Course Curriculum and Assignments

VETT 1018: Surgical Preparation and Assisting 3

This program is a cooperative educational effort of the American Animal Hospital Association and Cedar Valley College

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David L. Wright, D.V.M.

Educational opportunities are offered by the Dallas County Community College District without regard to race, color, age, national origin, religion, sex, disability, or sexual orientation.
I). Course Description:

Surgical Preparation and Assistance 3 is an upper-level veterinary technology course designed to provide information in the areas outlined in the topic schedule. Students must read the required materials, successfully complete the workbook and clinical assignments, and pass the scheduled exams to receive credit for the course.

II). Course Objectives:

This course is designed to teach and document competency of the following essential and recommended Committee on Veterinary Technician Education and Activities (CVTEA) tasks.

A. Participate in routine surgical procedures.

B. Perform surgical preparations.

C. Perform as a surgical assistant or circulating nurse.

D. Under supervision, assist with anesthesia:

1. Calculate and administer preoperative medications.
2. Induce and maintain general anesthesia.
3. Monitor the anesthetized patient.
4. Recognize anesthetic emergencies.
5. Care for anesthesia machines.
6. Properly scavenge waste anesthetic gas to protect staff.
7. Perform CPR on appropriate animal models

E. Monitor anesthetic recovery and provide intensive postoperative care and pain management.

F. Perform post surgical cleanup

III). DEVTP Program Information:

Program Phone: 1-877-353-3482
Office Hours: 8:00 AM to 5:00 PM Monday - Friday (Central Time Zone)
Program Fax: 1-972-860-8057
Information: http://ollie.dcccd.edu/vettech
Mailing Address: Cedar Valley College
DEVTP Program
3030 N. Dallas Avenue
Lancaster, TX 75134
IV). **Course Instructor:**

David L. Wright, D.V.M.

Instructor Email: DLW3505@dcccd.edu
Instructor Phone: 1-877-353-3482

V). **Course Materials:**

A). *Principles of Anatomy and Physiology*, by Tortora and Derrickson, 11th edition, Benjamin Cummings

B). *Veterinary Anesthesia and Analgesia* by McKelvey and Hollingshead, 3rd edition, Mosby

C). *Small Animal Surgical Nursing* by Tracy, 3rd edition, Mosby

D). Course Workbook

E). A medical dictionary such as *Stedman's Illustrated Medical Dictionary*, *Dorland's Illustrated Medical Dictionary*, or *Saunders Comprehensive Veterinary Dictionary*

VI). **Clinical Preceptors:**

Preceptors are extremely important to your success in the course. Being a preceptor is a position that requires time, commitment, and dedication. In most cases it is advantageous for students to have multiple preceptors, each with an interest in a specific area. In some practices, only one or two people may qualify to serve as a preceptor. However, in other practices, many individuals may be qualified to serve in this capacity. Multiple preceptors will decrease the burden on any one person in the practice in his or her preceptor responsibilities and assist the student in the completion of assignments and examinations. Each student is required to have at least one qualified preceptor for the course or courses for which they are enrolled. All preceptors must meet the minimum requirements for preceptor approval. Each preceptor must be a graduate D.V.M. or V.M.D., a graduate of an AVMA/CVTEA-accredited program of veterinary technology, or a person credentialed as an RVT, LVT, or CVT. Preceptors must always directly witness, participate in, or personally initial check-off sheets for assignments for the student to receive credit. Preceptors should never sign on weekly assignment lists or any other document without directly meeting these requirements. Preceptors are required to complete, monitor, and maintain Off Campus Clinical Instruction (OCCI) Standards.
Individual applications must be submitted and approval granted for each preceptor. New preceptors may be added at any time. To add a new preceptor, just contact the program office and we will fax or mail you an additional preceptor form.

VII). Student Code of Conduct:

Students in distance education courses are expected to follow the rules and policies stated in the student code of conduct in the Cedar Valley College and D.C.C.C. catalog. Failure to follow these rules may result in disciplinary action by the instructor and/or the college.

VIII). Important Information:

This course is an intermediate-level veterinary technology course. As such, you may be required by the assignments in this workbook to perform tasks reserved by law or statute for credentialed veterinary technicians. It is imperative that you follow the requirements of your locality regarding the tasks assigned in this workbook. You should follow the assignment schedule in the course workbook, and NOT use your enrollment in the DEVTP as a means of circumventing local laws or regulations. If laws disallow you from performing a given procedure, your preceptor should note that on the preceptor checklist. Points will not be deducted if a procedure is not performed because of legal constraints. Neither Cedar Valley College nor the American Animal Hospital Association advocate students performing tasks not legally allowable for non-credentialed individuals. However, as a student in DEVTP courses you may have certain rights as a student depending on your locality.

Please check your state or provincial regulations carefully and always follow them.
IX). Submission of Assignments:

A). All written work and required submissions should be submitted by Email directly to the specific staff member that administers that class.

B). You should submit your work **ONLY** to the person that administers each of your individual courses.

C). You should use your private Email account to send in all work either as a word processed document attachment, preferably in MS Word, or as a scanned attachment.

D). Please do not send in homework as the actual text of the Email.

E). The subject line of the Email should list the class and the week that you are sending. For example the subject line should read something like “VETT 1001 - Week Five”. In the body or text of the Email you must give us your name. We have no way of knowing who you are just from the Email address. You **MUST** give us the class, the week, and your name to receive credit for the submission.

F). The Weekly Preceptor Checklist should be signed each week by your preceptor, and then you should scan it and send it in as an Email attachment with your weekly submissions.

G). If you do your work in freehand, it must be neat, legible, and in done in dark ink. Pencil will not show up if it is scanned and then sent.

H). For more specific information on how to send work as an Email attachment and how to scan, save and send information, please see the posted directions in the “Assignments” section of your site.
IX). Student Credit and Grading:

A). To receive a passing grade for this course students must achieve an average grade of 70 percent or greater for the course. Since the course is both clinical and didactic, students should complete the written and clinical assignments and the tests with a grade of 70 percent or better. Examination and assignment grades will be available to students through the BlackBoard Course Information system. Students should check the "Check Grade" section of "Student Tools" in BlackBoard daily to ensure that assignments and exams have been received and posted. Assignment grades should be posted by the Monday following the assignments due date. At peak submission times there may be an additional 24- to 48-hour delay in posting grades. All earned points will be added together and divided by the number of total possible points to determine the final course grade as a percentage. This percentage grade will be mailed to students at the end of the course. Grades will be posted on each student’s official college transcript as CP (Credit Passing) or as CF (Course Failure). If students wish to be eligible to convert courses to college credit at a later date, a 70 percent score (CP) will be required for each course, and the student must meet applicable Off-Campus Clinical Instruction requirements. Students may finish and submit assignments ahead of the workbook schedule, but assignments and required course work must be submitted by the end of the week that they are due or the submissions are subject to the point penalty described in part D. below. Students are very strongly encouraged to work at the pace set in the workbook to achieve the maximum benefit and learning from the course. Final course grades and a certificate will be mailed to students at the end of the term after final grades are calculated.

B). Final numerical grades will be based on the following scale: 90% or greater of the total points. 100% to 90% = A, 89% to 80% = B, 79% to 70% = C, and below 70% = F.

C). Emails will be sent directly to you with specific information on any corrections to your submitted work. If you receive a perfect score, we will post the grade and will not send back your assignments. If we do have corrections or comments on your assignments we will put those in the form of an email and send that to you as soon as possible after grading your work. It is therefore essential that you enter your email address in your course site and that it is visible in the “Roster” section in each and every one of your course sites. You will need to check your class grades and email messages daily. This procedure will insure that you will have corrected assignments and feedback as soon as possible to use to in studying for your exams. Often corrected work can be in the mail when you need it the most as a study resource. The email that we send you will list the name of the class, which assignment it is, which question it is, and the correct answer or comments on your submission. This will allow you to get better feedback, much more quickly. If you wish to receive your paper copies back in the mail, just send them to us by U.S. mail and include a stamped, self-addressed envelope, and once your assignments are graded we will mail...
them back to you in the return envelope. If you choose to submit your work by U.S. mail, the required work **MUST** be received by the date the work is due, not the post mark date. This will insure that assignments and submissions are received, graded and returned in a timely manner.

**D). Please Note:** Points will be deducted for persistently late or tardy submission of assignments and required course work. A 25% point-loss, per week, penalty will be assessed for persistently late work. If you are going to be more than a week late in submitting your course work, you should contact the person that administers your class in writing or by email, let them know what the situation or problems is, and request an extension. To keep good records and to insure that everyone is clear on your expectations, all requests **MUST** be made by email or in writing. There is too much chance of miscommunication or confusion if the situation is handled strictly on the phone. If we are in contact with you and know what is happening, we can make suitable arrangements to accept late work without penalty. Work submitted late, without prior approval is subject to the tardy submission penalty stated above. If students have not submitted enough assignments and completed enough exams to maintain a passing average by Unit Six, they and their preceptors will be sent a letter of Administrative Withdrawal (AW) by the program.

