



School of  
Veterinary Medicine

**SYLLABUS:**  
**Small Animal Critical Care Clinical  
Rotation  
VMED 5463**

**CONTACT INFORMATION:**

**Coordinator**

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**Veterinary Teaching Hospital:**

PHONE: 225-578-9600

**Small Animal ICU:**

PHONE: 225-578-9620  
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**COURSE MATERIALS:**

***Moodle***

Please view additional course materials via login to Moodle using your myLSU account information:  
<http://itsweb.lsu.edu/Moodle/>

***Recommended Text(s):***

*Deborah Silverstein, Kate Hopper: Small Animal Critical Care Medicine, 2<sup>nd</sup> ed., Saunders Elsevier, 2015.*

*Jamie Burkitt Creedon, Harold Davis: Advanced Monitoring and Procedures for Small Animal Emergency and Critical Care, 1<sup>st</sup> ed. John Wiley & Sons, 2012*

*Signe J. Plunkett: Emergency Procedures for the Small Animal Veterinarian, 3<sup>rd</sup> ed., Saunders Elsevier, 2013.*

*Richard Nelson, C. Guillermo Couto: Small Animal Internal Medicine, 4<sup>th</sup> edition, Mosby Elsevier, 2009.*

**COURSE DESCRIPTION:**

Students on this rotation are assigned to the Veterinary Teaching Hospital Small Animal Critical Care Service, which operates on nights, weekends, and holidays. The Critical Care Service provides a setting for gaining clinical experience with the intensive treatment and monitoring strategies necessary to successfully manage critically ill or injured patients in the intensive care unit. Students are directly supervised by interns, residents, technicians, and faculty.

Students on the Small Animal Critical Care clinical rotation will have daytime shifts in the Critical Care Service (8am-5pm). They will provide direct assistance to the Emergency and Critical Care Intern, helping to manage STATs emergency patients and critical care inpatients. ICU cage side rounds will take place daily to help students familiarize themselves with the treatment and care of critical patients.

Emergency and Critical Care rounds will take place jointly every day between 4-5pm. Rounds will cover important emergency and critical care topics.

**COURSE OBJECTIVES:**

<b>Learning objectives:</b>	<b>Key Words:</b>
<i>After this rotation, you should be able to....</i>	
1. Obtain, record, and relay a prioritized patient history in a succinct and properly detailed manner.	History
2. Relay serious and suddenly changing information to clients in a clear, professional, & compassionate manner.	Communication
3. Perform and record physical examination and succinctly relay a prioritized list of findings.	Physical exam
4. Select and implement an appropriate fluid therapy plan for both routine dehydration and hypovolemic shock cases.	Fluid therapy,

(Choose an appropriate fluid and calculate fluid volumes and rates to be delivered.)	dehydration, shock, hypovolemia
5. Calculate drug doses based on body weight in mg amounts and ml volumes to be administered.	Drug calculations
6. Technically perform and analyze the Quick Assessment Tests (PCV, Total protein, glucose, lactate).	Monitoring
7. Develop an appropriate patient-specific diagnostic plan for each patient.	Emergency
8. Develop an appropriate patient-specific 24 hour treatment and monitoring plan for ICU inpatients.	Critical Care
9. Perform and interpret blood pressure measurements, ECG, and pulse oximetry findings.	Critical Care
10. Develop an appropriate nutritional plan for hospitalized patients	Critical Care

### TEACHING PHILOSOPHY:

An understanding of the pathophysiologic mechanisms behind patient illness is key to rational decision-making with regards to how and why we treat the way that we do. Knowledge of these processes and a “user-friendly” approach will make managing these normally intimidating cases much less stressful. Focus on the every-day things what will be used more frequently in the clinical setting for your practice of medicine. Exposure to the specialist-level techniques and thought processes are to gain an understanding of what such a specialty has to offer our patients and clients.

