Fourth-Year Anesthesiology and Critical Care Clerkship ANS R1-7 Syllabus
2016-2017**



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Clerkship Organization and Locations

Gainesville Administration

Department Chair:

Timothy Morey, MD (352) 273-8610 tmorey@anest.ufl.edu

Clerkship Director:

Christopher Giordano, MD (352) 222-7855 (c) cgiordano@anest.ufl.edu

Clerkship Co-Director:

Sean Kiley, MD (352) 215-2138 (c) skiley@anest.ufl.edu

Clerkship Coordinator:

Madalyn Murray (352) 265-0077 mmurray@anest.ufl.edu

Chief Residents:

Meghan Brennan, MD (352) 872-8017 mbrennan@anest.ufl.edu

Michael Kaminsky, DO (717) 979-1128 mkaminsky@anest.ufl.edu

Robert Stoker, MD (801) 656-5756 rstoker@anest.ufl.edu

Jacksonville Administration

Clerkship Director:

Adrienne Warrick, MD (904) 244-4195 Adrienne.Warrick@jax.ufl.edu

Clerkship Coordinator:

Claudia Chavarro (904) 244-4704 Claudia.Chavarro@jax.ufl.edu

Gainesville Inpatient Surgical Locations

Shands Hospital

1600 SW Archer Road, 32610

VA Medical Center

1601 SW Archer Road, 32608

Contact:

Dr. Sulek: Pager 413-2158

Office TBA

Florida Surgical Center

3480 Hull Road, 32607

Contact:

Resident you are paired with

Springhill Pain Clinic

4037 NW 86th Terrace

Contact:

Ask for Ms. Carpiz-Turdogan 352-265-7777

Gainesville ICU Directors and Administrative Contacts

Cardiovascular ICU

Sean Kiley, MD

Admin Contact: Jennifer Barghout 273-8630; JBarghout@anest.ufl.edu

Medical ICU

Jorge Lascano, MD

Admin Contact: Chris Pintado 273-8667; christopher.pintado@medicine.ufl.edu

Neruo ICU

Peggy White, MD

Admin Contact: Jennifer Barghout 273-8630; JBarghout@anest.ufl.edu

Pediatric ICU

Leslie Avery, MD

Admin Contact: Alyssa Shain 265-0462; shainaa@peds.ufl.edu

Surgical ICU

Phil Efron, MD

Admin Contact: Michele Silver 265-0916; michele.silver@surgery.ufl.edu

Caroli Harkness Caroli.Harkness@surgery.ufl.edu

Jamie Williams 273-5670; Jamie.Williams@surgery.ufl.edu

Trauma ICU

Phil Efron, MD

Admin Contact: Michele Silver 265-0916; michele.silver@surgery.ufl.edu

Caroli Harkness Caroli.Harkness@surgery.ufl.edu

Jamie Williams 273-5670; Jamie.Williams@surgery.ufl.edu

VA Surgical ICU

Drs. Hobson, Grek and Atteberry

Admin Contact: Linda Kunz 374-6013; linda.kunz@surgery.ufl.edu

Welcome

Welcome to your **Anesthesiology & Critical Care Clerkship** for 4th year medical students, which will begin in HME 465 at 8:30 am. This is a four-week required clerkship that is divided into two different components. Two weeks will be dedicated to the Perioperative Management of the surgical patient, including pre-, intra- and post-operative patient care under the direct supervision of a resident or attending. A typical day would include arriving at ~6:00am to help set up the OR, attending conference at 6:30 am, and starting the first OR case of the day between 7:30 and 8:15am. Typically, there will be several cases throughout the day in which the student will participate. Additionally, a continuity of care is expected by performing or at least reviewing the next day's pre-operative evaluation along with visiting the post-operative patients from the preceding day.

During the other two-weeks of the clerkship, the student will participate in their elected or assigned ICU management team. Each team differs slightly in schedule and management styles. Therefore, the specific times and rounding formats are left to each service to define within the framework of achieving the goals and objectives listed below. One-half of the group will start in the operating room for the anesthesiology portion of the clerkship; the other half of the group will start in the ICU. At the two-week interval the groups will switch.

