

COURSE SYLLABUS

Surgery and Anesthesia

CVM 7035

Credit Hours 2

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Course Location:

Banfield Veterinary Clinical Center Hospital (BVCC)
Orange Veterinary Hospital (OVH), 1100 W. Chapman Ave, Orange, CA 92868 (one Tuesday or Thursday per course)
MDC Laboratory, CVM building

Course Description: (Course Purpose, aims/goals)

Whether you are afraid of a scalpel blade or an anesthetic machine or can't wait to hold one or use one, this is the course for you to learn to perform surgery and anesthesia with skill and confidence. Doing so will result in the most humane management of your patients. As a compassionate veterinarian, this will result in significantly less work-related stress and enhance your marketability as a future employee. How will you achieve this serenity? In many cases, the lack of confidence that occurs with surgery and anesthesia is due to a lack of anatomical and physiological knowledge and simple lack of experience. Combine that with the thought that your patient's life is in your hands, and you have a recipe for increased cortisol! You have completed the Clinical Skills course in your freshman and sophomore years. In this course, you will have the opportunity to apply that previous knowledge and to observe, perform and model basic surgical procedures and anesthetic delivery and monitoring in the laboratory and clinical setting. This will increase both anatomical and physiological knowledge and psychomotor skill experience levels. All activities will occur under the supervision of experienced faculty and staff so that constructive, supportive feedback can be provided. Complications that can and might occur will be observed and discussed in this safe environment setting. Failure can sometimes be the first step to success!

TEACHING GOALS:

1. By the end of this course, students will have a basic or even higher level of confidence in their surgery and anesthesia skills.
2. By the end of this course, students will be aware of methods to continue to enhance their confidence and skills throughout their careers.

Learning Objectives: (Supporting The Course Purpose)

At the end of the course the student will:

For Teaching Goal 1:

- Rate their initial level of surgical skill and confidence (Appendices C & F).
- Demonstrate their initial level of surgical skill and confidence (Appendices A & B).
- Observe multiple resources regarding surgical procedures (including faculty / staff demonstrations, DVD's, textbooks, Banfield modules) and replicate those techniques.
- Discuss and may observe complications that can occur with surgical patients.
- Rate their level of surgical skill and confidence at the end of the course (Appendices C & F).
- Be assessed on their level of surgical knowledge, skill and confidence during the course (Appendices A & B and mid-block / final exams).
- Perform anesthesia, including preparation of equipment, assessment of patient anesthetic risk, anesthetic protocol construction, induction / maintenance / monitoring of anesthesia, anesthetic recovery and pain management (Appendix D).
- Observe multiple resources regarding humane patient management (including faculty / staff demonstrations, DVD's, textbooks, Banfield BLC modules) and replicate those techniques.

For Teaching Goal 2:

- Observe multiple surgical resources and discover which best applies to their learning style
- Design a plan for continuing skill and confidence development (Appendix C).

LEARNING EXPERIENCES:

Orientation Day:

- 8 - 9 AM Monday: Students will observe a basic orientation to the BVCC hospital where the rotation activities will occur.

- 9AM- noon Monday:
 - Students will discuss potential complications that might occur in patients undergoing anesthesia and surgery.
 - Students will individually rate their level of surgical skill and confidence on a form provided.
 - Multiple surgical resources will be provided and discussed. The group will be encouraged to share and critically evaluate their resources.
 - Students will demonstrate their surgical skills on models.
 - All discussions during this rotation can be continued and/or initiated on Blackboard in the course folder which will be monitored daily by the course director.
- 1 - 4 PM Monday: Students will participate in orientation to anesthetic & pain management agents and equipment, anesthetic monitoring equipment and procedures necessary for anesthesia such as IV catheter placement, endotracheal intubation

Clinical Surgery & Anesthesia Days

- Students will apply skills they've previously learned to live patients in order to examine, assess and prepare them for anesthesia and surgery (any course day)
- Students will perform basic anesthesia and surgery procedures. (W, F, M, W, F course days)
- Students will discuss their cases with the course director, course instructors and other group members to develop learning issues and discuss resources.
- Students will discuss and may observe complications occurring in patients.
- Students will record their cases in a log.

