

# ANSC 261L

---

Anesthesiology and Veterinary Dentistry for  
Veterinary Technicians Lab

**Course Syllabus and Handbook**  
**Spring 2018 (CRN 62222 & 62223)**

Name: \_\_\_\_\_

# **ANSC 261L: Anesthesiology and Dentistry for Veterinary Technicians**

## **CRN 62222 and CRN 62223**

Instructor: Amy Compton, DVM  
Assistant: Kathleen Baxter, RVT  
Office: Hale Kako'o 127  
Office Hours: By appointment  
Office phone: 236-9241  
Email: [comptona@hawaii.edu](mailto:comptona@hawaii.edu)  
[kabaxter@hawaii.edu](mailto:kabaxter@hawaii.edu)  
Effective Date: Spring 2018

### **Catalog Description**

This course will focus on the clinical skills necessary for safe and effective anesthesia and dental prophylaxis of companion animal patients (dogs and cats). Skills such as intravenous catheter placement, endotracheal intubation, patient preparation and monitoring, and dental prophylaxis under general anesthesia will be stressed. The use and side effects of commonly used sedatives, analgesics and anesthetics will be covered. Postoperative procedures include patient monitoring and charting as well as client education for postoperative care. (6 hours laboratory)

Pre-Requisite(s): Admission in the Veterinary Technology program.

Co-Requisite(s): Co-registration in ANSC 261.

**Activities Required at Scheduled Times Other than Class Times:** Students will be expected to rotate through some duties outside of the scheduled class time. These will include arriving prior to the beginning of lab to help admit patients and set up; staying after lab to clean up or discharge patients. If fulfilling one of these obligations represents an undue hardship, arrangements for accommodations and alternative duty must be made with the instructor by the second week of class. Students should also note that although the laboratory session is scheduled to conclude at 2:45pm, this is a patient care situation and running late is very common. Students will be required to stay until all their responsibilities for the day are taken care of. Excuses will not be granted for scheduled work, meetings, classes or other commitments. It is suggested that you plan for the lab to take the entire day to avoid having to reschedule other obligations.

### **Student Learning Outcomes**

Upon completion of the course, the student will be able to:

- Safely and effectively manage patients during all phases of anesthetic procedures.
- Safely and effectively select, operate and maintain anesthetic delivery equipment and monitoring instruments.
- Safely and effectively operate and maintain dental equipment.
- Understand and integrate all aspects of patient management for common dental procedures in companion animal species.
- Identify and provide appropriate instruments, supplies and environment to maintain asepsis during dental procedures.

## Course Content

- Commonly used anesthesia and dental equipment
- Proper collection and handling of laboratory specimens
- Laboratory safety (OSHA, SDS)
- Anesthetic protocols
- Anesthetic monitoring
- Dental anatomy of various species
- Dental disease

## Course Tasks

- Attend labs weekly as scheduled
- Be familiar with lecture content and other course materials prior to coming to lab
- Complete all required assignments
- Complete all required skills for the course
- Take the laboratory practicum

## Assessment Tasks and Grading

### **METHOD OF GRADING – ANSC 261L**

In order to receive a passing grade for ANSC 261L, the student **must do** all of the following, **no exceptions**:

- Complete all required assignments
- Take all assessments/practicum
- Have all required clinical skills for the laboratory section in the Accreditation Manager checked off

### **POINT VALUES**

- Attendance - 100 points
- Clinical Skills – 100 points
- Laboratory exercises and assignments – 100 points
- Practicum – 100 points

**Clinical Skills:** Students will be graded on clinical competency and improvement throughout the course. Some of the criteria for this score include:

- Performs skills competently and fluently
- Has good knowledge base for skills
- Shows improvement
- Is organized and ready to go
- Does calculations correctly

**Assignments:** Assignments may be given throughout the course. Each assignment will be clearly labeled if it is required, optional, take-home or in lab, point value etc. Unannounced quizzes may be administered at the beginning of lab to determine whether the student has the necessary knowledge to do a procedure.

**Exams:** A practicum will be given with a total point value of 100. Identification and proper use of dental and anesthetic equipment, proper drawing up and logging of drugs, and other skills will be covered.

