**TRIAL COURSE OR NEW COURSE PROPOSAL**

**SUBMITTED BY:**
- **Department:** Veterinary Medicine
- **Prepared by:** Cathy Griseto
- **Email Contact:** cagriseto@alaska.edu
- **College/School:** CNSM
- **Faculty Contact:** Arleigh Reynolds, Assoc Dean Vet Med
- **Phone:** 474-1928

1. **ACTION DESIRED**
   - **(CHECK ONE):** Trial Course [ ] New Course [X]

2. **COURSE IDENTIFICATION:**
   - **Dept:** [ ]
   - **DVM:** [ ]
   - **Course #:** 737
   - **No. of Credits:** 3
   - **Professional Program required course – see CSU syllabus attached**

3. **PROPOSED COURSE TITLE:**
   - Principles of Veterinary Anesthesia

4. **To be CROSS LISTED?**
   - **YES/NO:** [X]
   - If yes, Dept:

5. **To be STACKED?**
   - **YES/NO:** [ ]
   - If yes, Dept:

   **NOTE:** Cross-listing requires approval of both departments and deans involved. Add lines at end of form for additional required signatures.

6. **FREQUENCY OF OFFERING:**
   - Spring each year beginning 2017

7. **SEMESTER & YEAR OF FIRST OFFERING**
   - (AY2013-14 if approved by 3/1/2013; otherwise AY2014-15)
   - AY2016-2017

8. **COURSE FORMAT:**
   - **NOTE:** Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school’s curriculum council. Furthermore, any core course compressed to less than six weeks must be approved by the Core Review Committee.
   - **COURSE FORMAT:**
     - (check all that apply)
     - 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [X] 6 weeks to full semester
   - **OTHER FORMAT (specify):** Lecture and Lab

**RECEIVED**

AUG - 5 2014

Dean’s Office
College of Natural Science & Mathematics
9. CONTACT HOURS PER WEEK:

<table>
<thead>
<tr>
<th>Course Type</th>
<th>Hours/Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecture</td>
<td>2</td>
</tr>
<tr>
<td>Lab</td>
<td>2</td>
</tr>
<tr>
<td>Practicum</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: # of credits are based on contact hours. 800 minutes of lecture = 1 credit. 2400 minutes of lab in a science course = 1 credit. 1600 minutes in non-science lab = 1 credit. 2400–4800 minutes of practicum = 1 credit. 2400–8000 minutes of internship = 1 credit. This must match with the syllabus. See http://www.uaf.edu/uaacg/faculty-senate/curriculum/course-degree-procedures/guidelines-for-computing/ for more information on number of credits.

OTHER HOURS (specify type)

10. COMPLETE CATALOG DESCRIPTION including dept., number, title, credits, credit distribution, cross-listings and/or stacking (50 words or less if possible):

Example of a complete description:

FISH 487 W, O Fisheries Management
3 Credits Offered Spring
Theory and practice of fisheries management, with an emphasis on strategies utilized for the management of freshwater and marine fisheries. Prerequisites: COMM F131X or COMM F141X; ENGL F111X; ENGL F211X or ENGL F213X; ENGL F414; FISH F425; or permission of instructor. Cross-listed with NRM F487. (3+0)

DVM 733 Department of Veterinary Medicine
2 Credit Offered Spring
Principles of Veterinary Anesthesia
DVM737 is an introduction to the principles of clinical anesthesia. Performing anesthesia requires applying knowledge of chemistry, physics, physiology, pharmacology, and equipment in a clinical setting. Anesthetists should strive to create an optimal anesthetic state for each individual patient after careful consideration of the patient’s unique medical and surgical needs. Available anesthetic and support drugs, the anticipated effects of the drugs, the procedure to be performed on the patient, and the skill of the anesthetist all impact the management of individual cases. Improving patient comfort by minimizing acute postoperative pain is an important component of clinical anesthesia. It is our intent that this course serves as a foundation that supports and reinforces your knowledge of the basic sciences, and provides you with the opportunity to begin to get a feel for integrating those disciplines into making medical judgments.

Pre-requisites: Good standing in Professional Veterinary Program

11. COURSE CLASSIFICATIONS: Undergraduate courses only. Consult with CLA Curriculum Council to apply S or H classification appropriately; otherwise leave fields blank.