Surgical Anatomy (Week 1 & 2, Tues & Thurs):

- Students will apply skills they've learned to model and cadaver patients.
- Students will perform basic surgical procedures on models and possibly cadavers.
- Students will have the opportunity to use the models and possibly cadavers as a learning resource for application to the live patient.

Course Policies and Procedures: (Attendance/Dress Code etc. – specific to course)

Attendance

Attendance is mandatory on all days of the course. If a student needs to be absent, she/he must contact the course director in advance and obtain approval. For anticipated absences, contacting the course director by e-mail is appropriate. In emergency situations students should contact the course director via telephone; if this person cannot be reached, the student should contact Western University (Receptionist 909-469-5628; or Administrative Assistants for Clinical Programs 909-469-5590; or 909-469-5582), who will then notify the course director as soon as possible. Excused absences are generally granted in extenuating circumstances beyond the student's control (e.g., need to observe religious holidays, severe illness, death in the family); however, this time may need to be made up during the course (e.g., on Saturday or Sunday if the clinical site is open) or at another time. Students with unexcused absences are required to make up the absence and their course and course grade may be affected.

Honor Code

In compliance with the University and College requirements and recommendations and accessible in the Catalogue.

Students with Special Needs

Students in need of disability accommodations are encouraged to contact the Center for Disability Issues & the Health Professions (CDIHP) office: 909- 469-5380). This office will coordinate reasonable accommodations for students with disabilities documented *prior to the beginning of the course*. Retroactive disability-related accommodations will not be granted. Students needing accommodations should notify the course director before the course begins so that appropriate arrangements can be made.

Equipment/Clothing

The student should possess at all times the following equipment items: DAISIE suturing model, stethoscope, pen light, plexor hammer, digital thermometer, bandage scissors, hemostats, and suture scissors. A calculator may also be useful.

Clothing items needed include 3 white receiving jackets or laboratory coats and 2 scrub suits.

EQUIPMENT: There will be a fee charged to students to cover cost of lost or damaged instruments. This fee will be returned to students (minus any charges) at the end of the rotation when a complete inventory has been turned in to the course director. Fees will be established by the Phase & Course Director.

Professional Appearance

Professional dress is required at all times since you ++are representing Western University to the world and you/we will be judged, in part, on the basis of your appearance. Failure to dress professionally will result in a warning and the requirement to change immediately to appropriate attire.

Shorts, jeans, athletic clothing (e.g., sweatsuits, items made of lycra or spandex), open-toed shoes, and sandals are not appropriate dress at any time (for safety and/or professional appearance reasons).

Students should wear a clean, white receiving jacket (or white laboratory coat) with your Western University name tag at all times. In addition, the student should always have an extra receiving jacket with you each day since accidents may happen.

If a student wears scrubs outside the surgical procedures area of the hospital, he/she must also wear a white receiving jacket over them at all times. This is to facilitate sterility of the surgical suite.

Professional Attitude/Behavior

A courteous, professional attitude is expected at all times during the course. Reluctance to help fellow classmates, to take on responsibilities of case management, or to participate in any necessary activity could result in failure of the course.

Cleaning and Patient Care:

- 1) Students are responsible for their patients through discharge including cleaning kennel, food/water and walking.
- 2) Students are responsible for cleaning, wrapping and autoclaving their surgical packs throughout the day.
- 3) Students are responsible for laundry generated during the day.
- 4) Students are responsible for assisting in clean up at the end of the day including, but not limited to: wiping down equipment and exam tables, sweeping and mopping floors.
- 5) Students are responsible for cleaning / reorganizing any models used during the course.

Assessment: (Grades/Rubric/Exam)

EVALUATION/GRADING OF THE COURSE:

1. Students' cognitive surgical & anesthesia knowledge will be assessed with the mid-block and final examination.
 - 10% Mid-course exam (5% surgery & 5% anesthesia): 45 minute written exam including possible multiple choice, short answer, essay; occurs at the end of the first week of the course
 - 40% Final Exam (20% surgery & 20% anesthesia): 2 hour written exam including possible multiple choice, short answer, essay; occurs during the on-campus exam weeks
2. Students' psychomotor skill level will be assessed with constructive feedback provided using a feedback tool (Appendices A, B and D). The student will complete the tool for each procedure. Course directors or instructors will evaluate the students' tools. Each students' ratings will be considered and an overall score assigned based on the following guidelines:
 - Rating of 1 (novice) on the feedback tool = <65 % (0 / 15) = F
 - Rating of 2 (advanced beginner) on the feedback tool = 65 (9.75 / 15) = F
 - Rating of 3 (competent) on the feedback tool = 80 (12 / 15)
 - Rating of 4 (proficient) on the feedback tool = 90 (13.5 / 15)
 - Rating of 5 (expert) on the feedback tool = 100 (15 / 15)

The overall score will then be converted to a score out of 15% for surgery & 15% for anesthesia (30% of total grade). For example, a student scoring 4 in surgery will accrue 13.5 / 15 points toward their final grade.