**E).** In level 3 classes that require a video submission (General Hospital 3, Exam Procedures 3, and Surgical Procedures 3), the required videos must be submitted and received no later than the end of week 10. In all classes, including those, all written and clinical assignments, including course task checklists, are due at the end of week 11 of the course. The last week of classes, week 12, is to be utilized strictly as “finals week” and students should use that period to complete final written exams in their course(s). Written assignments, clinical assignments, and course task checklists received after the end of the 11th week will be subject to the same point penalties as any other assignment. It is important that you complete all your submissions, except for final on-line exams, before the end of the week 11.

**F).** From time to time students may request an extension beyond the end course date. Extensions may only be granted for reasons of personal illness or injury, close family member illness or injury, or the death of an immediate family. To receive an extension beyond the end term date, students must provide proper documentation of their illness or injury, their immediate family members illness or injury, or the death in the family. In the case of illness or injury this will require a specific signed letter from a physician. In the case of a death in family a published death notice or suitable external documentation will be sufficient. In both cases students must also provide a signed letter from an approved preceptor or a practice manager stating that the circumstances for the requested extension were sufficient to require that the student was not able to accomplish a specific number of days assignments. End of course extensions will be commensurate with the time that the student was unable to complete required course work. If you were out sick a week, it is appropriate to grant a weeks extension, and so on. If there are any other requests for extension they should be directed to both the course instructor and the course.
administrator. Requests for end of term extensions other than injury, illness or a death in the family will be handled on a case by case basis. The final decision to grant end of course extensions will rest with the course instructor.

G). You will have on-line exams in this class. The exam will be posted one week before the actual exam week, and will remain available until one week past the assigned exam week. At the end of the third week that the exam was posted it will be made unavailable and may not be taken after that date without the specific approval of the course instructor. Approved excuses to take the exam after it has been made unavailable include documented personal injury or illness, close family member injury or illness, or a death in the family. (See F. above)

H). If students feel that they have received an unfair evaluation on an assignment or exam, they should contact the instructor to resolve the situation. If a student wishes to appeal the decision of the instructor, the student should contact the Veterinary Technology Program Director.

X). Course Final Video Submission or Practical Examination:

A). Students in AVMA accredited distance learning programs are not required to travel to the parent institution to take required lab finals. In lieu of an on-campus final exam students in VETT 1018 may be required to submit a video demonstrating the specified required tasks. This video is worth 500 points, and should be submitted on or before the end of the tenth week of the course. The criteria for the successful completion of the video will be posted in your course site, and additional resources will be provided to assist you in the successful completion of this requirement. You should immediately contact your instructor with any questions or concerns about this assignment. If you choose to take the on-campus final exam, also worth 500 points, instead of submitting the video, you MUST contact your instructor by the start of the sixth week of class.

B). To complete Surgical Preparation and Assistance 3, you must complete either the video submission or a final practical examination. The choice is yours. The final practical examination will be administered at Cedar Valley College. To complete the video, you must videotape yourself performing the required course tasks. Each task is worth 50 points and failure to properly demonstrate and complete each task will result in the loss of appropriate points. The final practical exam will cover exactly the same material, except that students will perform the same tasks and be monitored and evaluated by a DEVTP staff member.

The specific required tasks are as follows:
1. Demonstrate the proper admittance of a preanesthetic patient, including all records and release forms.

2. Demonstrate the proper preanesthetic preparation of the patient by determining blood work to be performed, preanesthetic physical exam, and any special tests that may be ordered by the veterinarian.

3. Properly place an IV catheter and prepare the patient and equipment for induction of anesthesia.

4. Induce anesthesia, intubate the patient, and monitor to a stable plane of surgical anesthesia.

5. Demonstrate a proper presurgical scrub of a patient, properly transport the patient to the operating room, and properly position and secure the patient to the operating table.

6. Demonstrate the duties of a sterile surgical assistant, including draping of the patient, setting up the surgical instruments, properly identifying and passing the surgical instruments, and maintaining the sterile surgical field.

7. Properly clean instruments after surgery; properly repack gown, gloves, and surgical packs; and demonstrate the proper use of an autoclave.

8. Demonstrate the proper methods of monitoring anesthetized patients and the use of monitoring devices, and demonstrate knowledge of the parts of an anesthesia machine and how it functions.

9. Demonstrate the knowledge of suture needles, suture materials, and suture patterns.

10. Set up and properly calculate dosage problems.

C). Your video should show that you can perform all of these tasks, and that you have a good understanding of the processes and procedures for each task. The tasks may be in any order, but you must verbally explain what you are doing and provide narration for each task. If you have any problems or questions about this video you should contact your instructor for guidelines or clarification of the assignment. (If you just videotape your preceptor performing a spay with you standing there, you will not pass this very significant portion of the course.)
XI. Specific Point Values for Assignments and Examinations:

<table>
<thead>
<tr>
<th>Week</th>
<th>Assignment</th>
<th>Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>On-Line Assignments</td>
<td>50</td>
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<td></td>
<td>Weekly Tutorials</td>
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<td>OSHA Exam</td>
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<tr>
<td>1</td>
<td>Preceptor Checklist</td>
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<tr>
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<td>Preceptor Checklist</td>
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</tr>
<tr>
<td>3</td>
<td>Preceptor Checklist</td>
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<tr>
<td>4</td>
<td>Preceptor Checklist</td>
<td>5</td>
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<tr>
<td>5</td>
<td>Preceptor Checklist</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td>Preceptor Checklist</td>
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</tr>
<tr>
<td>7</td>
<td>Preceptor Checklist</td>
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<td></td>
<td>Exam One</td>
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<td>Preceptor Checklist</td>
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<td>Preceptor Checklist</td>
<td>5</td>
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<tr>
<td>10</td>
<td>Preceptor Checklist</td>
<td>5</td>
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<td></td>
<td>Required Course Video Submission or On-Campus Final Exam</td>
<td>500</td>
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<tr>
<td>11</td>
<td>Preceptor Checklist</td>
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<td></td>
<td>Course Task Checklist</td>
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<tr>
<td>12</td>
<td>Examination Two</td>
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<tr>
<td></td>
<td>Total Points Possible</td>
<td>1125</td>
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</table>

**Grading Scale:**

1125 to 1013 points = A  
1012 to 900 points = B  
899 to 788 points = C  
787 and below points = F
XII). Course Assignment Schedule:

<table>
<thead>
<tr>
<th>Week</th>
<th>Subject</th>
<th>McKelvey and Hollingshead</th>
<th>Tracy</th>
<th>Tortora and Derrickson</th>
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<tbody>
<tr>
<td>1</td>
<td>Analgesia</td>
<td>Pp. 315-332</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>Surgical Procedures</td>
<td></td>
<td>Pp. 267-280</td>
<td></td>
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<tr>
<td></td>
<td>The Chemical Level of Organization</td>
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<td></td>
<td>Pp. 28-59</td>
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<td>2</td>
<td>Analgesia - Part Two</td>
<td>Pp. 332-349</td>
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<td></td>
<td>Surgical Procedures</td>
<td></td>
<td>Pp. 281-297</td>
<td></td>
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<tr>
<td></td>
<td>Nervous Tissue</td>
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<td></td>
<td>Pp. 403-438</td>
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<tr>
<td>3</td>
<td>Anesthetic Problems and Emergencies</td>
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<td>Pp. 238-258</td>
<td></td>
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<td></td>
<td>Surgical Procedures</td>
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<td>Pp. 297-310</td>
<td></td>
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<td></td>
<td>Muscular Tissue</td>
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<td>Pp. 290-324</td>
</tr>
<tr>
<td>4</td>
<td>Anesthetic Problems and Emergencies - Part Two</td>
<td></td>
<td>Pp. 258-285</td>
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<td></td>
<td>Surgical Procedures</td>
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<td>Pp. 310-322</td>
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<tr>
<td></td>
<td>The Spinal Cord and Spinal Nerves, and The Brain and Cranial Nerves</td>
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<td>Pp. 439-523</td>
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<td>Special Techniques</td>
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<td>Surgical Emergencies</td>
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<td>Pp. 323-338</td>
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<td>Special Techniques - Part Two</td>
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<td>Surgical Emergencies</td>
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<td>The Reproductive Systems</td>
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<td>Pp. 1056-1103</td>
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<td>Examination One</td>
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<td>Surgical Emergencies</td>
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<td>Pp. 352-361</td>
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<tr>
<td>8</td>
<td>Anesthesia of Rabbits and Rodents</td>
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<td>Pp. 350-365</td>
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<tr>
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<td>Surgical Emergencies</td>
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<td>Pp. 362-378</td>
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<tr>
<td></td>
<td>Fluid, Electrolyte, and Acid-Base Homeostasis</td>
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<td>Pp. 1036-1055</td>
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</table>
XII). When Your Assignments are Due:

Specific information on the specific dates and times that assignments are due is posted on your course web site in the "Assignments" section. Please consult it and follow the assignment and exam schedule that is posted there.