<table>
<thead>
<tr>
<th>Classification</th>
<th>S</th>
<th>H</th>
</tr>
</thead>
<tbody>
<tr>
<td>Humanities</td>
<td></td>
<td></td>
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<tr>
<td>Social Sciences</td>
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</tbody>
</table>

Will this course be used to fulfill a requirement for the baccalaureate core? If YES, attach form.

YES: [ ] NO: X

If YES, check which core requirements it could be used to fulfill:

<table>
<thead>
<tr>
<th>Format</th>
<th>O = Oral Intensive</th>
<th>W = Writing Intensive</th>
<th>X = Baccalaureate Core</th>
</tr>
</thead>
<tbody>
<tr>
<td>Format 6</td>
<td>YES</td>
<td>NO</td>
<td>X</td>
</tr>
<tr>
<td>Format 7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11.A Is course content related to northern, arctic or circumpolar studies? If yes, a "snowflake" symbol will be added in the printed Catalog, and flagged in Banner.

YES [ ] NO X

12. COURSE REPEATABILITY:

Is this course repeatable for credit? [ ] YES [ ] NO X

Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).

How many times may the course be repeated for credit?

TIMES

If the course can be repeated for credit, what is the maximum number of credit hours that may be earned for this course?

CREDITS

If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course?

CREDITS
13. **GRADING SYSTEM**: Specify only one. Note: Changing the grading system for a course later on constitutes a Major Course Change - Format 2 form.

   **LETTER**: X  **PASS/FAIL**: 

**RESTRICTIONS ON ENROLLMENT (if any)**

14. **PREREQUISITES**: Professional Veterinary Medical program student or permission of instructor
   
   These will be required before the student is allowed to enroll in the course.

15. **SPECIAL RESTRICTIONS, CONDITIONS**: Professional Veterinary Medical program student or permission of instructor

16. **PROPOSED COURSE FEES**: TBD
   
   Has a memo been submitted through your dean to the Provost for fee approval? Yes/No
   
   Yes

17. **PREVIOUS HISTORY**: 
   
   Has the course been offered as special topics or trial course previously? Yes/No
   
   Yes
   
   If yes, give semester, year, course #, etc.: 

18. **ESTIMATED IMPACT**: 
   
   WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

   Professional Program approved by BOR, Chancellor and Provost – Impact to budget in second year will ease with second cohort of students

19. **LIBRARY COLLECTIONS**: 
   
   Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

   No x Yes 

   Department will keep complete library of required course materials in AHRB office

20. **IMPACTS ON PROGRAMS/DEPTS**: 
   
   What programs/departments will be affected by this proposed action? Include information on the Programs/Departments contacted (e.g., email, memo)

   Impact on Animal Resource Center facility for necropsy and specialized needs. ARC contacted and approved (jeblake@alaska.edu)

21. **POSITIVE AND NEGATIVE IMPACTS**: 
   
   Please specify positive and negative impacts on other courses, programs and departments resulting from the proposed action.

   There should be no impact on other departments.

**JUSTIFICATION FOR ACTION REQUESTED**

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. Use as much space as needed to fully justify the proposed course.

The course is required for second year veterinary students and the syllabus is provided by CSU CVMBS. The course has been approved by their accreditation requirements and will be offered at UAF as part of the 2+2 program (first two years at UAF and last two years at CSU).
Offerings above the level of approved programs must be approved in advance by the Provost.

Signature of Provost (if above level of approved programs)

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE

Signature, Chair
Faculty Senate Review Committee: ___Curriculum Review ___GAAC
___Core Review ___SADAC

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking)

Signature, Chair,
Program/Department of:

Signature, Chair, College/School Curriculum Council for:

Signature, Dean, College/School of:

ATTACH COMPLETE SYLLABUS (as part of this application). This list is online at: http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures-uaf-syllabus-requirements/
The Faculty Senate curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course (or changes to it) may be denied.

SYLLABUS CHECKLIST FOR ALL UAF COURSES
During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

1. Course information:
   - Title, number, credits, prerequisites, location, meeting time (make sure that contact hours are in line with credits).

2. Instructor (and if applicable, Teaching Assistant) information:
3. Course readings/materials:
   □ Course textbook title, □ author, □ edition/publisher.
   □ Supplementary readings (indicate whether □ required or □ recommended) and
   □ any supplies required.

4. Course description:
   □ Content of the course and how it fits into the broader curriculum;
   □ Expected proficiencies required to undertake the course, if applicable.
   □ Inclusion of catalog description is strongly recommended, and
   □ Description in syllabus must be consistent with catalog course description.