## GRADING SCALE

### Total Points and Grade Equivalent

>/= 360	A
320-359	B
280-319	C
240-279	D
<240	F

### Policy on Make-Up Exams:

Students must take the practicum at their scheduled time. Make-Ups cannot be offered. **No retests will be given for any reason.**

## ACADEMIC DISHONESTY

**Students involved in academic dishonesty will receive an "F" grade for the course.**

Academic dishonesty includes cheating on exams and plagiarism. See the 2015-2017 course catalog for a description of the University's policies concerning academic dishonesty.

## Student Responsibilities

- The student is expected to participate in all course activities and complete all examinations and course assignments on time.
- Any changes in the course schedule, such as examination dates, deadlines, etc., will be announced ahead of time in class or on the Laulima website. It is the student's responsibility to be informed of these changes.
- It is the student's responsibility to be informed about deadlines concerning registration (e.g., last day for withdrawal).
- Communication: The instructor will communicate with students through email, the Laulima website and announcements in lab. It is the student's responsibility to be informed of any announcements made when the student is absent.
- It is the student's responsibility to obtain copies of any assignments handed out when the student is absent.
- It is the student's responsibility to be aware of and follow all rules, policies and procedures as stated in the syllabus, the laboratory handbook, signs posted in the Annex, the WCC Vet Tech Student Handbook (see additional information below), or via other written communication by the instructor. Failure to follow rules, or any UH/WCC policies, will result in a point deduction or failure of the course, as determined by the instructor. The instructor reserves the right to change, modify or add to rules during the semester if deemed necessary. Students will be notified in writing of any changes.
- **The student is expected to attend each laboratory session in its entirety (until dismissed by the instructor), participate in all course activities, and complete all examinations and course assignments on time. Cell phones are not to be used during the laboratory unless being utilized directly for patient care (i.e. to look things up, use the calculator or timer, etc.).**
- Because dentistry labs involve working with hazardous materials, students MUST wear close-toed shoes. In addition, some lab activities will require students to wear gloves, face masks, and safety glasses (provided by the college). Scrubs are required at all times. Students failing to dress appropriately for lab will not be permitted to participate in laboratory exercises and will be considered absent.
- Students engaged in conduct that threatens themselves or others in the lab will be refused access to the lab for the remainder of the semester and receive an "F" grade for the course.
- Students are expected to be familiar with and follow the Standard Operating Procedures of the WCC Veterinary Technology Program. Violations of the SOP will result in a point deduction from the student's overall grade for the course. The instructor may also give demerits for such violations as provided for in the Student Handbook.

## Employability Skills and Work Ethic

We may offer points for two subjective assessment of the student's ability to work well with others, maintain a respectful demeanor toward peers and instructors, and fulfill responsibilities.

Behaviors evaluated for this assessment include but are not limited to:

- Takes initiative for own learning.
- Helps out other team members
- Treats all members of the team with respect and courtesy
- Arrives for laboratory promptly and ready to go
- Responds cheerfully when asked to do a task
- Acts professionally and does not complain, gossip or talk about others in the profession (in or outside the program) during class or laboratory
- Accepts constructive criticism
- Follows instructions
- Asks for help or clarification when needed

The final score is completely at the discretion of the instructor; however, students will receive written feedback at the end of the course to provide an opportunity for self-improvement.

## Attendance Policy

**Attendance to the laboratory is mandatory.** Only one excused absence is permitted. If a student has an emergency or is too ill to come to lab, they must contact the instructor and at least one team member as soon as possible. A doctor's note or other documentation of extenuating circumstances will be required for any absence within 48 hours of returning to class. Any additional absence will result in failure of the course.

**Tracking.** Attendance will be monitored using the AVImark practice management software during the semester. It is the student's responsibility to remember to clock in and out of lab. If the student forgets to clock in, it will be assumed they were tardy/absent.

**Tardiness.** Students arriving more than ten minutes late (after 9:10) must contact the instructor (please text) and a team member as soon as they know they will be late. It is up to the student to make up the missed work to teammates (i.e. take on an extra duty). The team should discuss with the instructor if an agreement cannot be reached. Points will be deducted for tardiness: 5 points for each time the student is tardy by 5 minutes or less; 10 points for each tardy between 5 and 15 minutes late; 15 points for being tardy greater than 15 minutes.