XIII). OSHA

Safety in any employment situation is a vital and important issue. Good and safe work habits are critical for success in your job. For these reasons, the required OSHA examination is available the first week of each DEVTP course. Even if you have received a passing grade on this exam in a previous course, you are required to complete and pass the OSHA exam posted on the course web site in each subsequent class. The exam is worth 20 points in level 1 courses and 10 points in all subsequent classes. Regardless of the number of points that you have, you MUST take and make a score of 70% or greater on this exam to receive credit for this course.
XIV). Academic Honesty:

Strict academic honesty is expected, and personal and professional integrity is valued in the Dallas County Community Colleges. Scholastic dishonesty is a violation of the Code of Student Conduct. Scholastic dishonesty includes, but is not limited to, cheating on a test, plagiarism, falsifying documents, forgery, and collusion. As a college student, you are considered a responsible adult. Your enrollment indicates acceptance of the DCCCD Code of Student Conduct published in the DCCCD Catalog. More information is available at https://www1.dcccd.edu/cat0406/ss/code.cfm.
Introduction to VETT 1018

I). Overview:

It is important to review the assignments for each unit, especially for Unit One. As in previous courses, schedule your time wisely and appropriately, and pay special attention to the assignment schedule. Assignments should be completed according to the schedule listed in the syllabus and in the workbook to receive full credit and benefit for each class or assignment. All assignments more than one week (7 days) late may be assessed a 25% penalty for each week late. The course officially closes 7 days after the last assignment due date. Any submissions received after that date will NOT be accepted. You are strongly encouraged to schedule an appointment with your preceptor and review both the student assignments for the course as well as the duties and responsibilities of the preceptor.

You should first review the materials for the week’s class and then schedule your clinical and study time to accomplish the tasks and assignments with your preceptor. A specific time should be scheduled with your preceptor for clinical assignments.

Examinations should be completed by the scheduled date. It is the responsibility of you and your preceptor to ensure that exams are completed at the appropriate time.

II). What’s New in Upper Level Courses?

Level Two and Level Three courses are intended for intermediate to upper level veterinary technician students. These courses are the foundation for the Cedar Valley College Distance Education Veterinary Technology Program (DEVTP). In order to apply for and maintain AVMA/CVTEA accreditation of the DEVTP, Cedar Valley College is required to document that certain tasks are completed by each student with a minimum level of proficiency. In order to accomplish this, we have posted your Course Task Checklist on your course web site in the “Assignments” section.

The Course Task Checklist contains a group of required tasks that must be completed during the course. You should familiarize yourself with each of the required tasks on this list. If the opportunity arises during the course of your normal duties, you may complete a task when it is convenient rather than at a time specified in the workbook. We realize that not all tasks might not be able to be accomplished based on a specified period in the workbook because of varying caseloads in clinical practice. As such, you are required to complete the tasks during the first 11 weeks of the course, but not necessarily during a specified unit period. When a task is completed, the preceptor should date and initial the appropriate area on the Course Task Checklist located at the back of this workbook.
The course task checklists meet the AVMA/CVTEA requirement that states, “10e. The program must provide documentation of standard criteria for evaluating completion of all essential tasks. These criteria must be consistent with standards that reflect contemporary veterinary practice. The Veterinary Technology Student Essential and Recommended Skills List is provided in Appendix J.” Further in a letter to all AVMA/CVTEA accredited programs it is stated “The Curriculum Standard 10e states, “The program must provide documentation of standard criteria for evaluating completion of all essential tasks.” This means that you must develop criteria for evaluating successful completion for each skill. The concept is that you must have a system for assessing satisfactory acquisition of skills beyond “yes or no”. You are not being asked to standardize teaching methods; only evaluation methods. To do so will require identifying the steps involved in successful completion for each skill. This will admittedly be an onerous task, but one that the Committee unapologetically feels is appropriate.” To meet this requirement the course task checklist has been expanded to include specific step-by-step details on a specific method the DEVTP program believes that each task should be performed according to defined procedures in textbooks and a set of quantitative listings of performance have been included as well. The list of steps for each task is intended to assist students and preceptors in insuring that all steps in an required or recommended task are accomplished and that noting “falls through the cracks” in any given task or assignments. The task list should be viewed as a positive step in insuring the technical competence of DEVTP students, not as a restrictive or proscriptive mandate by the DEVTP program or the AVMA. The purpose of the “10e” requirement is to assist with clinical competencies and to insure that veterinary technology programs, preceptors, and students are clear in what is expected in the hands-on portions of their courses.

At the end of the course or when all tasks have been successfully completed, the Course Task Checklist should be signed by you and your preceptor and then submitted to the course instructor. If performance of a task is in violation of local statutes or laws, the preceptor should make a notation to that effect on the preceptor list. ALWAYS follow your local regulations.
I). Required On-Line Assignments:

During this, and most of your other courses, you will have specific and required on-line assignments or classes. At the first of every term, you should open the “Course Documents” section of your course site and note the on-line assignments for this class. Very early in your class, determine which on-line assignments we will be doing, print off the instructions, and explore and become familiar with the sites and areas that you will be using.

II). Unit Tutorials:

In your course web site there are Unit Tutorials posted. These tutorials are designed to enhance your learning experience in this class and to provide Internet based resources to supplement and compliment your texts and any required videos. You should review each unit’s tutorial each week, and read though any supplemental web sites and complete any weekly self tests or other exercises. The Unit Tutorials can be a valuable and interesting learning tool.

III). Reading Assignments:

*Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead
Pages 315-332

*Small Animal Surgical Nursing*, by Tracy
Pages 267-280

*Principles of Anatomy and Physiology*, by Tortora and Derrickson
Pages 28-59

IV). Overview of Unit One:

This is the introductory week to the course. You should take extra time to familiarize yourself with the texts and assignments that are required to complete this unit’s work. It is essential that you stay on schedule and complete all assignments on time. One of the purposes of the Surgical Preparation and Surgical Assistance 3 course is to assist you in gaining the information and skills necessary to function as a technician in a veterinary hospital. As such, you should be aware of several things. First, not all answers will be expressly stated in the reading for each assignment. In many cases, the structures, tasks, and answers may have to be found by combining the information from several texts, including a medical dictionary. It is this research and exploration methodology that will encourage you to learn
independently and develop skills that will be used in other courses and in the daily tasks of a veterinary practice.

V). Unit One Objectives:

A). Read the information in Veterinary Anesthesia and Analgesia, by McKelvey and Hollingshead, Pages 315-332, and be able to answer the questions in the workbook based on the reading.

B). Read the information in Small Animal Surgical Nursing, by Tracy, Pages 267-280 and become familiar with the surgical procedures and techniques presented in the text.

C). Read the information in Principles of Anatomy and Physiology by Tortora and Derrickson, Pages 28-59, and be able to answer the questions in the text based on the reading. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

C). Review the required course task checklist and complete the duties of an anesthetist or sterile surgical assistant, and submit the completed checklist when the duties are completed. You should also be preparing and working on the required course video, or be preparing to take the final practical exam.

D). Familiarize yourself with the On-Line requirements of the course and prepare to participate in the required assignments.

E). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

F). All Unit One required submissions are due to the course administrator and must be received by the Monday following the first week of the course. They must be accompanied by the signed preceptor checklist for the first unit of the course.
VI). Assignment One:

Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead on pages 315-332, and answer the following questions in the workbook based on the reading. Read the Performance Objectives on Page 315, and insure that you can successfully complete the objectives.

1. Define *Pain*.

2. Define *Analgesia*.

3. Describe in detail why it is not only medically beneficial, but ethically mandated to treat pain in animals.

4. Define the term *Nociceptor*.

5. List the type of fibers that carry pain impulses and describe the type of impulses carried by each type of fiber.

6. How is pain classified?

7. How long should animals be treated with analgesics to control pain?

8. Why can the detection of pain in animals often be very difficult?

9. Describe the physical signs of pain that an animal may manifest.

10. What effect does pain have on the normal physiological processes of the body?

11. On pages 322 and 323, there is a chart on the "Recognition and Treatment of Postoperative Pain". *(Why would it be an excellent idea to record a 0 to 9 score in a patient's chart every two to four hours after a surgical procedure? If it were you, would you want your nurse to do that?)*

12. What usually happens to animals in the wild when they display signs of pain? Does this help explain why animals, even today, often go to elaborate lengths to hide the signs of pain?

13. What is the first and most important step in the alleviation of pain? Why is this rarely possible in our profession?

14. What is the role of naturally occurring Endorphins in the control of pain?

15. What role might good nursing care play in the alleviation of pain in patients?
16. Describe the process of Preemptive Analgesia. (Hence, the old saying that it is easier to prevent pain than it is to relieve it.)

17. Why is a thorough and complete knowledge of analgesics necessary in both preemptive and post trauma pain relief?

18. Which class of drugs is not especially beneficial in preemptive analgesia?

19. What are the mechanisms of pain relief of the opioids or opiates?

20. What is the difference between an opioid agonist and an opioid agonist/antagonist?

21. What are the general side effects of opioids?

22. List the general characteristics of each of the following opioids and describe when it would be most beneficial or indicated.