### COURSE POLICIES:

#### Equipment:

Practical and professional attire is required: either clean scrubs (recommended) or professional dress with a clean white lab coat and a name tag. Students should be prepared with basic supplies for examination, including stethoscope, watch/timer, thermometer, bandage scissors, pen light, reflex hammer, and a small note pad or notebook.

#### Orientation & Scheduling:

All students should report to the ICU for orientation on the first day of the block at 8 am. A shift schedule will be provided via email near the time of orientation. Critical Care students will be assigned to clinic duty that correspond to the following times:

<b>Day shift</b> (8 am – 5 pm) = 9 hrs	<b>Weekend Day shift</b> (8 am – 5 pm) = 9 hrs
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Shifts may extend up to 10 hours depending upon case load and patient care needs.

All scheduled shifts require students to be physically present in the hospital to participate in patient care and client communication. This rotation operates 365 days a year, including all holidays. Students are scheduled a minimum of one day off per week.

Students are allowed to make shift schedule switches as long as they clearly mark the changes on the master calendar posted in the ICU and update the Course Coordinator (Dr. Smith). However, if a switch is made, and one student fails to show up for the shift, it is the original student’s responsibility.

#### Attendance / Lateness Policy:

Absences must be pre-approved by Dr. Smith. Special schedule requests should be made two weeks prior to the start of the rotation. Unexcused absences and tardiness will result in an incomplete grade and students will be required to repeat the rotation. Students may be required to make up any time missed during a rotation, no matter the cause. Missed days that are made up will not count towards the total allowable excused absences. Please see the Phase II attendance requirements below.

#### Natural Disasters (Hurricanes, etc.)

Hurricane Season officially runs from June 1<sup>st</sup> - Nov. 30<sup>th</sup>. The projected path of tropical storms/hurricanes are mapped by the National Hurricane Center: <http://www.nhc.noaa.gov/?atlc>. Please stay aware of impending storm systems. Staff and students of the VTH are "essential personnel" during disasters affecting our community. The clinic schedule and student responsibilities may change during such events. Students may be required to participate in VTH emergency response efforts depending upon need and safety. **Please check in with Dr. Smith daily beginning 72 hours prior to any storm landfall projected for Louisiana.** If you are asked to report for duty during an emergency, your personal safety is the number one

priority. Use common sense in your commute and alert Dr. Smith and the Small Animal ICU (225-578-9503) if you are unable to arrive safely.

Preparedness begins at home. Please view the section on hurricane preparedness on Moodle and make sure you and your household is prepared (also visit: <http://www.getagameplan.org/>).

### Home Football Games:

Travel to the VTH during football season can be an adventure. Here is some general advice for negotiating the obstacles.

1. Be sure to have your SVM identification badge with you.
2. Approach the SVM via River Road along the levee (rather than Highland Rd).
3. There should be staff, student, and client parking reserved in front of the building for those needing access to the hospital.
4. If there is no parking, contact the campus police officer on duty (225-578-9811) to permit access to the equine clinic parking and parking behind the Dean's office (behind the gate).

### **GRADING/EVALUATION:**

#### Faculty and House Officer Evaluations: (100 pts)

Students are evaluated by both supervising faculty and house officers regarding weekly case management, client communication, medical record keeping, time management, and active participation in patient discussions/planning/work up. Evaluations will be totaled and averaged to obtain a final point value. See Faculty/House Officer Grade Sheet at end of syllabus.

Students are evaluated regarding technical skills and participation in patient care.

Students are evaluated regarding their attendance, knowledge, and participation in all rounds sessions. Rounds will cover variable clinical topics based upon in-hospital cases and essential medical knowledge pertaining to the practice of critical care. Students are not required to attend rounds during their scheduled off days.

#### Assessment Scale:

The scale for all clinical competencies will be assessed as falling into one of the following categories:

**Exemplary:** Superior knowledge, performance, understanding, and/or attitude towards the focus area. Able to competently perform and apply concepts with little to no supervisory intervention.