**BREAKS:** Students are allowed to take short breaks for a maximum of 15 minutes during the laboratory session to eat, smoke, use the restroom etc. provided all of the following conditions are met:

- There are no outstanding duties that need to be completed by the student's laboratory group at the moment
- The student notifies the instructor or instructor's assistant AND at least one laboratory partner where they will be

Failure to follow this procedure may result in an unexcused absence.

## **Learning Resources**

### **Required**

A wrist watch with second hand or digital second reading.

Veterinary Dentistry A Team Approach: Holmstrom S.E. 2<sup>nd</sup> Edition, Elsevier Saunders, St. Louis MO

Anesthesia and Analgesia for Veterinary Technicians: Thomas, J. and Lerche, P. Elsevier Mosby, St. Louis, MO. 4<sup>th</sup> Edition.

### **Recommended**

Veterinary Anesthesia and Analgesia Support Group <http://www.vasg.org>. This is an extensive free resource, geared to the veterinary practitioner and nursing staff, covering all things related to anesthesia of the veterinary patient.

The American Veterinary Dental College (AVDC) <http://www.avdc.org>. This is the clinical specialist organization for veterinary dentists, recognized by the American Board of Veterinary Specialties of the American Veterinary Medical Association.

## **Additional Information**

**Laulima:** Your instructor has created a Laulima website to accompany this course. This website contains lecture outlines, copies of course forms and syllabi, and links to on-line learning resources. Students enrolled in ANSC 261/261L are automatically enrolled in the ANSC 261/261L Laulima website. To access, go to <https://laulima.hawaii.edu/portal>. Login using your UH username and password and click on ANSC 261/261L.

### **DISABILITIES ACCOMMODATION STATEMENT**

*If you have a physical, sensory, health, cognitive, or mental health disability that could limit your ability to fully participate in this class, you are encouraged to contact the Disability Specialist Counselor to discuss reasonable accommodations that will help you succeed in this class. Ann Lemke can be reached at 235-7448, [lemke@hawaii.edu](mailto:lemke@hawaii.edu), or you may stop by Hale 'Akoakoa 213 for more information.*

## ANSC 261L DENTISTRY LAB PROCEDURES

- o At 9:00am or when all patients have been dropped off, group meeting will be called by instructor to assign patients to teams and make announcements
- o Students work in assigned teams to perform pre-op physical exam, and run any necessary lab work.
  - Please check with instructor before performing lab work. First year nursing students may have already done so.** Animals seven and older will have labs done routinely: younger animals will be tested if medically indicated.
- o Students will divide duties for the day as follows:
  - Anesthetist** – is responsible for induction, monitoring, and maintaining anesthesia, and recovery.
  - Dental cleaning** – this person is responsible for performing the dental prophylaxis, describing pathology to the person charting dentition. Administering local blocks and assisting veterinarian in extractions.
  - Circulating nurse – charting** – is responsible for setting up and breaking down wet table for procedure, locating supplies, charting all pathology of animal's dentition.
  - Circulation nurse – radiology** – is responsible for setting up and taking radiographs of the animal's dentition. An attempt should be made to do full mouth radiographs, but at the very least ones before and after extractions.
- o Students are to determine **ASA status** and gather all supplies needed for induction and the dental procedure. Portable trays are provided for each patient to help keep supplies in one place. The team will select an anesthesia protocol and do the necessary calculation after approval from the instructor.
  - Induction agents will be determined at the beginning of class.**
- o Once labs are reviewed and drug protocols/calculations are approved by the veterinarian, students will assist in drawing up and labeling drugs with patient name, drug name and quantity, and recording them in the controlled drug log as necessary.
- o Procedures will be scheduled taking patient factors into account, but priority will be given to student teams who are ready to go first.
- o Each team must fill out discharge orders and fill meds to go home with their patient; wash their instruments; clean up their own messes, and clean the wet table and dental equipment used for their patient.
- o When all procedures are finished, one team takes responsibility for general cleanup and restocking; one team is responsible for helping discharge patients in the late afternoon. Students must also take turns being responsible for arriving early or staying late to admit or discharge patients.
- o When all procedures are finished an assigned group will take responsibility for general cleanup and restocking.