3. Students will perform self-assessment of their surgical skills (Appendix C) and confidence (Appendix F) on orientation day and on the last rotation day. At the end of the rotation, students will develop a plan to continue to enhance their surgical skills and confidence. The course director will evaluate the students' tools and an overall score (10%) will be assigned based on the following guidelines:
 - Rating of 1 (novice) on the feedback tool = <65 % (0 / 10) = F
 - Rating of 2 (advanced beginner) on the feedback tool = 65 (6.5 / 10) = F
 - Rating of 3 (competent) on the feedback tool = 80 (8 / 10)
 - Rating of 4 (proficient) on the feedback tool = 90 (9 / 10)
 - Rating of 5 (expert) on the feedback tool = 100 (10 / 10)
4. Students will write surgical and anesthesia reports for all patients; these will be assessed using Appendix E. The course director and instructors will evaluate the students' tools and an overall score (5% surgery, 5% anesthesia) will be assigned based on the following guidelines:
 - Rating of 1 (novice) on the feedback tool = <65 % (0 / 5) = F
 - Rating of 2 (advanced beginner) on the feedback tool = 65 (3.25 / 5) = F
 - Rating of 3 (competent) on the feedback tool = 80 (4 / 5)
 - Rating of 4 (proficient) on the feedback tool = 90 (4.5 / 5)
 - Rating of 5 (expert) on the feedback tool = 100 (5 / 5)

Assessment will be combined 55% surgery and 45% anesthesia. A passing grade (>65%) must be earned in each of the four categories and individually in surgery and anesthesia in order to pass the course. Remediation is at the discretion of the course director.

Summary:

10% Mid-course exam (5% surgery & 5% anesthesia) (Blackboard and/or BVCC)

40% Final exam (20% surgery & 20% anesthesia) (during on campus exam week)

30% Clinical Skills (15% for surgery & 15% for anesthesia)

10% Self-assessment of surgical skills / confidence & Future Plan Development (surgery)

10% Surgery reports / Anesthesia record (5% surgery, 5% anesthesia)

TOTAL = 100% (55% surgery, 45% anesthesia)

Final Grade:

100-90=A ; 89-80=B; 79-70=C; 69-65=D; <65=F/U

Case Logs/Clinical Skills Documentation

As for other Phase II courses, students are required to enter patients encountered during CVM 7035 in their case log. You are required to complete a daily log of all cases you manage during the course. Clinical Skills are also documented in association with each case log. Be sure to complete this section as it provides you with a record of skills performed and the College uses this to document clinical skills acquisition for accreditation purposes. Please note that the case logs and clinical skills documentation are due at 8:00 AM on the Monday following the end of each course. Case logs submitted later than 8:00 AM on Monday following the course will have a 10% reduction in the overall score (based on 100 points) remove.

Course Schedule:

Monday: 8am-5pm/Orientation /Banfield Veterinary Clinical Center (BVCC); Student roles determined (surgeon, assistant surgeon, anesthetist); Teams will alternate roles on a daily or procedural basis; 8-9AM Hospital orientation (Surgery / Anesthesia technicians); 9AM - noon Surgery orientation & mock surgeries (Dr. Fahie & surgery technician); 1-4PM Anesthesia orientation (Dr. Lee & anesthesia technician); 4-5PM Student-directed. Complete self-assessment (Appendix C & F).

Tuesday: 8am-5pm: Care of Surgical Patients / Transfer of Surgical Patients from Shelter Medicine students / course directors; Study time / Model procedures; Preparation of anesthetic & surgical plan for following day. Two students go to Orange Veterinary Hospital (8:30 to 4PM) with Dr. Fahie (other 4 students take over their patient care for the day).