- Morphine
- Oxymorphone
- Hydromorphone
- Fentanyl
- Meperidine
- Butorphanol
- Buprenorphine
- Nalbuphine
VII). Assignment Two:

Read the information in *Small Animal Surgical Nursing*, by Tracy on pages 267-280 and become familiar with the following surgical procedures that are performed in veterinary medicine. Students should be aware that while not all these procedures are commonly performed, it behooves a student to become familiar with the procedures so that they can assist the veterinarian with the procedures, both as a sterile assistant and as a non-sterile technician.

1. Ovarohysterectomy
2. Pyometia
3. Caesarean Section

VIII). Assignment Three:

Read pages 28-59 in the Tortora and Derrickson text and be able to answer the Self-Quiz Questions and the Critical Thinking Questions. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

IX). Assignment Four:

Go to the course web site and thoroughly and completely read the information posted there. If you have any questions or need additional information, please contact a staff member as soon as possible for assistance and clarification.

X). Assignment Five:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read though the information on the linked web sites

XI). Assignment Six:

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.
SP 3 * UNIT ONE * PRECEPTOR CHECKLIST

Preceptor note: On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

Task or Assignment

<table>
<thead>
<tr>
<th>Task Description</th>
<th>Preceptor Initials</th>
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<tbody>
<tr>
<td>1. Complete 22 questions based on the reading in the McKelvey and Hollingshead text.</td>
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<tr>
<td>2. Complete the reading assignment in the Tracy text on the specified surgical procedures.</td>
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</tr>
<tr>
<td>3. Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.</td>
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<tr>
<td>4. Work on completing the course task checklists and be preparing the final course video or for the final practical exam.</td>
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</tr>
<tr>
<td>5. Go to the course web site, read the information there and familiarize your self with the on-line assignments and the requirements of the course.</td>
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__________________________________________  ________________________________________
Student Name (printed)                       Preceptor Signature

Student or Preceptor Comments:

Submit this completed, initialed, and signed page as well as any required submissions to the course administrator as an Email attachment no later than the Monday following the first week of the course.
UNIT TWO

I). Reading Assignment:

*Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead
Pages 332-349

*Small Animal Surgical Nursing*, by Tracy
Pages 281-297

*Principles of Anatomy and Physiology*, by Tortora and Derrickson
Pages 403-438

II). Unit Two Objectives and Assignments:

A). Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead, Pages 332-349, and be able to answer the questions in the workbook based on the reading.

B). Read the information in *Small Animal Surgical Nursing*, by Tracy, Pages 281-297 and become familiar with the surgical procedures and techniques presented in the text.

C). Read the information in *Principles of Anatomy and Physiology* by Tortora and Derrickson, Pages 403-438, and be able to answer the questions in the text based on the reading. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

C). Review the required course task checklist and complete the duties of an anesthetist or sterile surgical assistant, and submit the completed checklist when the duties are completed. You should also be preparing and working on the required course video, or be preparing to take the final practical exam.

D). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

E). All Unit Two required submissions are due to the course administrator and must be received by the Monday following the second week of the course. They must be accompanied by the signed preceptor checklist for the second unit of the course.
III). Assignment One:

Read the information in Veterinary Anesthesia and Analgesia, by McKelvey and Hollingshead on pages 332-349, and answer the following questions in the workbook based on the reading.

1. Describe how opioids are used to treat pain. Specifically describe how each route is used and the advantages and disadvantages of each route.

2. Please bookmark page 334 in the text. That is where you will find the dosages for the use of Fentanyl patches. (Very important!)

3. Which drugs are used to reverse opioids?

4. Why have Nonsteroidal Antiinflammatory Drugs (NSAID) recently become much more popular as a form of analgesia in veterinary medicine?

5. Describe the mode of action of NSAID's.

6. Describe the possible adverse effects of NSAID's.

7. Which of the NSAID's are the most potent and can be used for postoperative pain?

8. Describe the mechanism of action and uses of Alpha-2 Adrenergic Agents.

9. List and briefly describe the Alpha-2 agonists commonly used in veterinary medicine.

10. Why might the Alpha-2 agonists have limited uses in veterinary medicine?

11. What are the side effects of Alpha-2 agonists?

12. Which drugs are used to reverse Alpha-2 agonists?

13. What are the indications for the use of Ketamine as an analgesic?

14. What are the contraindications for the use of Ketamine?

15. Ketamine is commonly used in combination with Xylazine for analgesia and anesthesia in small animals. Do you see now, that when used in combination, they each compensate for the “bad effects” of the other?

16. Are tranquilizers analgesics?

17. Can tranquilizers be used to potentiate the effects of opioids and other analgesics?
18. Describe the concept of Combination Therapy to treat or alleviate pain. Is this commonly used in your practice?

19. After you have completed the entire chapter, review the "Key Points" section on Pages 345-346 and insure that you are familiar with the concepts and information presented there. If you have any questions about the "Key Points" go back to that area in the chapter and review the information, or contact your instructor with specific questions.

20. Be able to correctly answer the Review Questions on Pages 346-348 in the text.

IV). Assignment Two:

Read the information in Small Animal Surgical Nursing, by Tracy on pages 281-297 and become familiar with the following surgical procedures that are performed in veterinary medicine. Students should be aware that while not all these procedures are commonly performed, it behooves a student to become familiar with the procedures so that they can assist the veterinarian with the procedures, both as a sterile assistant and as a non-sterile technician.

1. Canine Castration
2. Feline Castration
3. Pharyngostomy Tube Placement
4. Intestinal Resection and Anastamosis
5. Abscesses
6. Lacerations
7. Onychectomy
V). Assignment Three:

Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.

VI). Assignment Three:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read though the information on the linked web sites.

VII). Assignment Four:

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.
Preceptor note: On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

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<tr>
<td>1. Complete 20 questions based on the reading in the McKelvey and Hollingshead text.</td>
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</tr>
<tr>
<td>2. Complete the reading assignment in the Tracy text on the specified surgical procedures.</td>
<td></td>
</tr>
<tr>
<td>3. Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.</td>
<td></td>
</tr>
<tr>
<td>4. Work on completing the course task checklists and be preparing the final course video or for the final practical exam.</td>
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Student Name (printed) Preceptor Signature

Student or Preceptor Comments:
UNIT THREE

I). Reading Assignment:

Veterinary Anesthesia and Analgesia, by McKelvey and Hollingshead
Pages 238-258

Small Animal Surgical Nursing, by Tracy
Pages 297-310

Principles of Anatomy and Physiology, by Tortora and Derrickson
Pages 290-324

II). Unit Three Objectives and Assignments:

A). Read the information in Veterinary Anesthesia and Analgesia, by McKelvey and Hollingshead, Pages 238-258, and be able to answer the questions in the workbook based on the reading.

B). Read the information in Small Animal Surgical Nursing, by Tracy, Pages 297-310 and become familiar with the surgical procedures and techniques presented in the text.

C). Read the information in Principles of Anatomy and Physiology by Tortora and Derrickson, Pages 290-324, and be able to answer the questions in the text based on the reading. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

D). Review the required course task checklist and complete the duties of an anesthetist or sterile surgical assistant, and submit the completed checklist when the duties are completed. You should also be preparing and working on the required course video, or be preparing to take the final practical exam.

E). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

F). All Unit Three required submissions are due to the course administrator and must be received by the Monday following the third week of the course. They must be accompanied by the signed preceptor checklist for the third unit of the course.
III. Assignment One:

Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead on pages 238-258, and answer the following questions or become familiar with the material presented in the workbook based on the reading. Read the Performance Objectives on Page 238, and insure that you can successfully complete the objectives.

1. What is the rate of anesthetically related deaths in veterinary practices in the United States?

2. Describe how each of the following may contribute to the cause of anesthetic problems and emergencies.

   A. Failure to Obtain an Adequate History or PE on the Anesthetic Patient
   
   3. What are the elements of a complete PE?
   
   4. What role does the History play in a complete PE?

   B. Lack of Familiarity with the Anesthetic Machine or Drugs Being Used

   C. Incorrect Administration of Drugs
   
   5. What the 5 "Rights" associated with the administration of any medication?
   
   6. Why is it so important to *READ THE LABEL*, no matter experienced you are?

   D. Preoccupied or Too Busy Personnel

   (Note: I always have to stop occasionally and tell students and personnel to, slow down, take a deep breath, relax. It is more important to do a good job with this patient than it is to mess up ten things because you are in too big a hurry. Do one thing at a time, do it well, and then move on to the next task.)

   E. Fatigue

   F. Inattentiveness

   (Note: *Always do it as if it were you pet*)

   G. Exhaustion of the Carbon Dioxide Reabsorber

   H. Inadequate Oxygen Flow
(Note: Sometimes students and technicians get too busy and don't pay attention to the machine. This is why bad things sometimes happen. You have two eyes. One eye is for the machines, one is for the patient. Good monitoring means watching the patient, the anesthetic machines, and the monitoring devices. You don't have more than two eyes, so concentrate on what is really important.)