On-line learning modules are required and available for the students to complete on their own time. These will correspond to a simulation or problem-based learning discussion that requires material to be understood in order to critically appraise the patient scenarios. The student must complete the online learning modules **before** the scheduled simulation / problem-based learning session or the student will not earn credit for the module, and each module will be time-stamped to verify completion. Lectures and Small Group Discussions are held in the Harrell Medical Building in either the Simulation Lab (Rm. 465) or classroom 460. A complete schedule of lectures is available online, as are all handouts, and necessary paperwork. Evaluation is through objective examinations performed by the residents, Fellows and Attendings.

If your assigned resident in the Operating Room portion of the clerkship is unavailable for any reason, please do the following in order of preference: choose from the alternate resident list, contact Madalyn Murray or Dr. Giordano, or call the Attending of the Day (AOD) on 494-4990 who can help assign you to a faculty member to develop your clinical and educational development.

Chris Giordano, MD
Clerkship Director

Message from the Chair

Dear Students,

Welcome to the Anesthesiology & Critical Care Clerkship administered by the Department of Anesthesiology. The four-week clerkship for Fourth Year medical students has two primary goals: to educate all physicians in the management of critical care, and to introduce concepts related to perioperative medicine which eventually impacts all medical practitioners. Integral to this education is the understanding and development of the life support skills that physicians need to rescue patients in desperate times, which include establishing intra-vascular access and managing airways.

You will have opportunities to tailor your experience in subspecialty areas and ICUs during this four-week rotation. Regardless of your specialty of choice, the lessons you will learn in this rotation will be of critical value. From basic review and application of pharmacology and physiology to the full range of perioperative medicine and acute and chronic pain management, this rotation in the Department of Anesthesiology cuts across all disciplines in a unique and interesting way. You will learn to perform a variety of procedures and physiologic/pharmacologic therapies from those who do it most often including: airway management, intravenous access, sedation, mechanical ventilation and emergency assessment. Your experience will, in large part, be what you make of it. This is an incredible group of top physicians in the field of anesthesiology and critical care medicine; be assertive and be inquisitive and you will have a wonderful learning experience, and hopefully some fun!

The Department of Anesthesiology provides clinical anesthesia and sedation services at UF Health in the following areas: operating suites in both UF towers, Labor and Delivery, Burn Unit, Radiology Suite, ECT Suite and Cardiac Catheterization Laboratory. We also provide service to outlying facilities including the Florida Surgical Center, Children's Surgery Center and the VAMC. Additionally, we operate the Acute Pain service and the Chronic Pain clinics at UF Health, along with a preoperative evaluation clinic at both UF and the VAMC. We also provide medical direction in the Post-Anesthesia Care Units of the UF facilities. Our Critical Care Medicine faculty oversees care of patients in the SICU, NICU, BICU, and the CVICU at UF Health.

With warmest regards,

Timothy Morey, MD
Professor and Chair

Competencies, Goals, and Objectives

The Department's expectations of your performance are aligned with the College of Medicine's competency-based curriculum. You will experience, be taught and evaluated specifically on your performance of the following competencies, goals and objectives:

Competencies:

Patient Care (PC)
Medical Knowledge (MK)
Practice-Based Learning (PBL)
Systems-Based Practice (SBL)
Professionalism (P)
Interpersonal and Communication Skills (IC)

Goals & Objectives

1. Understand the Principles and Risks of Airway Management

- *Airway evaluation (PC, MK, IC)
- *Airway control anticipation and resource management (PC, IC, SBL)
- *Mask ventilation (PC, MK)
- *Intubation: direct laryngoscopy, fiberoptic intubation, intubating adjuncts (PC, MK)
- *LMA (PC, MK)

2. Understanding the Indications and Different Modes of Mechanical Ventilation

- *Oxygenation (MK)
- *Ventilation (MK)
- *Respiratory volumes (MK)
- *Etiologies of respiratory failure (MK, PC)
- *Modes of mechanical ventilation (MK)
- *Respiratory adjuncts (MK, PC, SBL)