Wednesday: 8am-5pm /Surgery & Anesthesia in BVCC; 8-9AM Anesthesia prep / induction; 9AM-3PM Student Surgery time (no sedation after noon without course director consent); 3-4PM Surgery Rounds; 4-5PM Student - directed

Thursday:8am-5pm: Care of Surgical Patients / Transfer of Surgical Patients Shelter Medicine students / course directors Study time / Model procedures; Preparation of anesthetic & surgical plan for following day. Two students go to Orange Veterinary Hospital (8:30 to 4PM) with Dr. Fahie (other 4 students take over their patient care for the day).

Friday: 8am-5pm/ Surgery & Anesthesia in BVCC; 8-9AM Anesthesia prep / induction; 9AM-3PM Surgery time (no sedation after noon without course director consent); 3-4PM Anesthesia Rounds; 4-5PM Student -directed; Mid-block Course Evaluation feedback (Appendices A,B,C,D & E).

Monday: 8am-5pm/ Surgery & Anesthesia in BVCC; 8-9AM Anesthesia prep / induction; 9AM-3PM Surgery time (no sedation after noon without course director consent); 3-4PM Surgery Rounds; 4-5PM Student -directed

Tuesday:8am-5pm: Care of Surgical Patients / Transfer of Surgical Patients Shelter Medicine students / course directors; Study time / Model procedures; Preparation of anesthetic & surgical plan for following day. Two students go to Orange Veterinary Hospital (8:30 to 4PM) with Dr. Fahie (other 4 students take over their patient care for the day).

Wednesday: 8am-5pm / Surgery & Anesthesia in BVCC; 8-9AM Anesthesia prep / induction; 9AM-3PM Surgery time (no sedation after noon without course director consent); 3-4PM Anesthesia Rounds; 4-5PM Student -directed

Thursday: 8am-5pm: Study time / Model procedures; Transfer of Surgical Patients Shelter Medicine students / course directors

Friday: 8am-5pm / Surgery & Anesthesia in BVCC; 8-9AM Anesthesia prep / induction; 9AM-3PM Surgery time (no sedation after noon without course director consent); 3-5PM Surgery / Anesthesia rounds & clinical skills evaluation feedback & Future plan development & Course Evaluation Feedback (Repeat Appendix C & F; receive feedback with Appendix A, B, D, E).

On Surgery days (W,F,M,W,F), the course director or any course instructor may intervene with the surgeon, assistant surgeon or anesthetist to facilitate speed of the procedure if required for the patient's well being or due to scheduling.

Resources:

There are no required textbooks for this course, however there are multiple suggested resources, and group discussions will hopefully generate knowledge of additional resources each time the course is delivered.

Suggested resources:

- Blackboard CVM 7035 Course Folder
- Blackboard CVM Virtual Resource Center (Surgery & Anesthesia folders)
- Slatter D. Textbook of Small Animal Surgery, 3rd ed. 2003 WB Saunders; ISBN 0-7216-8607-9
- Bojrab MJ. Current Techniques in Small Animal Surgery, 3rd ed. 1990 Lea & Febiger; ISBN 0-8121-1193-1
- Bojrab MJ. Disease Mechanisms in Small Animal Surgery, 2nd ed. 1993 Lea & Febiger, ISBN 0-8121-1491-4
- Fossum T. Small Animal Surgery, 2nd ed. 2002 Mosby; ISBN 0-323-01238-8.
- Harari J. Surgical Complications & Wound Healing in the Small Animal Practice, 1993, WB Saunders. ISBN 0-7216-3984-4.
- Smith MM, Waldron D. Atlas of Approaches for General Surgery of the Dog and Cat, 1993, WB Saunders. ISBN 0-7216-3515-6.
- Piermattei DL, Johnson KA. An Atlas of Surgical Approaches to the Bones and Joints of the Dog and Cat, 2004, WB Saunders. ISBN 0-7216-8707-5.
- Evans HE. Miller's Anatomy of the Dog
- Kern EB, Sherris DA. Essential Surgical Skills with CD (human text with basic techniques that apply for all species)
- Hall, Clarke and Trim. Veterinary Anaesthesia (2000) Saunders
- Tranquilli, Thumon, Grimm (eds) Lumb and Jones. Veterinary Anesthesia and Analgesia (2007) Blackwell
- Muir, Hubbel, Bednarski. Handbook of Veterinary Anesthesia (2006) Mosby
- <http://vam.anest.ufl.edu> (Virtual Anesthetic Machine Simulations)
- Banfield modules found online or via Blackboard link:
 - Anesthesia for the Pet Practitioner, Novak, Banfield, The Pet Hospital
 - Anesthesia Equipment & Monitoring BLC/Quiz
 - Aseptic Technique & Surgical Prep I & II BLC/Quiz
 - ECG Training/Recognizing and Treating Arrhythmias BLC/Quiz
 - Manual Differentials BLC/Quiz