I. Misassembly of the Anesthetic Machine

7. Endotracheal Tube Problems

8. Why is important to never really trust anyone else with the assembly of the anesthetic machine?

J. Vaporizer Problems

K. Pop-Off Valve Problems

9. Why should there be no such thing as a standard anesthetic protocol? Why should there only be individual anesthetic plans tailored to the specific needs and unique characteristics of each specific patient?

L. Geriatric Patients

10. Define *Geriatric*.

11. What specific considerations are involved with geriatric patients?

12. Why do all geriatric patients need catheters and IV fluids?

13. Why might geriatric patients need supplemental oxygenation?

M. Pediatric Patients

14. Why might the fasting of pediatric patients be contraindicated?

15. What role does hypoglycemia play in anesthetizing pediatric patients?

16. Why are accurate weights very important with pediatric patients?

N. Brachycephalics

17. What role does vagal tone play in anesthetizing brachycephalic patients?
18. Why is preoxygenation, which should be mandatory in all patients and especially critical in all brachycephalic patients?

19. Why is rapid sequence induction beneficial in brachycephalic patients?

20. Why should you not remove the endotracheal tube from a brachycephalic patient until they are out the door and in the owner's car? (Just kidding, but you should get my point.)

O. Sighthounds

P. Obese Animals

21. Why would providing frequent and on-going positive pressure ventilation be essential in obese animals? Why should they never be left on their own to respire?

Q. Cesarean Sections

22. Why is preoxygenation, which should be mandatory in all patients and especially critical in all patients undergoing a C-section?

23. Why would epidural anesthesia be especially effective with C-section patients?

24. Which drugs are most depressive on the neonates?

25. Which drugs are least depressive on the neonates?

26. What the steps, drugs, and techniques involved in the necessitation of neonates?

27. What special nursing considerations are involved with the mother and the neonates after a Cesarean section?

R. Trauma Patients

28. What steps should be taken to stabilize trauma patients before undergoing anesthesia?

29. If a trauma patient must be immediately undergo an anesthetic induction, what is the rapid sequence induction agent of choice in these patients? What is the agent of second choice?
S. CNS Disease

30. Which anesthetic agents should be avoided in patients with CNS disease?

31. Which anesthetic agents are most indicated in patients with CNS trauma or disease?

32. If a CNS dysfunction patient must be immediately undergo an anesthetic induction, what is the rapid sequence induction agent of choice in these patients?

T. Cardiovascular (CV) Disease

33. What specific steps can be taken to minimize the risk of patients with CV disease?

34. Why must great care be taken with IV fluids in CV patients?

35. Why is preoxygenation, which should be mandatory in all patients, especially critical in all patients with CV disease?

U. Respiratory Disease

36. Why is preoxygenation, which should be mandatory in all patients, especially critical in all patients with CV disease?

37. Why should nitrous oxide be avoided in patients with respiratory disease?

38. Describe the processes and parameters of “bagging” an animal. Why is this especially important in patients with diaphragmatic hernias?

V. Hepatic Disease

39. Which anesthetic drugs are most contraindicated in patients with liver disease?

40. Which anesthetic drugs are most indicated in patients with liver disease?

41. Why is Propofol such a good induction or maintenance agent in patient with liver disease?
W. Renal Disease

42. Why would blood pressure monitoring be especially important in patients with renal disease?

43. Which anesthetic drugs are most contraindicated in patients with renal disease?

44. Which anesthetic drugs are most indicated in patients with renal disease?

45. What special challenges do hyperkalemic patients present?

IV). Assignment Two:

Read the information in Small Animal Surgical Nursing, by Tracy on pages 297-310 and become familiar with the following surgical procedures that are performed in veterinary medicine. Students should be aware that while not all these procedures are commonly performed, it behooves a student to become familiar with the procedures so that they can assist the veterinarian with the procedures, both as a sterile assistant and as a non-sterile technician.

1. Orthopedics

2. Lateral Ear Wall Resection

V). Assignment Three:

Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.

VI). Assignment Four:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read though the information on the linked web sites

VII). Assignment

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.
Preceptor note: On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

Task or Assignment

1. Complete 45 questions based on the reading in the McKelvey and Hollingshead text.

2. Complete the reading assignment in the Tracy text on the specified surgical procedures.

3. Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.

4. Work on completing the course task checklists and be preparing the final course video or for the final practical exam.

Submit this completed, initialed, and signed page as well as any required submissions to the course administrator as an Email attachment no later than the Monday following the third week of the course.
UNIT FOUR

I). Reading Assignment:

*Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead
Pages 258-285

*Small Animal Surgical Nursing*, by Tracy
Pages 310-322

*Principles of Anatomy and Physiology*, by Tortora and Derrickson
Pages 439-523

II). Unit Four Objectives and Assignments:

A). Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead,
Pages 258-285, and be able to answer the questions in the workbook based on the reading.

B). Read the information in *Small Animal Surgical Nursing*, by Tracy, Pages 310-322
and become familiar with the surgical procedures and techniques presented in the text.

C). Read the information in *Principles of Anatomy and Physiology* by Tortora and Derrickson,
Pages 439-523, and be able to answer the questions in the text based on the reading. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

D). Review the required course task checklist and complete the duties of an anesthetist or sterile surgical assistant, and submit the completed checklist when the duties are completed. You should also be preparing and working on the required course video, or be preparing to take the final practical exam.

E). Successfully take and pass the OSHA exam posted on the course web site with a score of 70% or greater if not previously completed in this course.

F). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.
6). All Unit Four required submissions are due to the course administrator and must be received by the Monday following the forth week of the course. They must be accompanied by the signed preceptor checklist for the fourth of the course.

III). Assignment One:

Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead on pages 258-285, and answer the following questions or become familiar with the material presented in the workbook based on the reading.

1. What is the role of a competent and caring veterinary technician in the emergency care of an anesthetic patient? (There is an old saying that in an emergency situation, “Actions should be automatic, and thinking should be logical”. Why is such a statement true?)

2. What are the causes and implications of each of the following, and what can be done to prevent them?

A. Animals That Will Not Stay Anesthetized

(Note: This is a good time to review the section on providing positive pressure ventilation in addition to the material presented in the text.)

B. Animals That Are Too Deeply Anesthetized

3. Describe the specific indicators that would signal that a patient is too deep.

4. What steps should be taken, and in what order to treat an anesthetic overdose?

5. What do you think would be the most common cause(s) of anesthetic overdose?

C. Pale Mucous Membranes

6. List the causes of pale mucous membranes.

D. Hypotension

7. How can you tell if hypotension really present? (Hint: CRT is a very poor indicator if hypotension and only really indicates the relative difference between the systolic and diastolic blood pressures.)

8. Why is it essential to maintain a Mean Arterial Blood Pressure of greater than 60 mm of Hg?
E. Hypoventilation

9. What specific steps should be taken to correct hypoventilation?

10. What will happen to the patient if hypoventilation is not corrected?

F. Dyspnea and/or Cyanosis

11. What specific steps should be taken to correct dyspnea?

12. Why are a significant number of the causes of hypoventilation, dyspnea, and cyanosis iatrogenic in most cases?

G. Tachypnea

13. What are the most common causes of tachypnea?

14. What are the specific things that can be done to produce normal respiration in patients with tachypnea?

H. Respiratory Arrest

15. Why are pulse oximeters and end-tidal carbon dioxide monitors especially helpful in preventing respiratory arrest?

16. Why might respiratory arrest be, "no big thing"?

17. Why might bagging the animal really be a bad thing?

18. What specific steps should be taken to treat respiratory arrest that is serious and life-threatening, versus transitory and insignificant?

19. How would you know the difference between respiratory arrest that is serious and life threatening, versus transitory and insignificant?

I. Cardiac Arrest

20. Define cardiac arrest.

21. What are specific indicators that would indicate that a patient is in cardiac arrest?

22. How would you differentiate between cardiac arrest, ventricular fibrillation, electromechanical disassociation, and other cardiac dysfunctions?

23. What are the essential steps in treating cardiac arrest?
24. Why is it far easier and important to prevent cardiac arrest, rather than treating it?

25. How are cardiac compressions performed on dogs and cats?

26. What are the possible harmful effects of improperly performed cardiac compressions?

27. When should internal cardiac compressions be considered?

28. What are chances of survival in any patient with true cardiac arrest?

29. What drugs are most commonly used to assist in the treatment of cardiac arrest?

30. Why is it desirable to keep a chart posted on the induction area and/or surgical room wall with an algorithm on the treatment of cardiac arrest?

31. What specific nursing care steps are necessary with patients that have undergone cardiac arrest and have been successfully resuscitated?

32. What are the causes and implications of each of the following, and what can be done to prevent them?

   **J. Regurgitation and Vomiting**

   33. What things can be done to prevent, treat, or correct regurgitation and vomiting in patients during the perianesthetic period?