**Expected:** Good knowledge, performance, understanding, and/or attitude towards the focus area. Able to competently perform and apply concepts with occasional supervised help and direction.

**Acceptable:** Adequate knowledge, performance, understanding, and/or attitude towards the focus area. Adequately competent to perform and apply basic concepts with regular supervision.

**Below expectation:** Poor knowledge, performance, understanding, and/or attitude towards the focus area. Not considered to be able to competently perform and apply basic concepts without intensive supervision.

#### Overall Grade Calculation:

Grades will be rounded to the nearest percentage point and are based on the standard LSU-SVM percentages:

A	90-100%
B	80-90%
C	70-79%
D	60-69%
F	< 60%

### **ASSIGNMENTS/RESPONSIBILITIES:**

#### Client Communication:

For hospitalized cases, students are part of the communication team providing clinical updates and updated information related to cost of care and other practical matters.

### Patient Care:

Students are responsible for performing and documenting the medical history and physical examination findings, and relaying that information to other team members and the medical record.

Students are responsible for assisting in case management under the supervision of the attending veterinarian and technical staff. This includes providing animal restraint for procedures, performing and assisting with technical procedures and diagnostic sample collection, requesting and organizing diagnostic procedures and medical treatments. Principles of triage should be applied in the context of providing optimal patient care and an expedited work flow.

Students are responsible for performing 8am treatments, QATs, and SOAPs for their patients for the duration of the patient's stay or until the end of the rotation. (See Continuity of Care)

### Medical Record Keeping:

Students are responsible for performing and documenting the medical history and physical examination findings via the medical record, and for relaying that information to other team members.

Students are responsible for writing ICU treatment orders daily to be approved, amended, and signed by the on-duty veterinarian.

Students are responsible for all medical record documentation, including writing case summaries for patient discharge or transfer. The medical record of all deceased animals should include a final summary.

**All such summaries must be less than 2 pages long when printed.**

### Continuity of Care

**At the end of each shift, critical care students must complete all paper work and make sure the ICU orders and medical records are complete.** Instructions and examples for these forms are located on Moodle.

If the rotation coincides with the end of a block in which student rotation en-mass takes place, it will be the responsibility of the critical care students to perform morning treatments, flow sheets, and assessments prior to 8 am in preparation for the cases to be transferred following block orientation.

## **COURSE CONTENT AND OUTLINE:**

This rotation will consist primarily of critical care daytime shifts in which you will admit and treat STATs emergency cases, as well as critical care patients hospitalized in the intensive care unit with the supervision of an attending veterinarian. Essential medical knowledge consists of basic physiology and pathophysiology, common complications of medical and surgical ICU patients, appropriate patient-specific monitoring parameters, and a systematic approach to complex medical conditions.

The flow of the clinic usually creates ample opportunity for self-study and technical training. During 'slow times' in the clinic, students will assist the ICU staff with patient care and create opportunities for learning technical skills.

## **OTHER RESOURCES:**

**Free Fluid Therapy Smartphone App:** <http://www.abbottanimalhealth.com/veterinary-professionals/products/fluid-therapy.html>  
**TARGET (Veterinary Antimicrobial Reference Guide):** <http://naccvp.com/?p=172>

## **SYLLABUS CHANGE POLICY:**

Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advanced notice.

## **GLOBAL POLICIES**

### **POSTINGS ON INTERNET/ SOCIAL NETWORKING SITES:**

Posting, releasing, or otherwise disclosing photos, identifiable case descriptions, images, or records related to the educational, clinical, or research activities of the LSU - School of Veterinary Medicine, outside of the LSU - School of Veterinary Medicine via social networking sites (e.g. MySpace, Facebook, Twitter, etc.) or via other than standard professional means of query and/or dissemination of educational, clinical, or research information is prohibited.