5. □ Course Goals (general), and (see #6)

6. □ Student Learning Outcomes (more specific)

7. Instructional methods:
   □ Describe the teaching techniques (e.g., lecture, case study, small group discussion,
   private instruction, studio instruction, values clarification, games, journal writing,
   use of Blackboard, audio/video conferencing, etc.).

8. Course calendar:
   □ A schedule of class topics and assignments must be included. Be specific so that it
   is clear that the instructor has thought this through and will not be making it up on the
   fly (e.g., it is not adequate to say "lab". Instead, give each lab a title that describes
   its content). You may call the outline Tentative or Work in Progress to allow for
   modifications during the semester.

9. Course policies:
   □ Specify course rules, including your policies on attendance, tardiness, class
   participation, make-up exams, and plagiarism/academic integrity.

10. Evaluation:
    □ Specify how students will be evaluated, □ what factors will be included, □ their
        relative value, and □ how they will be tabulated into grades (on a curve, absolute
        scores, etc.) □ Publicize UAF regulations with regard to the grades of "C" and below as
        applicable to this course. (Not required in the syllabus, but is a convenient way to
        publicize this.) Link to PDF summary of grading policy for "C":

11. Support Services:
    □ Describe the student support services such as tutoring (local and/or regional)
        appropriate for the course.

12. Disabilities Services: Note that the phone# and location have been updated.
    http://www.uaf.edu/disability/ The Office of Disability Services implements the Americans
    with Disabilities Act (ADA), and ensures that UAF students have equal access to the
    campus and course materials.
    □ State that you will work with the Office of Disabilities Services (208 WHITAKER
    BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

5/21/2013
PRINCIPLES OF VETERINARY ANESTHESIA

VM 737 - SPRING SEMESTER, 2017

Department of Clinical Sciences
Veterinary Medical Center
College of Veterinary Medicine
Colorado State University
Fort Collins, CO 80523

Dr. Pedro Boscán (pboscan@colostate.edu)
Dr. Gregg Griffenhagen (Gregg.G riffenhagen@colostate.edu)
Dr. Khursheed Mama (Khursheed.Mama@colostate.edu)
Dr. Marlis Rezende (marlisrezende@yahoo.com)

Course Coordinator: Dr. Peter Hellyer (Peter.Hellyer@colostate.edu)
Lectures:  
Monday 9:00 – 9:50  Pathology 101  
Friday 1:00 – 1:50  Pathology 101  

Recitation:  
Tuesday 8:00 – 11:00  Path 109 before Spring Break  
        Path 101 after Spring Break  

Recitation 1:  
Jan 17  Hellyer  Introduction  

Lecture 1:  
Jan 20  Rezende  Evaluation of the pre-anesthetic patient  
        Patient preparation for anesthesia  

– Please review videos posted on Canvas prior to Lecture 1 - Basic canine and equine anesthesia  

Lecture 2:  
Jan 23  Hellyer  Anesthesia equipment, part I  

Recitation 2:  
Jan 24  Rezende  Case discussion: patient evaluation; Pre-anesthetic plan and SOAP  

Lecture 3:  
Jan 27  Hellyer  Anesthesia equipment, part II  

Lecture 4:  
Jan 30  Mama  Clinical Pharmacology I  

Recitation 3:  
Jan 31  Hellyer/Hector Rezende  Anesthetic machines (1st half of class) Held at VTH (Junior Surgery Lab)  

Lecture 5:  
Feb 3  Mama  Clinical Pharmacology II  

Lecture 6:  
Feb 6  Mama  Clinical Pharmacology III  

Recitation 4:  
Feb 7  Hellyer/Hector Rezende  Anesthetic machines (2nd half of class) Held at VTH (Junior Surgery Lab)  

**Anesthesia Machine Practical**  

**Schedule with faculty: February 8th – May 1st**  

Lecture 7:  
Feb 10  Mama  Clinical Pharmacology IV  

Lecture 8:  
Feb 13  Mama  Clinical Pharmacology V  

Recitation 5:  
Feb 14  Mama  Injectable drug calculations/inhaled anesthetic delivery  

Lecture 9:  
Feb 17  Mama  Balanced anesthesia  

Lecture 10  
Feb 20  Boscan  Anesthesia and the Cardiovascular System  

Recitation 6:  
Feb 21  Hellyer  **Midterm 1:** material from Jan 17 through Feb 14  