3. Appreciating Various Modalities of Hemodynamic Monitoring

- *ECG, pulse oximetry, blood pressure, temperature (MK, SBL)
- *Arterial line placement and utility (MK, PC)
- *Central line placement and utility (MK, PC)
- *Pulmonary artery catheter placement and utility (MK, PC)
- *Diagnosing different types of shock and their therapies (MK, PC)
- *Transesophageal echocardiography placement and utility (MK, PC)
- *Recognizing critical events: PE, hemorrhage, tamponade, MI (MK, PC)

4. Appreciate the Scope, Utility and Risks of Procedural Sedation

- *Levels of sedation (MK)
- *Practitioners of procedural sedation (IC, SBL)
- *Standards of monitoring (PC, SBL)
- *Guidelines of procedural sedation (PC, SBL)
- *Describe the elements of informed consent (IC, MK)
- *Capnography (MK)
- *Sedation medications and physiologic impact (PC, MK)
- *Reversal medications (PC, MK)
- *High-risk sedation patients (PC, MK)
- *Airway obstruction mitigation maneuvers

5. Identifying and Treating Critical Illness

- * Defining ARDS and management (PC, MK, SBL)
- * Evaluate the critically ill patient (MK, PC, SBL)
- * Different type of shock (MK)
- * Differentiate SIRS and sepsis (MK, SBL)
- * Understanding surviving sepsis guidelines (PC, SBL, P)

- * Exposure to interdisciplinary team structure and management (P, IC, SBL)

6. Recognizing and Implementing Different Strategies for Acute Pain Management

- * Definition and types of pain (PC, MK, IC)
- * Multimodal pain management (PC, MK, IC)
- * Regional anesthesia (PC, MK, IC, SBL, P)
- * Local anesthetics (MK)
- * Anticoagulation and regional techniques (MK, PC)

7. Identifying and Rescuing the Critical Patient in Emergency Assessment

- * Review crisis resource management (P, PC, IC, SBL)
- * BLS utility (PC, IC, P)
- * ACLS utility (PC, SBL, P)
- * Acute coronary syndrome causes and treatment (MK, PC)
- * ECG interpretations (MK, PC)
- * Peripheral IV placement and utility (PC)
- * Diagnosis and therapy for elevated intracranial pressure (MK, PC)

8. Understanding Blood Component Therapy and the Different Transfusion Triggers

- * Physiology of oxygen delivery and consumption (MK)
- * Blood component storage and handling (MK)
- * Indications for different blood components: PRBC, Plts, FFP, Cryo (PC, MK)
- * Risks of different blood components: PRBC, Plts, FFP, Cryo (PC, MK)
- * Alternative therapies: recombinant factors, prothrombin complex, anti-fibrinolytics (MK)
- * Risks and decisions for massive transfusion: TRIM, TRALI, TACO, electrolytes, and temperature

9. Anesthesia Pharmacology and Management

- * Profiles / indication of induction drugs: propofol, ketamine, thiopental, etomidate (MK)
- * Profiles and indication of muscle relaxants: succinylcholine, rocuronium, vecuronium (MK)
- * Reversal drugs for opiates, BZDs, muscles relaxants (MK)
- * Total intravenous anesthesia versus a balanced anesthetic (MK)
- * Profiles and indication of vasopressors: epi, norepi, ephedrine, neo, vasopressin (MK)
- * Beta-blockers, nitroglycerin, nitroprusside (MK)
- * Rapid sequence intubation: indications, drugs, sequence (MK, PC)
- * Intraoperative recall (MK, PC)

10. Perioperative Bedside Ultrasound Assessment

- * Introduce ultrasound as a modality and its potential to assist with diagnosis of cardio/pulmonary pathology
- * Identify cardiac anatomy on standard transthoracic views: parasternal long, parasternal short, apical, subcostal
- * Discuss findings used to evaluate fluid status and cardiac function using ultrasound
- * Identify normal and abnormal
- * Identify normal pleural/interstitial lung US
- * Identify and discuss US findings associated with lung pathologies