This policy applies to all students, faculty, staff, clients, and visitors of the LSU - School of Veterinary Medicine and to all activities of the LSU - School of Veterinary Medicine, on or off campus, related to veterinary clinical services and teaching and research labs. Pictures of animals (whether owned by University or client), and client information are strictly forbidden from being published or posted on social networking sites such as “Facebook”, “Twitter”, and “Myspace”; and non-educational blogs, message boards, or internet websites; without the prior approval from an appropriate Supervisor, Department Head, Director of the LSU – School of Veterinary Medicine Veterinary Teaching Hospital, or the Director of the Louisiana Animal Disease Diagnostic Laboratory. This policy is to promote the safety and privacy of students, faculty, staff, clients, and visitors. Failure to comply with this policy could result in damage to persons or property, may be a violation of legal, professional, and/or ethical obligations, and may result in disciplinary action by the LSU - School of Veterinary Medicine, up to and including dismissal.

### **PHOTOGRAPHS AND VIDEO OF PATIENTS:**

Photographs and video may be taken of patients for educational purposes (e.g., for use in abstracts, articles, and presentations). Any photographs and video for use by the media may not be taken without the express consent of the patient’s owner. Verbal consent by the animal’s owner is an acceptable means of gaining permission to photograph/video the patient. If a member of the media is present in the hospital and wishes to take background footage of clinicians and students working with animal, no close-up shots are permitted such that the animal would be identified by its owner. All media requests must be directed to the LSU – School of Veterinary Medicine Public Relations Coordinator.

### **ATTENDANCE REQUIREMENT**

All students in the Phase II curriculum may be allowed a maximum of six (6) excused absences (this may be days or portions thereof, depending on the desires of the block mentor and course coordinator) which require no form of remediation. Additional days, for the days of the examination only, will be allowed to take the North American Licensing Examination. Examples of excused absences that may be allowed are: job interviews, state board examinations, family emergencies, illness, and attendance of professional meetings.

The block mentor shall have the final authority on granting an excused absence. Resolution of a dispute over excused absences shall be the duty of the Associate Dean for Student Affairs. Block mentors will be encouraged to allow any necessary excused absence, however insufficient student numbers on a block may preclude the approval of an excused absence. A maximum of two excused absences will be allowed per four week block and one excused absence per two week block. If a student exceeds the number of excused absences allowed per block then remediation may be required to pass the block (such as additional assignments or making up time lost).

If a student misses more than 2 days in any block’s grading period, then remediation may be required. These missed days include boards and excused absences (i.e. travel to and from boards and the boards). All excused absences greater than the six days allowed may require remediation. A written notification to the Associate Dean for Student Affairs for approval will be required at least four weeks in advance in anticipation of any anticipated excused absence over 6, or as soon as possible after an unanticipated excused absence. The Course Coordinators will forward a copy of any excused absence to the VCS office for tabulation. A written confirmation of the absence may be required. A written excuse may be required. If a written excuse cannot be obtained, then the absence will be considered unexcused. Any unexcused absence will require remediation and/or possible failure of the block.

### **LSU SCHOOL OF VETERINARY MEDICINE ACADEMIC MISCONDUCT POLICY:**

The LSU Code of Student Conduct applies to the School of Veterinary Medicine within the Code is the Academic Misconduct Policy, which outlines the School of Veterinary Medicine expectations for the integrity of students’ academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the LSU Code of Student Conduct Policy and for living up to their pledge **not** to violate the Code.

- I. It shall be a violation of this Code for a student to cheat.
- II. It shall be a violation of this Code for a student to knowingly circumvent any course requirement.
- III. It shall be a violation of this Code for a student to steal.
- IV. It shall be a violation of this Code for a student to purposely impair another student's educational opportunity.
- V. It shall be a violation to act in a manner which is detrimental to the moral and ethical standards of the veterinary medical profession.
- VI. It shall be a violation for a student to knowingly deceive another student, faculty member, or

professional associate with the intent to gain advantage, academic or otherwise, for said student or for any other student.