Appendices

Appendix A: Surgical Skills Feedback Tool - Perform OHE

1 = Novice; doesn't meet expectations; demonstrates positive evidence <10% of the time

2 = Advanced Beginner; minimally meets expectations; demonstrates positive evidence 10-49% of the time

3 = Competent; meets expectations of 3rd year student; demonstrates positive evidence 50-70% of the time

4 = Proficient; exceeds expectations of 3rd year student; demonstrates positive evidence 70-90% of the time

5 = Expert; exceeds expectations & does not require supervision; demonstrates positive evidence more than 90% of the time

For Self-Assessment: In surgery, I ...

For Others to Assess: In surgery, the student demonstrates the following:

POSITIVE EVIDENCE	NEGATIVE EVIDENCE
APPROACH	APPROACH
Understand and apply principles of sterile technique	Unable to explain reasoning behind sterile techniques
Can explain justification for choices / decisions in applying sterile technique	Unable to apply sterile technique
Plan surgical technique in advance & has multiple plans in case of complications	Arrives unprepared for surgery
Can explain choice of technique	Unable to proceed if a problem occurs with original plan
Choose appropriate location for initial incision	Unable to correctly identify anatomic landmarks for approach
Make initial incision with correct surgical technique & appropriate tissue handling	Incorrect use of scalpel blade / thumb forceps
Gentle tissue handling during blunt dissection to linea	Makes multiple attempts to hold tissues with instruments
Make linea incision with correct surgical technique & appropriate tissue handling	Unable to proceed past hesitancy & reluctance to perform procedure
Perform hemostasis as indicated	Too gentle with tissues, resulting in greater tissue trauma due to multiple attempts
Completes approach within 5 minutes	Wipes with gauze 4X4's instead of blotting for hemorrhage control & visualization
PROCEDURES	Linea incision not on midline or not fully perforated
Identify visible abdominal organs	Accidentally perforated other organs during linea incision
Identify ovarian pedicle using correct surgical technique & appropriate tissue handling & within 5 minutes	Unable to identify anatomic structures visible
Identify & break suspensory ligament (when necessary) with correct surgical technique & appropriate tissue handling	PROCEDURES
Plan & place hemostatic forceps in	Unable to problem solve finding uterus / ovary

preparation for ligature of ovarian pedicle	
Can justify ligature choices	Unable to break suspensory ligament without abnormal hemorrhage
Demonstrate proper strength & tissue & suture handling during ligation	Unable to justify ligature type / suture material choice
Justify choices of ligature material and technique	Incorrect placement of clamps / ligatures
Complete ligation of ovarian pedicle within 5 minutes	Ligature unsuccessful to prevent hemorrhage
Can explain & perform modifications to the plan if complications arise.	Lacks time efficiency for approach / procedures / wound closure
Find opposite uterine horn & ovary within 5 minutes.	CLOSURE
Repeat steps above within 5 minutes.	Unable to justify choice of suture pattern / material for closure
Prepare & perform uterine body ligation within 5 minutes	Incorrect choice of suture pattern / material
Justify choices of ligature material and technique	Incorrect linea apposition
CLOSURE	Incorrect skin apposition
Perform wound closure with appropriate technique & choice of suture materials & pattern	GENERAL
Justify choices of ligature material and technique	Frequently requires supervisor to provide answers / suggestions
Perform wound closure within 20 minutes.	Unable to prioritize patient needs versus own nervousness, hesitation, distraction
GENERAL	Lack of dexterity
Capable of teaching others	
Calm, cool, collected	
Can focus with distraction	
Can anticipate potential problems	
Can generate a set of solutions to problems encountered	
Perform independently, needing little guidance	
Presence of dexterity	

Appendix B: Surgical Skills Feedback Tool - Perform Castration

1 = Novice; doesn't meet expectations; demonstrates positive evidence <10% of the time

2 = Advanced Beginner; minimally meets expectations; demonstrates positive evidence 10-49% of the time

3 = Competent; meets expectations of 3rd year student; demonstrates positive evidence 50-70% of the time

4 = Proficient; exceeds expectations of 3rd year student; demonstrates positive evidence 70-90% of the time

5 = Expert; exceeds expectations & does not require supervision; demonstrates positive evidence more than 90% of the time

For Self-Assessment: In surgery, I ...