11. Cognitive Errors: Behavioral Economics

- * Mechanics of Decision-Making (SBL, IC, PBL)
- * Vulnerabilities of Decision-Making (SBL, IC, PBL)
- * Definition of Heuristics (SBL, IC, PBL)
- * Common biases in medical practice (SBL, IC, PBL)
- * Tools to mitigate decision-making errors (SBL, IC, PBL)

Assignments

All assignments are must be submitted via StudyCore by 5pm on the last day of the rotation, unless otherwise specified. All assignments submitted after their specified deadlines will lost points. If you are having problems submitting assignments, please contact Ms. Murray at mmurray@anest.ufl.edu.

Case Logs

In accordance with the GME and the UF College of Medicine, all medical students are required to keep a log of the patients they encounter. Case Logs must be completed in StudyCore. Make sure to include what procedures you participated in (i.e. peripheral IV, Mask Ventilation, Intubation, LMA insertion, aline, central line, nasogastric tube, IM injection, Foley catheter, ...) Please note, that we will periodically review these logs to evaluate the range of patients and procedures you encounter during your experience. This will allow us to fine tune the experience for each student so that we can maximize your learning opportunity.

Case Review

During the Anesthesiology two weeks, you will complete one Case Review Form for each week including all of the Perioperative management strategies implemented. This should include a brief review of the patient's history and physical, the anesthetic plan, any remarkable intraoperative events, the post-operative pain plan and dispositional plan. Please include any questions or uncertainties that you may have, and prepare to present this case during the ***Small Group: Case Conference*** session. On-line are examples of case-write ups that will correspond to full credit, half credit and no credit. These cases will be submitted for review and be counted as part of your final grade.

Team Reflection Piecesⁱ

At this point in your training you should be familiar with the basic components of Team Knowledge, Skills, and Attitudes {KSAs}, these are nine different team behaviors that highly effective teams use to achieve goals. If you need a refresher on these KSAs, they are on the following page.

We would like you to reflect upon both of the different reflective writing prompts below. You are to submit two reflective responses (one for each prompt) that should be approximately 250 words each. The purpose of this reflection is two-fold, first to serve as a means of evaluating your *growth* as a member of a clinical team, second, is to identify *strengths* and *opportunities* for growth and improvement within the University of Florida College of Medicine. We ask you to think as if you've been hired as an external evaluator in order to assess the collaborative practices at the University of Florida COM. Tell us what is going well and let us know where we need to improve. The piece will be submitted for review and counted as part of your final grade.

When responding to the reflective writing prompts, please describe your experience with enough detail for the clerkship faculty to understand the context in which the experience occurred, the problem or situation that presented and the resolution that was reached. When writing about your reflections, the following points for consideration may be helpful: analyze and evaluate the experience, as well as any thinking processes that were involved. If possible, explore deeper levels of meaning, i.e., professional, ethical, moral, and/or social issues.

During the Anesthesiology / Critical Care clerkship you had the opportunity to work with many different care providers in many different clinical situations. Please consider the different clinical encounters that you witnessed and take time to reflect upon the following writing prompts, all responses to these questions will be kept anonymous:

1. Describe a situation during which you observed members of a clinical team using one or more of the Team KSA. Describe the KSA(s) that was/were used and the context in which it/they was used. How do you think that the outcomes associated with the situation were enhanced by the use of the skill?
2. Describe a situation during which you members of a clinical team could have benefitted from employing one or more of the Team KSAs. Describe the/these KSA(s) that could have been used and how you think the outcomes may have changed.

The following chart details skills related to teams and teamwork based on the science of teamwork and concepts from TeamSTEPPS training for healthcare providers.