# LABORATORY SAFETY RULES

- Be familiar with lab safety procedures and take appropriate precautions at all times to ensure the safety of other students, instructors and patients.
- Follow all instructions carefully, especially when hazardous materials are being used.
- Know the locations of important safety equipment: eyewash, safety shower, fire extinguisher, and first aid kit.
- Report **ALL** injuries, including scratches, needle sticks or ANYTHING that breaks the skin, to the instructor immediately. Fill out 'Incident' form if instructor determines it is necessary.
- Dress appropriately for lab. Closed-toe shoes are required for ALL labs.
- Report any hazardous conditions (e.g. chemical spills or broken glass) to the instructor immediately.
- NO FOOD, DRINK, SMOKING OR VAPING ARE ALLOWED IN THE ANNEX
- Chemicals used in lab may be poisonous, corrosive, or flammable. No chemicals, even those known to be safe, should be ingested or touched with un-gloved hands unless you are specifically directed to do so by your instructor.
- Know how to safely operate all lab equipment and tools (e.g., microscopes, scalpels, and hematology supplies). Safe usage will be demonstrated by your instructor.
- **Clean all lab supplies and return them to their proper location before leaving lab.**
- Treat all organisms, living or dead, with care and respect. Use gloves when handling dissected specimens.
- Place broken glass, sharps, and dissected specimens in the appropriate receptacles (NOT IN THE TRASH!)
- Unless otherwise instructed, chemical wastes should NOT be disposed of down the drain.
- Human and animal tissues and bodily fluids (e.g., saliva and blood) must be disposed of in appropriate bio-hazard containers (NOT IN THE TRASH!).
- Wash your hands immediately following each lab to reduce the possibility of contamination or infection.
- Syringes are not to be detached from needles for disposal. Place the entire needle and syringe in the sharps container.
- Microscope slides, the plastic attachment on IV infusion sets or any non-metal item that can potentially puncture a plastic trash bag must be placed in containers marked "Non-metal sharps." Any non-metal sharps contaminated with bodily fluids or biohazardous material is to be placed in the regular sharps container.
- If you are unsure about proper safety protocol, ASK.

## Anesthesia and Surgery Protocols for ANSC 261L

Examine patient, get TPR. Determine ASA physical status.

**\*\*ALL PATIENTS: Draw up 1mg/kg lidocaine and 1mg/kg bupivacaine in same syringe, label with drug contents and patient name. Set aside for local nerve blocks.\*\***

Unless otherwise, noted, all premedication or induction combinations can be combined in same syringe.

**Always verify doses with doctor before drawing up drugs**

### Cat Protocols

#### Premedication – Choose one Combination:

1. Buprenorphine 0.02mg/kg and Acepromazine 0.06mg – 0.1mg/kg IM
2. Buprenorphine 0.02mg/kg and Midazolam 0.4mg/kg IM
3. Buprenorphine 0.02mg/kg and Dexmedetomidine\* 0.002 – 0.01mg/kg IM

\* If needed, reverse Dexmedetomidine with Antisedan. Use same volume as dexmedetomidine and give IM. Can be given IV in an emergency. Draw up proper quantity and have ready.

#### Induction – Choose one:

1. Propofol at 4mg/kg given IV **to effect** over 90-120 seconds
2. Alfaxalone at 2-5mg/kg given IV **to effect** over 90-120 seconds
3. Ketamine and Midazolam at 0.5ml/10lbs of each drug (MAX 0.5 total of each)

**Maintenance** on isoflurane titrated to effect

**Analgesic/Pain medication:** Give **Onsior** (robenacoxib) 2mg/kg SQ

**(Give when pre-medicating)**

**\*\*\*** For cats/kittens <4months old and <5.5 lbs; give: **Simbadol** 0.25mg/kg post-op

## Feral or Fractious Cat Protocol:

Feral cats must NEVER be awake outside of the trap

Premedication: None

Induction: “Kitty Magic” – use all of the following, given together IM

Buprenorphine: 0.1ml/10lbs (of 0.3mg/ml)

Ketamine: 0.1ml/10lbs

Dexmedetomidine\*: 0.1ml/10lbs

\* If needed, reverse Dexmedetomidine with Antisedan. Use same volume as dexmedetomidine and give IM. Can be given IV in an emergency. Draw up proper quantity and have ready.