For Others to Assess: In surgery, the student demonstrates the following:

POSITIVE EVIDENCE	NEGATIVE EVIDENCE
APPROACH	APPROACH
Understand and apply principles of sterile technique	Unable to explain reasoning behind sterile techniques
Can explain justification for choices / decisions in applying sterile technique	Unable to apply sterile technique
Plan surgical technique in advance & has multiple plans in case of complications	Arrives unprepared for surgery
Can explain choice of technique	Unable to proceed if a problem occurs with original plan
Choose appropriate location for initial incision	Unable to correctly identify anatomic landmarks for approach
Make initial incision with correct surgical technique & appropriate tissue handling	Incorrect use of scalpel blade / thumb forceps
Gentle tissue handling during blunt dissection to linea	Makes multiple attempts to hold tissues with instruments
Make scrotal / pre-scrotal incision with correct surgical technique & appropriate tissue handling	Unable to proceed past hesitancy & reluctance to perform procedure
Perform hemostasis as indicated	Too gentle with tissues, resulting in greater tissue trauma due to multiple attempts
Completes approach within 5 minutes	Wipes with gauze 4X4's instead of blotting for hemorrhage control & visualization
PROCEDURES	Unable to identify anatomic structures visible
Identify testicular pedicle using correct surgical technique & appropriate tissue handling & within 5 minutes	
Identify & expose parietal tunic with correct surgical technique & appropriate tissue handling	PROCEDURES
Plan & place hemostatic forceps in preparation for ligature of testicular pedicle	Unable to expose parietal tunic without abnormal hemorrhage
Can justify ligature choices	Unable to justify ligature type / suture material choice
Demonstrate proper strength & tissue &	Incorrect placement of clamps / ligatures

suture handling during ligation	
Justify choices of ligature material and technique	Ligature unsuccessful to prevent hemorrhage
Complete ligation of testicular pedicle within 5 minutes	Lacks time efficiency for approach / procedures / wound closure
Can explain & perform modifications to the plan if complications arise.	CLOSURE
CLOSURE	Unable to justify choice of suture pattern / material for closure
Perform wound closure with appropriate technique & choice of suture materials & pattern	Incorrect choice of suture pattern / material
Justify choices of ligature material and technique	Incorrect apposition
Perform wound closure within 10 minutes.	GENERAL
GENERAL	Frequently requires supervisor to provide answers / suggestions
Capable of teaching others	Unable to prioritize patient needs versus own nervousness, hesitation, distraction
Calm, cool, collected	Lack of dexterity
Can focus with distraction	
Can anticipate potential problems	
Can generate a set of solutions to problems encountered	
Perform independently, needing little guidance	
Presence of dexterity	

Appendix C: Self-assessment Skills Feedback Tool

1 = Novice; doesn't meet expectations; demonstrates positive evidence <10% of the time

2 = Advanced Beginner; minimally meets expectations; demonstrates positive evidence 10-49% of the time

3 = Competent; meets expectations of 3rd year student; demonstrates positive evidence 50-70% of the time

4 = Proficient; exceeds expectations of 3rd year student; demonstrates positive evidence 70-90% of the time

5 = Expert; exceeds expectations & does not require supervision; demonstrates positive evidence more than 90% of the time

For Self-Assessment: In surgery, I ...