- VII. It shall be a violation for any student to fail to report any infraction of the LSU Code of Student Conduct Policy to an appropriate representative.

The LSU Code of Student Conduct can be found at: <http://saa.lsu.edu/code-student-conduct>

### **GENERAL STATEMENT ON ACADEMIC INTEGRITY:**

Louisiana State University adopted the Commitment to Community in 1995 to set forth guidelines for student behavior both inside and outside of the classroom. The Commitment to Community charges students to maintain high standards of academic and personal integrity. All students are expected to read and be familiar with the LSU Code of Student Conduct and Commitment to Community, found online at [www.lsu.edu/saa](http://www.lsu.edu/saa). It is your responsibility as a student at LSU to know and understand the academic standards for our community.

Students who are suspected of violating the Code of Conduct will be referred to the office of Student Advocacy & Accountability. For undergraduate students, a first academic violation could result in a zero grade on the assignment or failing the class and disciplinary probation until graduation. For a second academic violation, the result could be suspension from LSU. For graduate students, suspension is the appropriate outcome for the first offense.

### **AMERICANS WITH DISABILITIES ACT:**

Louisiana State University is committed to providing reasonable accommodations for all persons with disabilities. The syllabus is available in alternate formats upon request.

Students with disabilities: If you are seeking classroom accommodations under the Americans with Disabilities Act, you are required to register with Disability Services (DS). DS is located in 115 Johnston Hall. Phone is 225/578-5919. **To receive academic accommodations for this class, please obtain the proper DS forms and meet with me at the beginning of the course.** The Office of Student and Academic Affairs can help you if you have questions as well.

<http://disability.lsu.edu/students>

### **SEXUAL HARASSMENT POLICY**

The University reaffirms and emphasizes its commitment to provide an educational and work environment free from sexual harassment and to provide a means to remedy sexual harassment that employees may have experienced. (PS-73 Sexual Harassment and PS-95 Sexual Harassment of Students)

The intent of this policy is to express the University's commitment and responsibility to protect its students from sexual harassment and from retaliation for participating in a sexual harassment complaint. It is not intended to infringe upon constitutionally guaranteed rights nor upon academic freedom. In considering allegations of sexual harassment, the University must be concerned with the rights of both the complainant and the accused.

All proven cases of sexual harassment shall result in appropriate disciplinary action. The severity of the disciplinary action shall be consistent with the seriousness of the act of sexual harassment. Additionally, under appropriate circumstances, the University may take action to protect its students from sexual harassment by individuals who are not students of the University. If the alleged harasser is a student, the Dean of Students Office must be notified of the complaint.

Student Advocacy & Accountability, Office of the Dean of Students, LSU Student Life & Enrollment, 340 LSU Student Union, Baton Rouge, LA 70803, Phone: (225) 578-4307 Fax: (225) 578-5637 [dossaa@lsu.edu](mailto:dossaa@lsu.edu)

### **COPY STATEMENT**

Some of the materials in this course are possibly copyrighted. They are intended for use only by students registered and enrolled in this course and only for instructional activities associated with and for the duration of the course. They may not be retained in another medium or disseminated further. They are provided in compliance with the provisions of the Teach Act (Section 110(1) of the Copyright Act) <http://www.copyright.gov/docs/regstat031301.html>.