Lecture 11:  
Feb 24  Boscan  Cardiovascular monitoring and support
| Lecture 12: | Feb 27 | Boscan | Support during anesthesia: (vital organs, padding, positioning & temp) |
| Recitation 7: | Feb 28 | Boscan | Monitoring equipment (TBD) |
| Lecture 13: | March 3 | Boscan | Support during anesthesia: (fluids, electrolytes and recovery considerations) |
| Lecture 14: | March 6 | Boscan | Anesthesia and the Respiratory System |
| Recitation 8: | March 7 | Boscan | Blood gas evaluations using case examples |
| Lecture 15: | March 10 | Boscan | Respiratory Monitoring and support |

**SPRING BREAK (March 13-19)**

| Lecture 16: | March 20 | Mama | Chemical restraint and sedation for minor procedures |
| Recitation 9: | March 21 | Hellyer | Midterm 2: material from Feb 17 through March 10 |
| Lecture 17: | March 24 | Mama | Species-specific considerations for general anesthesia in exotic animal species |
| Lecture 18: | March 27 | Rezende | Anesthetic considerations for horses |
| Recitation 10: | March 28 | Boscan | Keeping the anesthetic record |
| Lecture 19 | March 31 | Rezende | Anesthetic considerations for ruminants, camelids, etc. |
| Lecture 20: | April 3 | Rezende | Common misconceptions in the practice of anesthesia; causes and incidence of anesthetic-related morbidity/mortality |
| Recitation 11: | April 4 | Hellyer Griffenhagen | Student presentations |
| Lecture 21: | April 7 | Rezende | Anesthetic considerations for pregnant patients, cesarean sections; neonatal or pediatric patients |
| Lecture 22: | April 10 | Rezende | Anesthetic considerations for trauma patients |
| Recitation 12: | April 11 | Hellyer Griffenhagen | Student presentations |
| Lecture 23: | April 14 | Griffenhagen | Anesthetic considerations for neurological patients (spine or brain pathology) |
| Lecture 24: | April 17 | Griffenhagen | Anesthetic considerations for renal and hepatic disease |
Recitation 13: April 18 Hellyer Midterm 3 (material from March 20 through April 14)
Lecture 25: April 21 Griffenhagen Anesthetic considerations for cardiac disease
Lecture 26: April 24 Griffenhagen Recognition of pain in animals
Recitation 14: April 25 Hellyer Griffenhagen Student presentations
Lecture 27: April 28 Griffenhagen Local Anesthesia
Lecture 28: May 1 Boscan Management of pain in animals – acute/perioperative
Recitation 15: May 2 Hellyer Griffenhagen Student presentations
Lecture 29: May 5 Boscan Chronic pain management

Final exam is cumulative and will cover the entire course material. The final exam will be given during Final’s week (May 8-12).

COURSE OBJECTIVES FOR VM 737 – PRINCIPLES OF ANESTHESIA

VM737 is an introduction to the principles of clinical anesthesia. Performing anesthesia requires applying knowledge of chemistry, physics, physiology, pharmacology, and equipment in a clinical setting. Anesthetists should strive to create an optimal anesthetic state for each individual patient after careful consideration of the patient’s unique medical and surgical needs. Available anesthetic and support drugs, the anticipated effects of the drugs, the procedure to be performed on the patient, and the skill of the anesthetist all impact the management of individual cases. Improving patient comfort by minimizing acute postoperative pain is an important component of clinical anesthesia. It is our intent that this course serves as a foundation that supports and reinforces your knowledge of the basic sciences, and provides you with the opportunity to begin to get a feel for integrating those disciplines into making medical judgments.

VM737 is not intended to turn neophytes into practicing anesthetists. Our goal is to begin your anesthesia training by presenting a conceptual framework on which a knowledgeable practice of anesthesia will be based.

Material for testing purposes may come from lectures, recitations, lecture notes, and assigned readings. The anesthesia faculty expects each student to review pertinent topics in physiology, pharmacology, and anatomy.

EVALUATION AND GRADING

The anesthesia faculty expects all students to abide by the Code of Honor of the College of Veterinary Medicine and Biomedical Sciences.
Grades will be based upon a practical/oral examination on anesthetic equipment, three in class midterm exams, group presentation, quizzes, and a final exam. All exams are comprehensive and closed book and must be completed on your own. Resources are not permitted when completing the practical exam on anesthetic equipment.