Teamwork Knowledge, Skills, and Attitudes ¹

Team work	Definition	Behavioral Examples
Team Leadership	Ability to direct and coordinate the activities of other team members; assess team performance, assign tasks, develop team KSA's, motivate team members, plan and organize, and establish a positive atmosphere.	<ul style="list-style-type: none"> • Facilitate team problem solving • Provide performance expectations and acceptable interaction patterns • Synchronize and combine individual team member contributions • Seek and evaluate information that impacts team functioning • Clarify team member roles • Engage in preparatory meetings and feedback sessions with the team
Mutual Performance Monitoring	The ability to develop common understandings of the team environment and apply appropriate task strategies in order to accurately monitor teammate performance.	<ul style="list-style-type: none"> • Identifying mistakes and lapses in other team member actions • Providing feedback regarding team member actions in order to facilitate self-correction
Mutual Support/ Back-up Behavior	<ul style="list-style-type: none"> • Ability to anticipate other team member's needs through accurate knowledge about their responsibilities. • The ability to shift workload among members to achieve balance during high periods of workload. 	<ul style="list-style-type: none"> • Recognition by potential back-up providers that there is a workload distribution problem in their team • Shifting of work responsibilities to under-utilized team members • Completion of the whole task or parts of tasks by other team members
Adaptability	<ul style="list-style-type: none"> • Ability to adjust strategies based on information gathered from the environment through the use of compensatory behavior and reallocation of intra-team resources. • Altering a course of action or team repertoire in response to changing conditions (internal or external). 	<ul style="list-style-type: none"> • Identify cues that a change has occurred, assign meaning to that change, and develop a new plan to deal with the changes • Identify opportunities for improvement and innovation for habitual or routine practices • Remain vigilant to changes in the internal and external environment of the team
Team/ Collective Orientation	Propensity to take other's behavior into account during group interaction and the belief in the importance of team goals over individual member's goals.	<ul style="list-style-type: none"> • Taking into account alternative solutions provided by teammates and appraising that input to determine what is most correct • Increased task involvement, information sharing, strategizing, and participatory goal setting
Shared Mental Models	An organizing knowledge structure of the relationships between the task the team is engaged in and how the team members will interact	<ul style="list-style-type: none"> • Anticipating and predicting each other's needs • Identify changes in the team, task, or team-mates and implicitly adjusting strategies as needed
Mutual Trust	The shared belief that team members will perform their roles and protect the interests of their teammates	<ul style="list-style-type: none"> • Information sharing • Willingness to admit mistakes and accept feedback
Conflict Resolution	Ability to manage and confront conflict before it interferes with team functioning.	<ul style="list-style-type: none"> • Expressing concerns and suggesting alternatives to a situation • Working on a "win-win" so that a solution is reasonable to everyone involved • Focusing on what is right, not who is right.
Closed-Loop Communication	The exchange of information between a sender and receiver regardless of medium.	<ul style="list-style-type: none"> • Following up with team members to ensure was received • Acknowledge that message was received • Clarifying with the sender of the message that the message received is the same as the intended message sent

¹ Adapted From:

Eduardo Salas, Dana E. Sims and C. Shawn Burke Is there a "Big Five" in Teamwork? Small Group Research 2005; 36; 555. <http://sgr.sagepub.com/cgi/content/abstract/36/5/555>

Modules

Each class-based *Simulation* or *Problem-Based Learning Discussion* has a corresponding educational module that is designed to introduce medical knowledge to the student **prior** to the start of the corresponding lecture. Refer to the lecture schedule for lecture dates. These modules are accessible on-line and are meant for self-teaching. There are questions infused throughout the module meant to keep you stimulated and to reinforce topics that are critical to appropriately applying during the simulation. These modules have many elements and topics that are controversial and are not necessarily universally applied – as are many things in medicine you will encounter! Please feel free to bring up any questions, uncertainties or ideas that you think need further addressing or explaining during the following class activity. Ideally, these modules will stimulate a dialogue for you to bring up with your resident or Attending in the OR and ICU. Modules count as part of your final grade. Points will be awarded based on submitting the module completion screen into Canvas. Refer to the Lectures and Modules for the complete list of modules and their associated lecture on page 11.