**SVM INSTITUTIONAL LEARNING GOALS/OBJECTIVES:**

<b>AVMA - COE Competency</b>	<b>VMED 5463 Course Objective</b>	<b>Assessment Method</b>	<b>Teaching Method</b>
<b>Competency One:</b> Comprehensive patient diagnosis (problem solving skills), appropriate use of clinical laboratory testing, and record management			
1.2 Patient Assessment / Clinical Thinking Skills	1, 2	Oral patient presentation	Case-based discussion
1.3 Knowledge Base / Basic Pathophysiology	All	Oral patient presentation, case-based worksheets	Case-based discussion and worksheets
1.4 Diagnostic Skills/Clinical Laboratory Assessment	6, 7, 9	Oral patient presentation	Case-based discussion
1.5 Participation in Patient Discussions	1, 3, 7, 8, 10	Oral patient presentation	Case-based discussion
1.6 Medical Records	2, 3	Individual case-based critique	Case-based discussion
<b>Competency Two:</b> Comprehensive treatment planning including patient referral when indicated			
2.1 Treatment planning	4, 5, 7, 8, 10	Oral patient presentation, case-based worksheets	Case-based discussion and worksheets
2.2 Understanding Therapeutics / Availability	4, 5, 8, 10	Oral patient presentation, case-based worksheets	Case-based discussion and worksheets
<b>Competency Five:</b> Basic medicine skills, experience and case management			
5.1 Basic Medical Skills/ Case Management	All	Oral patient presentation, case-based worksheets	Case-based discussion
5.2 Medical Experience Gained Through Rotation	All	Oral patient presentation, case-based worksheets	Case-based discussion and worksheets
<b>Competency Six:</b> Emergency and intensive care case management			
6.1 Emergency Care Management	All	Oral patient presentation, case-based worksheets	Case-based discussion
6.2 Intensive Care Management	All	Oral patient presentation, case-based worksheets	Case-based discussion
6.3 Time Management	All	Individual case-based critique	Case-based discussion
<b>Competency Eight:</b> Client communications and ethical conduct			
8.1 Client Communication/Client Education/Discharge Summary	2, 3	Individual case-based critique	Case-based discussion
8.2 Working with Health Care Team	1, 2, 3	Individual case-based critique	Case-based discussion
8.3 Ethical Conduct	All	Individual case-based critique	Case-based discussion
8.5 Reliability / Thoroughness / Punctuality / Appearance	All	Individual case-based critique	Case-based discussion

## VMED 5463 SMALL ANIMAL CRITICAL CARE

### FACULTY / HOUSE OFFICER GRADE SHEET

**Student:** \_\_\_\_\_ **Block:** \_\_\_\_\_ **Dates:** \_\_\_\_\_

	Exemplary performance	Expected performance	Acceptable performance	Below Expectation
<b>Competency One:</b> Comprehensive patient diagnosis (problem solving skills), appropriate use of clinical laboratory testing, and record management				
1.2 Patient Assessment/Clinical Thinking Skills	8	7	6	5
1.3 Knowledge Base/Basic Pathophysiology	8	7	6	5
1.4 Diagnostic Skills/Clinical Laboratory Assessment	8	7	6	5
1.5 Participation in Patient Discussions	8	7	6	5
1.6 Medical Records/Discharge Summary	8	7	6	5
<b>Competency Two:</b> Comprehensive treatment planning including patient referral when indicated				
2.1 Treatment planning	8	7	6	5
2.2 Understanding Therapeutics/Availability	4	3	2	1
<b>Competency Five:</b> Basic medicine skills, experience and case management				
5.1 Basic medical skills/ Case Management	8	7	6	5
5.2 Medical experience gained through rotation	4	3	2	1
<b>Competency Six:</b> Emergency and intensive care case management				
6.1 Emergency Care Management	8	7	6	5
6.2 Intensive Care Management	8	7	6	5
6.3 Time Management	4	3	2	1
<b>Competency Eight:</b> Client communications and ethical conduct				
8.1 Client Communication/Client Education	4	3	2	1
8.2 Working with Health Care Team	4	3	2	1
8.3 Ethical conduct	4	3	2	1
8.5 Reliability/Thoroughness/Punctuality/Appearance	4	3	2	1
<b>Total Score:</b>				<b>/ 100</b>

FACULTY / HOUSE OFFICER \_\_\_\_\_

FINAL GRADE: \_\_\_\_\_

COURSE COORDINATOR \_\_\_\_\_