   **K. Postanesthetic Seizures and Excitement**

   34. Which drugs are most indicated in the treatment of postanesthetic seizures?

   **L. Dyspnea in Cats During the Recovery Period**

   35. What specific steps should be taken to treat and correct postanesthetic dyspnea in cats?

   **M. Dyspnea in Dogs During the Recovery Period**

   36. What specific steps should be taken to treat and correct postanesthetic dyspnea in dogs?
N. Prolonged Recovery from Anesthesia

37. What specific steps should be taken to treat and correct prolonged recovery from anesthesia?

38. Why do all postanesthetic patients need to be carefully and closely monitored until they have reached a suitable state of consciousness and stability?

39. After you have completed the entire chapter, review the "Key Points" section on Pages 280-281 and insure that you are familiar with the concepts and information presented there. If you have any questions about the "Key Points" go back to that area in the chapter and review the information, or contact your instructor with specific questions.

40. Be able to correctly answer the Review Questions on Pages 282-285 in the text.

IV). Assignment Two:

Read the information in Small Animal Surgical Nursing, by Tracy on pages 310-322 and become familiar with the following surgical procedures that are performed in veterinary medicine. Students should be aware that while not all these procedures are commonly performed, it behooves a student to become familiar with the procedures so that they can assist the veterinarian with the procedures, both as a sterile assistant and as a non-sterile technician.

1. Temporary Tarsorrhaphy

2. Be able to answer the Review Questions on Pages 314-317

V) Assignment Three:

Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.

VI). Assignment Four:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read though the information on the linked web sites.
VII). Assignment Five

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

VIII). Assignment Six:

Successfully take and pass the OSHA exam posted on the course website with a score of 70% or greater if not previously completed in this course.
Preceptor note: On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

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<td>3. Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.</td>
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<td>4. Work on completing the course task checklists and be preparing the final course video or for the final practical exam.</td>
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<td>5. Successfully take and pass the OSHA exam posted on the course web site with a score of 70% or greater if not previously completed in this course.</td>
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Student Name (printed)  Preceptor Signature

Student or Preceptor Comments:
UNIT FIVE

I). Reading Assignment:

*Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead
Pages 286-300

*Small Animal Surgical Nursing*, by Tracy
Pages 323-338

II). Unit Five Objectives and Assignments:

A). Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead, Pages 286-300, and be able to answer the questions in the workbook based on the reading.

B). Read the information in *Small Animal Surgical Nursing*, by Tracy, Pages 323-338 and become familiar with the information and techniques presented in the text.

C). Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

D). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

E). All Unit Five required submissions are due to the course administrator and must be received by the Monday following the fifth week of the course. They must be accompanied by the signed preceptor checklist for the fifth unit of the course.
III). Assignment One:

Read the information in Veterinary Anesthesia and Analgesia, by McKelvey and Hollingshead, Pages 286-300, and answer the following questions based on the material.

1. Read the Performance Objectives on Page 286, and insure that you can successfully complete the objectives.

2. Define the term local anesthesia.

3. Which specific agents are commonly utilized in veterinary medicine as local anesthetics?

4. Describe how local anesthesia differs from general anesthesia.

5. What are the advantages of local anesthetics over general anesthetics?

6. What are the disadvantages of local anesthetics over general anesthetics?

7. What is the mechanism of action of local anesthetics?

8. Define the term Epidural Block.


10. Describe how local anesthetics may be used topically.

11. Describe how local anesthetics can be used by infiltration.

12. What role does epinephrine play when it is used in conjunction with local anesthetics?

13. When should local anesthetics with epinephrine NOT be used?

14. Describe Nerve Blocks, how they are produced, and their uses.

15. Describe Line Blocks, how they are produced, and their uses.

16. How are local anesthetics useful in Intraarticular administration?

17. Define Regional Anesthesia.

18. Describe the techniques used to induce Epidural Anesthesia.

19. What the indications for epidural anesthesia?
20. What are the contraindications for epidural anesthesia?

21. What are the advantages and disadvantages of epidural anesthesia?

22. Why isn’t epidural anesthesia used more in small animal veterinary medicine? (It is very commonly used in large animal veterinary medicine.)

23. How is epidural anesthesia different from spinal anesthesia?

24. Describe Intravenous Regional Anesthesia (IRA), how it is produced, and its uses. (Note: I’ve used IRA quite extensively and it is a safe, highly effective and very advantageous form of analgesia in many cases.)

25. List and describe the possible toxic effects of local anesthetics.

26. What are the signs of local anesthetic toxicity? (This was a part of a really good episode of "ER").

IV). Assignment Two:

Read the information in Small Animal Surgical Nursing, by Tracy on pages 323-338 and become familiar with the following information and procedures that may be performed in veterinary practice. Students should be aware that while not all these procedures are commonly performed, it behooves a student to become familiar with the procedures so that they can assist the veterinarian whenever necessary.

1. Shock

2. Management of the Trauma Victim

3. Respiratory Arrest

4. Cardiac Arrest

5. Cardiopulmonary Resuscitation
V). **Assignment Three:**

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

VI). **Assignment Four:**

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read though the information on the linked web sites.
Submit this completed, initialed, and signed page as well as any required submissions to the course administrator as an Email attachment no later than the Monday following the fifth week of the course.

**SP 3 * UNIT FIVE * PRECEPTOR CHECKLIST**

**Preceptor note:** On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

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<tr>
<th>Task or Assignment</th>
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<tbody>
<tr>
<td>1. Complete 26 questions based on the reading in the McKelvey and Hollingshead text.</td>
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<tr>
<td>2. Complete the reading assignment in the Tracy text on the specified topics and procedures.</td>
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<tr>
<td>3. Work on completing the course task checklists and be preparing the final course video or for the final practical exam.</td>
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__Student Name (printed)___                                             __Preceptor Signature___

**Student or Preceptor Comments:**
UNIT SIX

I). Reading Assignment:

*Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead
Pages 300-314

*Small Animal Surgical Nursing*, by Tracy
Pages 338-352

*Principles of Anatomy and Physiology*, by Tortora and Derrickson
Pages 1056-1103

II). Unit Six Objectives and Assignments:

A). Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead, Pages 300-314, and be able to answer the questions in the workbook based on the reading.

B). Read the information in *Small Animal Surgical Nursing*, by Tracy, Pages 338-352 and become familiar with the information and techniques presented in the text.

C). Read the information in *Principles of Anatomy and Physiology* by Tortora and Derrickson, Pages 1056-1103, and be able to answer the questions in the text based on the reading. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

D). Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

E). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

F). All Unit Six required submissions are due to the course administrator and must be received by the Monday following the sixth week of the course. They must be accompanied by the signed preceptor checklist for the sixth unit of the course.
III). Assignment One:

Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead on pages 300-314 and answer the following questions in the workbook based on the reading.

1. Define the terms *Assisted Ventilation, Controlled Ventilation*, and *Positive Pressure Ventilation*.

2. Define the terms *Respiratory Rate* and *Respiratory Minute Volume*.

3. What is the normal tidal volume in an awake animal?

4. If an animal breathes 12 times per minute and the animal weighs 66 pounds, what would be that animal's respiratory minute volume? (Be able to work other problems based on this principle.)

5. Why would a sedated, tranquilized, and especially an anesthetized animal, always be in a state of hypoventilation?

6. Define the terms *Hypercarbia, Hypoxia, Atelectasis*.

7. In human anesthesia, patients are very commonly paralyzed and the anesthesiologist must provide one hundred percent ventilation for the patient. Why would this actually in many ways be a good thing in veterinary medicine?

8. Describe the process, advantages and disadvantages of *Manual Ventilation*.

9. How would open-chest bagging differ from closed-chest bagging?

10. Describe the process, advantages and disadvantages of *Mechanical Ventilation*.

11. What are differences between a pressure cycle, a volume cycle, or a time cycle ventilator?  
(I use a volume cycle ventilator.)

12. Describe the risks of controlled ventilation. Is controlled ventilation worth the time and effort?

13. Describe the circumstances under which Neuromuscular Blocking Agents (NBA) may be needed or desired.

14. What is the mechanism of action of NBA's?

15. What are the two major types of NBA's and how do they differ?

16. Which drugs are used to reverses nondepolarizing NBA's?
17. On "ER" when an endotracheal tube must be quickly placed in a patient, a combination of Etomidate and Succinylcholine are used to facilitate the procedure. Why would these two drugs in combination be a nearly ideal combination?

18. After you have completed the entire chapter, review the "Key Points" section on Pages 309-310 and insure that you are familiar with the concepts and information presented there. If you have any questions about the "Key Points" go back to that area in the chapter and review the information, or contact your instructor with specific questions.


IV). Assignment Two:

Read the information in Small Animal Surgical Nursing, by Tracy on pages 338-352 and become familiar with the following information and procedures that may be performed in veterinary practice. Students should be aware that while not all these procedures are commonly performed, it behooves a student to become familiar with the procedures so that they can assist the veterinarian whenever necessary.