Evaluations

Formative Feedback Evaluations

The Formative Feedback form should be completed with your resident (with whomever you spent the most time) at the end of each week. First you should complete the self-assessment portion, then ask your resident to complete their portion.

Since formative feedback is meant to provide you with information to improve, weaknesses and deficiencies should be stressed more than strengths. Formative feedback does not influence your final Summative Evaluation. If you wish to discuss any aspects of your formative feedback, or have any questions about this or any other aspects of the clerkship, please feel free to call Dr. Giordano (222-7855). You are responsible to for making sure each evaluation is completed and turned in on time. Completion and timely submission of these evaluations will count towards your final grade.

ICU Evaluation

The Evaluation form should be completed by a resident (or whomever you spend the most time with) at the end of each week. You are responsible to for making sure each evaluation is completed and turned in on time. Completion and timely submission of these evaluations will count towards your final grade.

Resident/Faculty Evaluation

Evaluations on the residents/faculty/lecturers can be completed in StudyCore. Please make sure to complete evaluations on all of the people you worked with as these help us improve the Clerkship experience.

Clerkship Evaluation

Evaluation of your Clerkship experience is to be completed in StudyCore. Please make sure to complete evaluations on all of the people you worked with as these help us improve the Clerkship experience.

Required Readings

ANS R1 and ANS R2 only

On your CCM rotations, you will have the opportunity to gain the experience and knowledge base to skillfully care for the critically ill patient in a collaborative, team-oriented and multidisciplinary setting.

Prior to your rotation, complete the following:

- Be Familiar with the ST ICU Handbook (will be provided prior to the start of the rotation)
- CVL Tutorial - <http://gme.med.ufl.edu/policy-procedures/continuing-education/central-venous-line-credentialing/>
 - (if that link doesn't work, try this one: <http://gme.med.ufl.edu/policy-procedures/housestaff-training/central-venous-line-credentialing/>)
- The Science of Patient Safety –
 - http://www.ahrq.gov/professionals/education/curriculumtools/cusptoolkit/videos/04a_scisafety/index.html
 - <https://www.youtube.com/watch?v=GOJJHHm7lnM>
 - <https://www.youtube.com/watch?v=wpzb7nM6oFQ>
 - <https://www.youtube.com/watch?v=6BnXs4KtER8>
- Sepsis readings which will be provided prior to the start of the Rotation

Jacksonville ANS 1J and ANS R2J

Handbook of Clinical Anesthesia by first author Paul G. Barash; will be provided on loan to rotators.

Lectures and Modules

Lab: Mask Ventilation & Endotracheal Intubation

Module: Airways:

http://training.health.ufl.edu/ed/Giordano%20Anesthesiology/6_Airways%20output/story.html

Lab: Mechanical Ventilation

Module: Mechanical Ventilation

<http://training.health.ufl.edu/ed/Giordano%20Anesthesiology/Mechanical%20Ventilation%20output/story.html>

Lab: Critical Illness

Module: Critical Illness:

<http://training.health.ufl.edu/ed/Giordano%20Anesthesiology/Critical%20Illness%20output/story.html>

Lab: Transfusion Medicine

Module: Transfusion Medicine:

<http://training.health.ufl.edu/ed/Giordano%20Anesthesiology/Transfusion%20output/story.html>

Lab: Acute Pain

Module: Acute Pain Management:

<http://training.health.ufl.edu/ed/Giordano%20Anesthesiology/APM%20for%20Medical%20Students%20output/story.html>

Lab: ACLS / Emergency Assessment

Module: Perioperative Emergencies:

<http://training.health.ufl.edu/ed/Giordano%20Anesthesiology/Periop%20Emergencies%20output/story.html>

Lab: Applied Intravenous Sedation and Analgesia: Physiology and Pharmacology

Module: Procedural Sedation:

<http://training.health.ufl.edu/ed/Giordano%20Anesthesiology/Procedural%20Sedation%20output/story.html>

Lab: Hemodynamic Monitoring

Module: Hemodynamic Monitoring:

<http://training.health.ufl.edu/ed/Giordano%20Anesthesiology/HDL%20output/story.html>

Small Group: Cognitive Errors

Small Group: Case Conference

Bring at least one OR Case Write-up

Policies and Procedures

The University of Florida Honor Code:

“We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honesty and integrity.”