For Others to Assess: In surgery, the student demonstrates the following:

POSITIVE EVIDENCE	NEGATIVE EVIDENCE
Aware of my personal learning style	Do not recognize my weaknesses
Critically appraise my performance	Do not recognize my strengths
Critically consider how my thinking changes as new knowledge is acquired	Do not learn from my mistakes or those of others
Aware of my strengths and I acknowledge them	Only gauge my performance by exam grades
Aware of my weaknesses and I acknowledge them	Do not welcome feedback
Investigate my role in all outcomes, good and bad	Unable to avoid a defensive reaction when offered feedback
Take personal responsibility for actions and outcomes	Unapproachable with feedback
Generate plans for improvement based on feedback	Do not incorporate feedback into an action plan
Act on generated plans for improvement	Have unrealistic goals
	Have unmeasurable goals
	Do not follow through on action plans

FUTURE PLAN (to be completed at end of rotation):

Goal (Skill wished to enhance / achieve):

Proposed mechanism(s) of skill acquisition (goal achievement):

Goal (Skill wished to enhance / achieve):

Proposed mechanism(s) of skill acquisition (goal achievement):

Goal (Skill wished to enhance / achieve):

Proposed mechanism(s) of skill acquisition (goal achievement):

Goal (Skill wished to enhance / achieve):

Proposed mechanism(s) of skill acquisition (goal achievement):

Goal (Skill wished to enhance / achieve):

Proposed mechanism(s) of skill acquisition (goal achievement):

Goal (Skill wished to enhance / achieve):

Proposed mechanism(s) of skill acquisition (goal achievement):

Appendix D: Anesthesia Skills Feedback Tool

1 = Novice; doesn't meet expectations; demonstrates positive evidence <10% of the time

2 = Advanced Beginner; minimally meets expectations; demonstrates positive evidence 10-49% of the time

3 = Competent; meets expectations of 3rd year student; demonstrates positive evidence 50-70% of the time

4 = Proficient; exceeds expectations of 3rd year student; demonstrates positive evidence 70-90% of the time

5 = Expert; exceeds expectations & does not require supervision; demonstrates positive evidence more than 90% of the time

For Self-Assessment: When performing anesthesia, I ...

For Others to Assess: When performing anesthesia, the student demonstrates the following:

POSITIVE EVIDENCE	NEGATIVE EVIDENCE
Understand and apply principles of anesthesia	Unable to explain reasoning behind principles of anesthesia
Can explain justification for choices & decisions made in anesthetic protocol development	Unable to justify choices
Plan anesthetic protocol in advance & has multiple plans in case of complications	Arrives unprepared for anesthesia
Can explain choice of technique	Unable to proceed if a problem occurs with original plan
Anticipate complications and prepared to act if they occur	Unable to interpret patient and patient data to determine whether a complication is occurring
Interprets patient and patient data from equipment to adjust to patient needs throughout procedure	Unaware of potential complications
Understand and apply principles of pain management	Unaware of principles of pain management
Remain focused and execute appropriate support in critical circumstances	Makes irrational decisions under pressure
Maintain sterile technique during anesthesia in surgery	Breaks sterile technique during anesthesia in surgery
Maintain accurate anesthetic record	Medical record documentation incomplete or incorrect

Appendix E: Surgery / Anesthesia Record Feedback Tool

1 = Novice; doesn't meet expectations; demonstrates positive evidence <10% of the time

2 = Advanced Beginner; minimally meets expectations; demonstrates positive evidence 10-49% of the time

3 = Competent; meets expectations of 3rd year student; demonstrates positive evidence 50-70% of the time

4 = Proficient; exceeds expectations of 3rd year student; demonstrates positive evidence 70-90% of the time

5 = Expert; exceeds expectations & does not require supervision; demonstrates positive evidence more than 90% of the time

For Self-Assessment: My medical records are ...

For Others to Assess: When writing medical records, the student demonstrates the following:

POSITIVE EVIDENCE	NEGATIVE EVIDENCE
Factually correct; Accurate	Missing facts
Complete	Data not recorded accurately
Legible	Illegible
Without typographical errors	Typographical errors
Inclusive of appropriate terminology for anatomy	Anatomic terminology errors
Inclusive of appropriate terminology for instruments	Incorrect instrumentation documented
Inclusive of appropriate terminology for procedures	Incorrect documentation of procedures performed
Time recorded accurately	Time incorrectly recorded or not recorded
Drugs and calculations recorded accurately	Drugs and calculations not recorded correctly
Inclusive of complications or problems that occurred	Complications or problems not recorded

Appendix F: Surgical Skill Confidence

For which items do you have confidence in your skills?

	Confident	Unconfident
Dog spay		
IV catheter placement		
Surgical Anatomy		
DAISIE model		
Dog neuter		
Cat spay		
Cat neuter		
Anesthesia/pain mgt.		