1. Trauma
2. Airway Obstruction
3. Anesthetic Emergencies

V). Assignment Three:

Read pages 1056-1103 in the Tortora and Derrickson text and be able to answer the Self-Quiz Questions and Critical Thinking Questions. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.
VI). Assignment Four:

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

VII). Assignment Five:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read through the information on the linked web sites.
**SP 3 * UNIT SIX * PRECEPTOR CHECKLIST**

*Preceptor note:* On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

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<tr>
<th>Task or Assignment</th>
<th>Preceptor Initials</th>
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<tr>
<td>1. Complete 19 questions based on the reading in the McKelvey and Hollingshead text.</td>
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<tr>
<td>2. Complete the reading assignment in the Tracy text on the specified topics and procedures.</td>
<td>_____________</td>
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<tr>
<td>3. Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.</td>
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<tr>
<td>4. Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.</td>
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*Student Name (printed)*  *Preceptor Signature*

*Student or Preceptor Comments:*
UNIT SEVEN

I). Exam Assignment:

Examination One: Weeks One through Six

II). Reading Assignment:

*Small Animal Surgical Nursing*, by Tracy
Pages 352-361

III). Unit Seven Objectives and Assignments:

A). Complete Exam One posted on the course Blackboard site.

B). Read the information in *Small Animal Surgical Nursing*, by Tracy, Pages 267-280 and become familiar with the information and techniques presented in the text.

C). Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

D). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

E). All Unit Seven required submissions are due to the course instructor administrator and must be received by the Monday following the seventh week of the course. They must be accompanied by the signed preceptor checklist for the seventh unit of the course.
IV). Assignment One:

Read the information in Small Animal Surgical Nursing, by Tracy on pages 352-361 and become familiar with the following information and procedures that may be performed in veterinary practice. Students should be aware that while not all these procedures are commonly performed, it behooves a student to become familiar with the procure so that they can assist the veterinarian whenever necessary.

1. Neurologic Emergencies
2. Ophthalmic Emergencies
3. Gastrointestinal Emergencies

V). Assignment Two:

Complete Examination One posted on the course Blackboard site.

VI). Assignment Three:

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

VII). Assignment Four:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read though the information on the linked web sites.
Submit this completed, initialed, and signed page as well as any required submissions to the course administrator as an Email attachment no later than the Monday following the seventh week of the course.

**SP 3 * UNIT SEVEN * PRECEPTOR CHECKLIST**

*Preceptor note:* On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

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<tr>
<th>Task or Assignment</th>
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<tbody>
<tr>
<td>1. Complete the reading assignment in the Tracy text on the specified topics and procedures.</td>
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<tr>
<td>2. Complete Exam One posted on the course Blackboard site.</td>
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<tr>
<td>3. Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.</td>
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_______________________________________  _______________________________________
Student Name (printed)                        Preceptor Signature

**Student or Preceptor Comments:**
UNIT EIGHT

I). Reading Assignment:

Veterinary Anesthesia and Analgesia, by McKelvey and Hollingshead
Pages 350-365

Small Animal Surgical Nursing, by Tracy
Pages 362-378

Principles of Anatomy and Physiology, by Tortora and Derrickson
Pages 1036-1055

II). Unit Eight Objectives and Assignments:

A). Read the information in Veterinary Anesthesia and Analgesia, by McKelvey and Hollingshead, Pages 350-365, and be able to answer the questions in the workbook based on the reading.

B). Read the information in Small Animal Surgical Nursing, by Tracy, Pages 362-378 and become familiar with the information and techniques presented in the text.

C). Read the information in Principles of Anatomy and Physiology by Tortora and Derrickson, Pages 991-1010 1036-1055 take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

D). Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

E). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

F). All Unit Eight required submissions are due to the course administrator and must be received by the Monday following the eight week of the course. They must be accompanied by the signed preceptor checklist for the eight unit of the course.
III. Assignment One:

Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead on pages 350-365 and answer the following questions in the workbook based on the reading.

1. Read the Performance Objectives on Page 350, and insure that you can successfully complete the objectives.

2. Why is patient evaluation especially important with non-traditional species?

3. Make a photocopy of the chart on page 351 of the text and then tape into a pocket notebook that you keep with you at work. If you do you will be very glad, because someday you will need that information very quickly.

4. Describe the basic restraint and handling of each of the following species.

   - Mice
   - Rats
   - Hamsters
     (Before you handle the hamster, go ahead and get out the band-aids to stop your bleeding. I always do.)
   - Gerbils
   - Guinea pigs
   - Rabbits

5. Why must you always and carefully support the hind legs of a rabbit?

6. Describe the process and procedures for performing a PE on a non-traditional small animal?

7. Why do non-traditional small animals need careful and meticulous PE's?

8. What is the policy stated in the text concerning the withholding of food before anesthesia? Do you think that this is a sound and medically viable policy?

9. Why must fluid rates be very, very, carefully calculated and monitored in non-traditional small animals?

10. Briefly describe the use of the following drugs in non-traditional small animals.

    - Preanesthetic agents
• Anticholinergics
• Phenothiazines
• Benzodiazepines
• Alpha-2 Agonists
• Opioids

IV). Assignment Two:

Read the information in *Small Animal Surgical Nursing*, by Tracy on pages 362-378 and become familiar with the following information and procedures that may be performed in veterinary practice. Students should be aware that while not all these procedures are commonly performed, it behooves a student to become familiar with the procure so that they can assist the veterinarian whenever necessary.

1. Gastric Dilation/Volvulus
2. Urinary Emergencies
3. Reproductive Emergencies

V). Assignment Three:

Read pages 1036-1055 in the Tortora and Derrickson text and be able to answer the Self-Quiz Questions and Critical Thinking Questions. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

VI). Assignment Four:

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

VII). Assignment Four:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read though the information on the linked web sites.
Preceptor note: On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

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<tr>
<th>Task or Assignment</th>
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<tr>
<td>1. Complete 10 questions based on the reading in the McKelvey and Hollingshead text.</td>
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<tr>
<td>2. Complete the reading assignment in the Tracy text on the specified topics and procedures.</td>
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<tr>
<td>3. Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.</td>
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<tr>
<td>4. Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.</td>
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Student Name (printed)  Preceptor Signature

Student or Preceptor Comments:
UNIT NINE

I). Reading Assignment:

*Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead
Pages 365-386

*Principles of Anatomy and Physiology*, by Tortora and Derrickson
Pages 950-991

II). Unit Nine Objectives and Assignments:

A). Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead, pages 365-386, and be able to answer the questions in the workbook based on the reading.

B). Read the information in *Principles of Anatomy and Physiology* by Tortora and Derrickson, Pages 950-991, and be able to answer the questions in the text based on the reading. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

C). Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

D). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

E). All Unit Nine required submissions are due to the course administrator and must be received by the Monday following the ninth week of the course. They must be accompanied by the signed preceptor checklist for the ninth unit of the course.
III. Assignment One:

Read the information in Veterinary Anesthesia and Analgesia, by McKeelvey and Hollingshead on pages 365-386 and answer the following questions in the workbook based on the reading.

1. Describe the techniques and procedures for the induction of general anesthesia in non-traditional small animals.

2. Briefly describe the use of the following drugs in non-traditional small animals.
   - Cyclohexamines
   - Neuroleptanalgesics
   - Barbiturates
   - Propofol
   - Inhalation anesthetics

3. Please read the section on "Rabbit Endotrachecal Intubation" on pages 370-373 of the text. (Intubating lagomorphs is one of the most difficult procedures that you may face in veterinary medicine. Even if you are adept at intubating traditional species, the lagomorphs present unique and special challenges.)

4. Describe the methods and procedures for monitoring the depth of anesthesia in non-traditional small animals during anesthetic procedures.

5. Describe the methods and procedures for monitoring the physiological status of non-traditional small animals during anesthetic procedures.

6. Why is temperature monitoring especially important with non-traditional small animals?

7. Describe the special considerations that must be taken with non-traditional small animals during the postoperative or recovery phase.

8. Describe the processes and procedures for handling each of the following emergency situations with non-traditional small animals.
   - Respiratory depression
   - Circulatory failure
9. What unique challenges do anesthetically related emergencies present with non-traditional small animals?

10. Despite their obvious differences, how are anesthetically related emergencies in non-traditional small animals similar to other small animals?

11. What are the special challenges associated with pain assessment with non-traditional small animals?

12. What are physical and behavioral signs that would indicate that a non-traditional species was in postoperative or post-traumatic pain?

13. Discuss the use of each of the following in the treatment of postoperative or posttraumatic pain in non-traditional small animals.
   - Opioids
   - NSAID's
   - Local anesthetics

14. How is chronic pain treated with non-traditional small animals?

15. Describe the process and procedures for the administration of appropriate analgesics in non-traditional small animals.

16. Why is it a very bad idea to recover a mouse or rat from anesthesia directly facing a cage with a large hungry cat in it? (OK, it is pretty obvious, but please don't get too tired or busy to overlook the obvious.)