Communication

E-mail is the predominant source of communication regarding updates in the Clerkship. It is expected for you to check your e-mail **daily** since this is our primary means of communication. The Department of Anesthesiology is committed to an excellent student experience and we believe good communication is the principle foundation to achieving this goal.

Dress Code:

Students should come to the hospital dressed professionally. If you will not be seeing any patients until in the Operating (room when you will dress in scrubs) appropriate casual attire is acceptable (no short shorts, revealed mid-riffs, etc.). While in the ICU, long sleeve shirts and dress pants will be worn along with white coats; Scrubs may be worn during extensive patient contact. Please never wear scrubs outside of the hospital, as you become a vector transporting microbes in and out of sterile environments in the hospital. Badge identification should be visible at all times.

Reporting Problems:

Problems with your senior, an attending, intern or a general concern should be reported to Dr. Giordano as soon as possible. The Clerkship should be a great experience and all concerns will be addressed appropriately.

Attendance

Attendance is required at all Clerkship activities. In the fourth year clinical Clerkships and electives, daily attendance is required for all aspects of the clinical rotations. During clinical rotations, typical “holidays” are not taken unless specifically mentioned by the Clerkship (Christmas and Thanksgiving are exempt from this rule). Due to the highly interactive nature of this rotation you cannot be absent more than 20% of the days in the rotation. If you have any unexpected or planned absences, you **MUST** notify your resident or ICU Team who you are working with during your clinical experiences and Ms. Madalyn Murray (mmurray@anest.ufl.edu). The official COM policy can be viewed at: <http://medinfo.ufl.edu:8050/year1/secure/ufcom-policy-student-evaluations.pdf>.

In the event of an absence, you will be required to make up the time missed in order to ensure adequate clinical experience. This may require an extra call or weekend experience. Failure to adhere to these policies and procedures will result in a lowered professionalism competency score. Missed days and unexcused absences, which cannot be completed before Clerkship end date, will result in a grade of “Incomplete”.

Unplanned Absences

In the event of a single day, unexpected absence due to illness, you **MUST** notify Ms. Madalyn Murray (mmurray@anest.ufl.edu). You must also contact your assigned resident. Text pages, e-mail, phone call, all forms of communication are acceptable. If you do not communicate with the office regarding your absence and Dr. Giordano cannot reach you, he will notify the office of Medical Education and Dr. Novak that we have been unable to contact you and a search for you will be initiated.

Planned Absences

Students must contact Ms. Madalyn Murray (mmurray@anest.ufl.edu) as far in advance as possible (these requests must be made at least four (4) weeks prior to the beginning of the Clerkship) to discuss and obtain the permission of Dr. Giordano to be absent from assigned responsibilities in the case of planned meetings, events such as weddings or family gatherings, or the observation of a personal religious holiday.

Residency Interview Absences

Here is the link to the policy manual and the specific wording for residency interview absences:

<http://cdn.webservices.uflhealth.org/wp-content/blogs.dir/118/files/2014/10/Policies-and-Procedures-Handbook-2015.pdf>
<http://osa.med.ufl.edu/policies/evaluation-advancement-graduation/>

Holidays

Students are allotted the following holidays: Thanksgiving, Summer Break, and Winter Break. Thanksgiving is defined as beginning 7pm Wednesday and ending 5am Monday. Summer and Winter Break are determined by the UF COM Academic Calendar. The COM recognizes other holidays, both religious and secular, which are of importance to some individuals and groups. Students wishing to observe these holidays must inform Ms. Madalyn Murray (mmurray@anest.ufl.edu) before the clerkship begins. In the event of such request, an alternate assignment or arrangement may be provided to the student to ensure adequate clinical experience.

