ANSC 261L
Anesthesiology and Veterinary Dentistry for Veterinary Technicians Lab

Course Syllabus and Handbook
Spring 2017

Name: ________________________________
ANSC 261L: Anesthesiology and Dentistry for Veterinary Technicians
CRN 64332 and CRN 64333

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Effective Date: Spring 2017

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 activities outside of the scheduled class time. These will include arriving fifteen minutes prior to the beginning of lab to help admit 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 where running late is very common. Students will be required to stay until all their responsibilities for the day are taken care of. Extensions will not be granted for scheduled work, meetings, classes or other commitments. It is suggested that you plan for the lab to run 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
- 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 midterm 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**

- Employability Skills and Work Ethic (see section under “student responsibilities”) – 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 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 will 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 midterm practicum will be given with a total point value of 100. Identification and proper use of dental and anesthesia equipment, proper drawing up and logging of drugs, and other skills will be covered.

**GRADING SCALE**

**Total Points and Grade Equivalent**

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\begin{align*}
\text{>= 360} & \quad \text{A} \\
320-359 & \quad \text{B} \\
280-319 & \quad \text{C} \\
240-279 & \quad \text{D} \\
<240 & \quad \text{F}
\end{align*}
\]

**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 Laulau.

It is the student’s responsibility to be informed of these changes.
It is the student’s responsibility to be aware of and follow all rules, policies and procedures as stated in this syllabus, the laboratory handout 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 of any changes.

- **The student is expected to attend each laboratory session in its entirety (until dismissed by the instructor), participate in all course assignments and complete all examinations and course assignments on time.** Cell phones are not to be used during the laboratory unless being used 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 require students to wear gloves, face masks, and safety glasses (provided by the college). Scrubs are required at all times. Students failing to conduct themselves 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 democracy for such violations as provided for in the Student Handbook.
  - Minor violation – 10 point deduction
  - Major violation – 50 point deduction
  - Second major violation or more than 3 minor violations – “F” grade for course

The student and the Program Director will be notified in writing of any violation resulting in a point deduction.

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**Employability Skills and Work Ethic**

Points will be rewarded based on 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.
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). If the student cannot come to an agreement, 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.

Penalties – Deduction from employability grade

- Failure to contact team and instructor in case of absence or tardiness
- Failure to provide documentation for an absence
- Tardiness

**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 will result in an unexcused absence.

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**Learning Resources**

**Required**

A wrist watch with second hand or digital second reading.

**Veterinary Dentistry A Team Approach:** Holmstrom S.E. 2nd Edition, Elsevier Saunders, St. Louis MO


**Recommended**

Science Direct: science database available through the library learning commons link from the WCC website or at [http://www.sciencedirect.com/](http://www.sciencedirect.com/)

Veterinary Anesthesia and Analgesia Support Group [http://www.vasg.org](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.

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**Additional Information**

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

**DISABILITIES ACCOMMODATION STATEMENT**
ANSC 261L DENTISTRY LAB PROCEDURES

- At 9:00am or when all patients have been dropped off, group meeting will be called by instructor to assign patient teams and make announcements.
- 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.
- 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 proctor, and 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.
- 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.**
- 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 log as necessary.
- Procedures will be scheduled taking patient factors into account, but priority will be given to student teams who are ready to go first.
- Each team must fill out discharge orders and fill meds to go home with their patient; wash their instruments; clean their own messes, and clean the wet table and dental equipment used for their patient.
- 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 and helping to admit and properly label all patients.
- 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 VAPEING 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 ungloved 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 use 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 fluid 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

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Feral or Fractious Cat Protocol:

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**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 also be given IV in an emergency. Draw up proper quantity and have ready.

**Maintenance** on isoflurane titrated to effect

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

(Give when pre-medicating)

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

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**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
* If needed, reverse Dexmedetomidine with Antisedan. Use same volume as dexmedetomidine and give IM. Can be given 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 0.2 mg/kg SQ

For nervous or fearful (aggressive) dogs and/or an additional anesthetic protocol, see attached ‘Doggie Majors 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
- 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):**
- O₂ supply ON & quantity sufficient
Ax Machines attached to \( O_2 \) 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 Rocal or Trifexis
- All supplies put away
- Start surgical laundry
- Start autoclave
- Anesthesia machines \( O_2 \) and Vaporizers OFF
- \( O_2 \) supply OFF & quantity noted
- Scavenge system OFF
- Monitors off and all leads stowed
- Radiology shut down
- Wet tables cleaned
- Dental machines stowed
○ 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

○ Prophy 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

<table>
<thead>
<tr>
<th>Dog Weight</th>
<th>Light Sedation</th>
<th>Mild Sedation</th>
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</thead>
<tbody>
<tr>
<td>Lbs</td>
<td>Kg</td>
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</tr>
<tr>
<td>4-7</td>
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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.
### Dexdomitor-Opioid-Ketamine Sedation/Anesthesia In Dogs

<table>
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<tr>
<th>Dog Weight</th>
<th>Moderate Sedation</th>
<th>Profound Sedation</th>
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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
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<td>7.7</td>
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<td>0.60</td>
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<td>99-110</td>
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<td>0.66</td>
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<td>110-121</td>
<td>50-55</td>
<td>6.6</td>
<td>0.70</td>
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<td>121-132</td>
<td>55-60</td>
<td>6.6</td>
<td>0.76</td>
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<td>132-143</td>
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<td>6.4</td>
<td>0.80</td>
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<td>143-154</td>
<td>65-70</td>
<td>6.2</td>
<td>0.84</td>
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<td>154-176</td>
<td>70-80</td>
<td>6.0</td>
<td>0.90</td>
<td>12.3</td>
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<tr>
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<td>&gt;176</td>
<td>&gt;80</td>
<td>5.8</td>
<td>0.94</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Use opioid and ketamine in an identical injection volume as Dexamitom 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 Dexamitom to take full advantage of sedation-analgesia

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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 5 - A moribund patient who is not expected to survive without surgery

<table>
<thead>
<tr>
<th>Date</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 12 &amp; 13</td>
<td>Lab Handbook, Dental Machines, Dental Radiology, Neuters</td>
</tr>
<tr>
<td>January 19 &amp; 20</td>
<td>Anesthesia &amp; CPR Review, Spays/Neuters</td>
</tr>
<tr>
<td>January 26 &amp; 27</td>
<td>Min. 3 dentals each lab</td>
</tr>
<tr>
<td>February 2 &amp; 3</td>
<td>Min. 3 dentals each lab</td>
</tr>
<tr>
<td>February 9 &amp; 10</td>
<td>Min. 3 dentals each lab</td>
</tr>
<tr>
<td>February 16 &amp; 17</td>
<td>Min. 3 dentals each lab</td>
</tr>
<tr>
<td>February 23 &amp; 24</td>
<td>Min. 3 dentals each lab</td>
</tr>
<tr>
<td>Date Range</td>
<td>Notes</td>
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<tr>
<td>March 30 &amp; 31</td>
<td>Spring Break</td>
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<tr>
<td>April 6 &amp; 7</td>
<td>Min. 3 dentals each lab</td>
</tr>
<tr>
<td>April 13 &amp; 14</td>
<td>No lab</td>
</tr>
<tr>
<td>April 20 &amp; 21</td>
<td>Min. 3 dentals each lab</td>
</tr>
<tr>
<td>April 27 &amp; 28</td>
<td>Clean-up</td>
</tr>
</tbody>
</table>
Skills Checklist for ANSC 261L

Required Hands-on Skills

Name: ________________________

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

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