Maintenance on isoflurane titrated to effect

Analgesic/Pain medication: Give **Onsior** (robenacoxib) 2mg/kg **SQ**

(Give when pre-medicating)

\*\*\* For cats/kittens <4months old and <5.5 lbs; give: **Simbadol** 0.24mg/kg post-op

# DOG Protocols:

## Premedication - Choose One Combination:

1. Butorphanol 0.2-0.4mg/kg and Acepromazine\*\* 0.01-0.05 mg/kg IM
2. Butorphanol 0.2-0.4/kg and Dexmedetomidine\* 0.002-0.005mg/kg and Midazolam 0.2-0.4mg/kg IM
3. Butorphanol 0.2-0.4 mg/kg and Midazolam 0.2mg/kg IM

\*\*Maximum dose of acepromazine is 3mg

\* If needed, reverse Dexmedetomidine with Antisedan. Use same volume as dexmedetomidine and give IM. Can be given IV in an emergency. Draw up the proper quantity and have ready.

## Induction - Choose One:

1. Propofol at 4mg/kg given IV to effect over 90-120 seconds
2. Alfaxalone at 2-5mg/kg given IV to effect over 90-120 seconds
3. Ketamine and Midazolam at 0.25mL/10lbs of each drug IV

## Maintenance on isoflurane to effect.

**Analgesia/Pain meds:** Rimadyl 1 MG per pound (or 2.2mg/kg) SQ (give when pre-medicating) Or Meloxicam 0.1 - 0.2 mg/kg SQ

**For nervous or fearful (aggressive) dogs and/or an additional anesthetic protocol, see attached 'Doggie Magic' dose chart.**

## INDUCTION CHECKLIST

- ▣ ICET: \_\_\_\_\_ - \_\_\_\_\_mm
- ▣ Gauze square
- ▣ Gauze (for tying)
- ▣ Induction drugs
- ▣ O2 is on
- ▣ Anesthetic machine leak test
- ▣ Anesthetic machine properly equipped
- ▣ Lidocaine/bupivacaine (for local nerve blocks)
- ▣ Lidocaine 0.1mL (for intubating cats)
- ▣ Laryngoscope
- ▣ Flush
- ▣ IV Catheter
- ▣ Porous tape
- ▣ Eye lubricant
- ▣ Clippers
- ▣ Scrub
- Do you have to go to the bathroom?

# Pre Dental Checklist

## **Kennel check:**

- ☐ Name cards on runs/cages
- ☐ Patients walked
- ☐ Runs/cages cleaned
- ☐ Water bowls removed

## **Induction area check:**

- ☐ SX or dental supplies available – suture, blades, etc.
- ☐ Emergency medications available
- ☐ Warming source ON

## **Anesthesia Machine(s):**

- ☐ **O<sub>2</sub>** supply ON & quantity sufficient
- ☐ Scavenge system ON
- ☐ Soda Lime filled/fresh
- ☐ ISO filled
- ☐ Ax Machines attached to **O<sub>2</sub>** source and Leak checked

## ***Monitor(s)***

All leads attached and operational

# Post Dental Checklist

## Treatment area check:

- ☐ Wash and wrap all Instruments
- ☐ Wipe down all surfaces with Roccal or Trifexis
- ☐ All supplies put away
- ☐ Start surgical laundry
- ☐ Start autoclave
- ☐ Anesthesia machines **O<sub>2</sub>** and Vaporizers OFF
- ☐ **O<sub>2</sub>** supply OFF & quantity noted
- ☐ Scavenge system OFF
- ☐ Monitors off and all leads stowed
- ☐ Radiology shut down
- ☐ Wet tables cleaned
- ☐ Dental machines stowed
- ☐ TX floors swept
- ☐ TX floors mopped (blue handle mop/bucket)
- ☐ Trash emptied **and** Bio trash tied and marked for autoclaving

## Pre Dental Checklist Per Patient

- ☐ Peri-operative supplies located  
(muzzles, eye lube, clippers, nail trimmers, ear cleaner, etc.)
- ☐ ID and Procedure confirmed
- ☐ Weight and TPR recorded
- ☐ Reservoir bag & breathing system calculated & attached
- ☐ Fluids calculated & pump set up
- ☐ Bloodwork run and shown to DVM if done
- ☐ Patient examined by DVM
- ☐ Drugs calculated and verified by DVM
- ☐ Drugs drawn up, labeled, **and** logged
- ☐ Pre-meds given
- ☐ (3) sizes ETTs selected and leak checked
- ☐ Plug in and pressurize dental machine
- ☐ Check scaler
- ☐ Fill distilled water / ☐ Fill CLS
- Prophyl cup and paste, Oravet
- Autoclaved dental tools