Students with Disabilities

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter, which must be presented to the instructor when requesting accommodation.

Counseling Services

Contact information for the Counseling and Wellness Center: <http://www.counseling.ufl.edu/cwc/Default.aspx>, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Performance Criteria

All faculty and residents submit competency-based summative evaluations of students with whom they worked a sufficient amount of time. These evaluations count for a significant portion of your final grade. Written formative feedback is provided at the end of week two via a student self-assessment forms.

On-line Course Evaluation

All students are expected to log into StudyCore and complete a confidential survey regarding your sub-internship experience. These evaluations are vital to the success of the clerkship by ensuring adequate levels of teaching. This feedback is also helpful in resident/faculty evaluations and award nominations.

Final Grade Composition

In accordance with College of Medicine policy, you are evaluated for this clerkship using a letter grade (A, B, C). The letter grade is based on a mixture of subjective and objective components as follows:

- **Attendance:** 10% (9 points)
- **Modules:** 20% (16 points)
 - Eight Modules (2 points each)
- **Examination:** 30% (84 points)
- **Evaluations:** 30% (9 points)
 - Four Evaluations – two Formative Feedback and two ICU Evaluations
- **Case Review:** 4% (9 points)
 - Two Case Review Forms (4.5 points each)
- **Team Reflection Piece Prompt 1:** 3% (5 points)
 - One paper – 250 words
- **Team Reflection Piece Prompt 2:** 3% (5 points)
 - One paper – 250 words

Policies may also be viewed at <https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx>.

Anesthesiology / Critical Care Resources

Recommended texts:

- *Essential Anesthesia: From science to practice* by Drs. Euliano & Gravenstein. There are numerous copies available in the Health Science Center Library.
- *Civetta, Taylor and Kirby's Critical Care*, 5ed. 2009 (edited by Andrea Gabrielli, MD, FCCM, Joseph Layon, MD, FACP and Mihae Yu, MD).

Recommended Overviews

- Marino's *The ICU Book*, 4ed. 2013
- Morgan & Mikhail's *Clinical Anesthesiology*, 5ed. 2013 (edited by John F. Butterworth IV, David C. Mackey, John D. Wasnick)

"First Source" Reference Texts

- *Miller's Anesthesia*, 7ed. 2009 (edited by Ronald Miller, MD, Lars Eriksson, MD, PhD, Lee Fleisher, MD et al.)

Internet Resources

- Morgan & Mikhail - <http://accessmedicine.mhmedical.com/book.aspx?bookid=564>
- *Principles of Critical Care* - <http://accessmedicine.mhmedical.com/book.aspx?bookid=361>

Appendix

Key Points for Exam:

4 Stages of sedation
Sedation medications
Respiratory depression risks / treatment
Pulse oximetry
Capnography
FRC: CW vs parenchyma
Closing Capacity: high and low risk populations
Laplace's law
Supplemental Oxygen uses
PEEP
PCV vs VCV vs. PSV: risks/ benefits
VQ areas (shunt vs dead space)
Mechanical ventilation flow wave forms
PK vs Plt pressure
Denitrogenation
Rapid sequence intubation
difficult intubation predictors
sniffing position
difficult airway algorithms
difficult mask intubation predictors and adjuvants
NMB uses
Anemia vs. hypovolemia
Blood component storage method
Blood component storage risks (prbc, plts, ffp)
Indications for PRBC transfusion
Transfusion risks
Coagulopathy monitoring tools
Arterial Gas monitoring
Indications and types of Shock
Indication for invasive vs. non-invasive airway management
SIRS
ARDS
Crystalloid types and indications
Defibrillation vs. synchronized cardioversion: indications and risks
Chest compressions
Electrocardiogram ACLS tracings
Coronary perfusion
Myocardial infarction
Central line indications and risks
Poiseuille's law
Arterial dampening
SVR
PVR
Pulse pressure
Types of pain and medication therapies
Neuroaxial blocks and indications
Extremity blocks and indications
Limitations to field blocks
Anticoagulation and neuroaxial blocks

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