17. Be able to correctly answer the Review Questions on Pages 385-386 in the text.
IV). Assignment Two:

Read pages 950-991 in the Tortora and Derrickson text and be able to answer the Self-Quiz Questions and Critical Thinking Questions. You should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the Tortora text.

V). Assignment Three:

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.

VI). Assignment Four:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read though the information on the linked web sites.
Preceptor note: On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

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<tr>
<td>1. Complete 17 questions based on the reading in the McKelvey and Hollingshead text.</td>
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<tr>
<td>2. Complete the reading assignment in the Tortora and Derrickson text and you should take and successfully master the self-test quizzes posted on the course web site over the reading and material in the text.</td>
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<tr>
<td>3. Work on completing the course task checklist to be submitted at the end of the eleventh week of the class. You should also be preparing and working on the required course video, or be preparing to take the final practical which is due by the end of the tenth week of the class.</td>
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Student Name (printed)  Preceptor Signature

Student or Preceptor Comments:
UNIT TEN

I). Reading Assignment:

Veterinary Anesthesia and Analgesia, by McKelvey and Hollingshead
Pages 387-402

II). Unit Ten Objectives and Assignments:

A). Read the information in Veterinary Anesthesia and Analgesia, by McKelvey and Hollingshead, Pages 387-402 and be able to answer the questions in the workbook based on the reading.

B). Work on completing the course task checklist to be submitted at the end of the eleventh week of the class.

C). Submit the course video assignment by the end if this unit if it is being completed in lieu of the final on-campus practical examination.

D). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

E). All Unit Ten required submissions are due to the course instructor administrator and must be received by the Monday following the tenth week of the course. They must be accompanied by the signed preceptor checklist for the tenth unit of the course.
III). Assignment One:

Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead on pages 387-402 and answer the following questions in the workbook based on the reading.

1. Read the Performance Objectives on Page 350, and insure that you can successfully complete the objectives.

2. Describe the concept of **biological variation**, and how it influences the choices and techniques when performing anesthetic procedures on large animals.

3. Why is handling and restraint very, very important in all aspects of dealing with large animals medically?

4. Describe the processes, procedures and techniques of sedating and doing standing chemical restraint with horses?

5. Why are standing procedures sometimes preferable to general anesthesia in horses?

6. Describe the concept of **field anesthesia** in horses.

7. What special considerations and concerns are inherently associated with field anesthesia?

8. Why, in many cases, is field anesthesia a necessity and not an option?

9. What role does nystagmus play in evaluating the depth of anesthesia in horses?

10. Pay special attention to the section on page 391 on “How to Administer Triple Drip to Horses”. Triple Drip is one of the safest and most convenient and effective anesthetic agents for use in horses. It does take careful attention and monitoring, or it can be very dangerous.

11. Describe the utilization of inhalant anesthetics in horses.

12. What special precautions must be taken with horses before undergoing general anesthesia where an inhalant agent will be used?

13. Why is positioning and padding horses during general anesthesia very important?

14. What can result from improper padding or positioning of horses during general anesthesia?

15. Describe the principles of administering IV fluids to horses during anesthetic procedures.
16. What is the normal fluid maintenance rate for an average horse?

17. Why may fluid infusers or fluid pumps be necessary with horses?

18. Describe the procedures that can be used to monitor blood pressure in horses?

19. Why is direct arterial blood pressure monitoring usually inexpensive and convenient in horses?

20. What is the minimum MAP that should be maintained in horses to insure adequate tissue perfusion?

21. Describe the use of each of the following in monitoring horses during an anesthetic procedure.
   
   • **Pulse oximetry**
   
   • **Capnography**
   
   • **Electrocardiography**

22. Why are horses such a unique general anesthesia challenge and not just a "really big dog"?

23. Describe the special challenges and procedures for anesthetizing foals.
IV). Assignment Two:

Work on completing the course task checklist to be submitted at the end of the eleventh week of the class.

V). Assignment Three:

Submit the course video assignment by the end if this unit if it is being completed in lieu of the final on-campus practical examination.

VI). Assignment Four:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read through the information on the linked web sites.
SP 3 * UNIT TEN * PRECEPTOR CHECKLIST

Preceptor note: On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

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<tr>
<td>1. Complete 23 questions based on the reading in the McKelvey and Hollingshead text.</td>
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<tr>
<td>2. Submit the course video assignment by the end if this unit if it is being completed in lieu of the final on-campus practical examination.</td>
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<tr>
<td>3. Work on completing the course task checklist to be submitted at the end of the eleventh week of the class.</td>
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Student Name (printed)  Preceptor Signature

Student or Preceptor Comments:
UNIT ELEVEN

I). Reading Assignment:

*Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead
Pages 1402-416

II). Unit Eleven Objectives and Assignments:

A). Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead, Pages 402-416 and be able to answer the questions in the workbook based on the reading.

B). Complete the Course Task Checklist and Submit it to the course administrator by the end of this unit.

C). Read through the Unit Tutorial and complete any self tests or exercises, and view the linked Internet web sites.

D). All Unit Eleven required submissions are due to the course administrator and must be received by the Monday following the eleventh week of the course. They must be accompanied by the signed preceptor checklist for the eleventh unit of the course.
III). Assignment One:

Read the information in *Veterinary Anesthesia and Analgesia*, by McKelvey and Hollingshead on pages 402-416 and answer the following questions in the workbook based on the reading.

1. Describe the special consideration necessary when anesthetizing cattle.
2. What special problems do cattle have being ruminants?
3. Why are anticholinergics generally contraindicated in ruminant species?
4. Describe the drugs commonly used for sedation and chemical restraint in cattle.
5. Describe the processes and procedures for general anesthesia in cattle.
6. Why is general anesthesia almost always avoided in cattle?
7. Describe the processes for monitoring cattle during anesthetic procedures.
8. Describe the considerations for supportive and postoperative care of cattle.
9. Describe the procedures for anesthetizing calves.
10. Describe the processes for anesthetizing small ruminants.
11. Describe the processes and procedures for anesthetizing swine.
   (The TKX mixture on page 410 works great.)
12. Describe the processes for regional or local anesthesia in large animals.
13. After you have completed the entire chapter, review the "Key Points" section on Page 413 and insure that you are familiar with the concepts and information presented there. If you have any questions about the "Key Points" go back to that area in the chapter and review the information, or contact your instructor with specific questions.
14. Be able to correctly answer the Review Questions on Pages 414-416 in the text.
IV). Assignment Two:

Complete the Course Task Checklist and submit it to the course administrator by the end of this unit.

V). Assignment Three:

Read and study the Unit Tutorial posted on the course web site and complete any self tests or exercises. Please view and read though the information on the linked web sites.
Submit this completed, initialed, and signed page as well as any required submissions to the course administrator as an Email attachment no later than the Monday following the eleventh week of the course.

**SP 3 * UNIT ELEVEN * PRECEPTOR CHECKLIST**

*Preceptor note:* On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

<table>
<thead>
<tr>
<th>Task or Assignment</th>
<th>Preceptor Initials</th>
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</thead>
<tbody>
<tr>
<td>1. Complete 14 questions based on the reading in the McKelvey and Hollingshead text.</td>
<td></td>
</tr>
<tr>
<td>2. Complete the Course Task Checklist and submit it to the course administrator by the end of this unit.</td>
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</tbody>
</table>

__________________________  __________________________
Student Name (printed)       Preceptor Signature

Student or Preceptor Comments:
UNIT TWELVE

Examination Two

I). Exam Two:
Complete Exam Two based on Weeks One through Twelve

II). Week Twelve Assignments and Assignments:
Complete Exam Two posed on the course web site.
Complete the Course Evaluation and submit it to AAHA.
Submit this completed, initialed, and signed page as well as any required submissions to the course administrator as an Email attachment no later than the Monday twelfth the first week of the course.

3 * UNIT TWELVE * PRECEPTOR CHECKLIST

Preceptor note: On written assignments, the preceptor is required only to verify that the questions were answered. The preceptor is not required to grade written assignments, but discussion and professional evaluation will help the student.

<table>
<thead>
<tr>
<th>Task or Assignment</th>
<th>Preceptor Initials</th>
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<tbody>
<tr>
<td>1). Complete Exam Two posted in the course Blackboard site.</td>
<td></td>
</tr>
<tr>
<td>2). Complete the course evaluation posted on the course Website and return it to AAHA.</td>
<td></td>
</tr>
</tbody>
</table>

Student Name (printed)                  Preceptor Signature

Student or Preceptor Comments:
DEVTP End-of-Course Evaluation

As a part of this course, you are requested to complete a survey that evaluates all aspects of the course. The survey is available on the Internet through your course site and should be submitted electronically. The survey is located in the "Course Documents" section of your site and should be completed sometime during the twelfth unit of the class.

Your responses to the survey will be kept in the strictest confidence and will not affect your grade. AAHA will report only your name to CVC after you complete the survey. AAHA will not report individual results to CVC. When the semester is over, the survey results will be used to make DEVTP even stronger.