## Post Dental Checklist Per Patient

- ☐ Patient sternal and temp > 98°
- ☐ Post-op pain meds given
- ☐ Catheter removed
- ☐ Dental machine depressurized
- ☐ Dental machine turned off
- ☐ Hand pieces cleaned
- ☐ Patient clean and brushed
- ☐ Discharge paperwork filled out
- ☐ Meds to go home filled
- ☐ E-collar placed if necessary
- ☐ Surgery paperwork turned in

Table 1. Doggie magic combination for light and mild sedation-premedication

		Light Sedation		Mild sedation	
Dog Weight		Dexdomitor 62.5 mcg/m <sup>2</sup> IM		Dexdomitor 125 mcg/m <sup>2</sup> IM	
Lbs	Kg	mcg/kg	Dexdomitor ml	mcg/kg	Dexdomitor ml
4-7	2-3	4.7	0.02	9.4	0.04
7-9	3-4	4.15	0.025	8.3	0.05
9-11	4-5	3.85	0.035	7.7	0.07
11-22	5-10	3.25	0.05	6.5	0.10
22-29	10-13	2.8	0.065	5.6	0.13
29-33	13-15	2.6	0.075	5.2	0.15
33-44	15-20	2.45	0.085	4.9	0.17
44-55	20-25	2.25	0.10	4.5	0.20
55-66	25-30	2.1	0.115	4.2	0.23
66-73	30-33	2.0	0.125	4.0	0.25
73-81	33-37	1.95	0.135	3.9	0.27
81-99	37-45	1.5	0.15	3.7	0.30
99-110	45-50	1.75	0.165	3.5	0.33
110-121	50-55	1.7	0.175	3.4	0.35
121-132	55-60	1.65	0.19	3.3	0.38
132-143	60-65	1.45	0.20	3.2	0.40
143-154	65-70	1.41	0.21	3.1	0.42
154-176	70-80	1.5	0.225	3.0	0.45
>176	>80	1.31	0.235	2.9	0.47

Use opioid and ketamine- in an identical injection volume as Dexdomitor shown in the table. Choice of opioid-

- 1) Butorphanol (10 mg/mL) or
- 2) Hydromorphone (2 mg/mL) or
- 3) Morphine (15 mg/mL) or
- 4) Buprenorphine (300 mcg/mL should be given 15 minutes ahead of Dexdomitor to take full advantage of sedation-analgesia

Table 2. Doggie magic combination –Moderate –Profound sedation

Dexdomitor-Opioid-Ketamine Sedation/Anesthesia In Dogs					
		Moderate Sedation		Profound sedation	
Dog Weight		Dexdomitor 250 mcg/m <sup>2</sup> IM		Dexdomitor 375 mcg/m <sup>2</sup> IM	
Lbs	Kg	mcg/kg	Dexdomitor ml	mcg/kg	Dexdomitor ml
4-7	2-3	20	0.08	28.1	0.12
7-9	3-4	16.6	0.10	25.0	0.15
9-11	4-5	15.5	0.14	23.0	0.20
11-22	5-10	13.3	0.20	19.6	0.29
22-29	10-13	10.8	0.26	16.8	0.38
29-33	13-15	10.7	0.30	15.7	0.44
33-44	15-20	9.7	0.34	14.6	0.51
44-55	20-25	8.9	0.40	13.4	0.60
55-66	25-30	8.4	0.46	12.6	0.69
66-73	30-33	7.9	0.50	12.0	0.75
73-81	33-37	7.7	0.54	11.6	0.81
81-99	37-45	7.5	0.60	11.0	0.90
99-110	45-50	6.9	0.66	10.5	0.99
110-121	50-55	6.6	0.70	10.1	1.06
121-132	55-60	6.6	0.76	9.8	1.13
132-143	60-65	6.4	0.80	9.5	1.19
143-154	65-70	6.2	0.84	9.3	1.26
154-176	70-80	6.0	0.90	9.0	1.35
>176	>80	5.8	0.94	8.7	1.42

Use opioid and ketamine- in an identical injection volume as Dexdomitor shown in the table. Choice of opioid-

- 1) Butorphanol (10 mg/mL) or
- 2) Hydromorphone (2 mg/mL) or
- 3) Morphine (15 mg/mL)- may induce more frequent vomiting response than other opioids.
- 4) Buprenorphine (300 mcg/mL), buprenorphine should be given 15 minutes ahead of Dexdomitor to take full advantage of sedation-analgesia

Table 3. Doggie magic combination- surgical injectable combination

Dexdomitor-Opioid-Ketamine Anesthesia-Analgesia In Dogs					
		Invasive procedures		Invasive procedures	
Dog Weight		Dexdomitor 250 mcg/m <sup>2</sup> IV		Dexdomitor 500 mcg/m <sup>2</sup> IM	
lbs	kg	mcg/kg	Dexdomitor ml	mcg/kg	Dexdomitor ml
4-7	2-3	20	0.08	40.0	0.15
7-9	3-4	16.6	0.10	35.0	0.20
9-11	4-5	15.5	0.14	30.0	0.30
11-22	5-10	13.3	0.20	25.0	0.40
22-29	10-13	10.8	0.26	23.0	0.50
29-33	13-15	10.7	0.30	21.0	0.60
33-44	15-20	9.7	0.34	20.0	0.70
44-55	20-25	8.9	0.40	18.0	0.80
55-66	25-30	8.4	0.46	17.0	0.90
66-73	30-33	7.9	0.50	16.0	1.00
73-81	33-37	7.7	0.54	15.0	1.10
81-99	37-45	7.5	0.60	14.5	1.20
99-110	45-50	6.9	0.66	14.0	1.30
110-121	50-55	6.6	0.70	13.5	1.40
121-132	55-60	6.6	0.76	13.0	1.50
132-143	60-65	6.4	0.80	12.8	1.60
143-154	65-70	6.2	0.84	12.5	1.70
154-176	70-80	6.0	0.90	12.3	1.80
>176	>80	5.8	0.94	12.0	1.90

Use opioid and ketamine- in an identical injection volume as Dexdomitor shown in the table. Choice of opioid-

- 1) Butorphanol (10 mg/mL) or
- 2) Hydromorphone (2 mg/mL) or
- 3) Morphine (15 mg/mL) or 4) Buprenorphine (300 mcg/mL), buprenorphine should be given 15 minutes ahead of Dexdomitor to take full advantage of sedation-analgesia

## American Society of Anesthesiologists (ASA)

### Physical Status Classification System

**ASA Physical Status 1** - A normal healthy patient

**ASA Physical Status 2** - A patient with mild systemic disease (including neonates and geriatric)

**ASA Physical Status 3** - A patient with severe systemic disease

**ASA Physical Status 4** - A patient with severe systemic disease that is a constant threat to life

**ASA Physical Status 5** - A moribund patient who is not expected to survive without surgery

# Skills Checklist for ANSC 261L

Required Hands-on Skills

Name: \_\_\_\_\_

Instructor initials must be obtained on the day procedure was performed.

Skill	Animal	Date	Instructor
Maintain emergency medical supplies/crash cart			
Perform first aid and cardiopulmonary resuscitation (simulation acceptable)			
Use resuscitation bag			
Perform dental prophylaxis			
Create diagnostic dental radiographic images			
Chart pathological dentition			
Calculate dosages of appropriate anesthetic drugs			
Place intravenous catheter (cephalic)			
Place intravenous catheter (saphenous)			
Maintain and care for catheter			
Place endotracheal tubes in patients			
Use clinical signs and equipment to monitor patient status			
Complete controlled substance log			
Maintain and operate esophageal stethoscope			
Maintain and operate anesthesia machine - rebreathing circuit			
Maintain and operate anesthesia machine - nonrebreather			
Maintain and operate scavenging system			
Maintain and operate oxygen source			
Maintain and operate electrocardiograph			
Maintain and operate the pulse oximeter			
Maintain and operate the capnograph			
Maintain and operate respiratory monitors			
Maintain and operate blood pressure monitor: oscillometer			
Maintain and operate blood pressure monitor: doppler			
Maintain and operate laryngoscope			
Group:			
Perform cystocentesis to collect urine			