**Point Summary:**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midterm Exam 1 (February 21)</td>
<td>100</td>
</tr>
<tr>
<td>Midterm Exam 2 (March 21)</td>
<td>100</td>
</tr>
<tr>
<td>Midterm Exam 3 (April 18)</td>
<td>100</td>
</tr>
<tr>
<td>Practical Machine Exam (Feb 8 - May 1)</td>
<td>100</td>
</tr>
<tr>
<td>Group presentations</td>
<td>50</td>
</tr>
<tr>
<td>Cumulative Final Exam (finals week)</td>
<td>200</td>
</tr>
<tr>
<td>Quizzes</td>
<td>0-100</td>
</tr>
<tr>
<td><strong>Total Points</strong></td>
<td>650-750</td>
</tr>
</tbody>
</table>

**Quizzes**

Quizzes may or may not be given during lecture and recitation to enhance recall and learning and to encourage attendance. Quizzes will typically be worth 5-10 points each. Quizzes cannot be made up, unless the student has an excused absence through the Dean’s Office. Quizzes may cover any material taught in the course and are typically short answer questions.

**Group presentations (April 4, 11 & 25, May 2):**

The goal of this activity is to have students synthesize the information presented in this class, along with the physical exam and pain assessment skills developed in the Foundations course, to be able to assess acute and/or chronic pain in clinical patients. Students will be assigned to groups of 5 to develop a brief case presentation. The presentation should include the following:

- Patient signalment
- Presenting complaint(s)
- Patient evaluation (how was this done)
- Identify if the patient has acute or chronic pain, or both
- Procedures performed or to be performed
- Identify what criteria (or scales) were used to categorize pain
- Treatment(s)
- Any follow-up information on the efficacy of treatment
- Is there a need for further treatment?

The presentation should be <10 minutes which will be followed by questions from Drs. Griffenhagen and Hellyer. Each student in the group will be asked a specific question. The grade will be based on the clarity and accuracy of the presentation, along with how well each student handles specific questions. The group presentation is worth 20 points and the individual student question is worth 30 points.
Note: Patients may be from the VTH, outside clinics, or even pets of students, friends, and family members. Please do not provide any details which would identify the owner without their permission. It is essential that no patient be made uncomfortable for the purposes of this assignment. If you have specific questions or concerns, please contact Drs. Griffenhenagen or Hellyer directly.

Grades will be assigned in accordance with the scholastic standards of the college.

TESTS MUST BE TAKEN AT THE REGULARLY SCHEDULED TIMES. Should emergency extenuating circumstances interfere with a student’s presence for a scheduled exam, individuals must obtain prior approval from the course leader, and arrange for an alternate testing time. ALTERNATE TESTS MAY BE WRITTEN OR ORAL EXAMS, ADMINISTERED WITHIN ONE WEEK OF THE MISSED EXAM BY THE ANESTHESIA FACULTY.

VM737: Practical/Oral Examination on Anesthetic Equipment:
This examination must be taken with one of the anesthesia faculty (Boscan, Griffenhenagen, Rezende, Hellyer, and Mama) at the VTH and must be completed by Monday, May 1st. A sign-up sheet will be provided to arrange for a specific testing time with the faculty. The exam must not be taken on the same day that an anesthesia faculty member, staff member, or resident has given you a review session (we do not want to test short term memory). The exam is worth 100 points. You may be asked any combination of questions to arrive at 100 points. TIME LIMIT: Each test must be completed within 10 minutes.

You may be asked to identify any component on the anesthetic machine and asked to explain its function:
(Maximum 75 points for this section: 1-15) You may be asked to identify one component but asked to explain the function of a different one?

<table>
<thead>
<tr>
<th>Component</th>
<th>Explain Function/Demonstrate how it works</th>
</tr>
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<tbody>
<tr>
<td>1. Oxygen tank</td>
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<td>2. Oxygen tank pressure gauge</td>
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<tr>
<td>3. Oxygen &amp; scavenger hoses/connection</td>
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<td>4. Oxygen flow meter</td>
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<td>5. Oxygen flush valve</td>
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<td>6. Vaporizer</td>
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<td>7. Fresh gas inlet</td>
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<td>8. Inspiratory &amp; expiratory valves</td>
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<td>9. Corrugated tubing</td>
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<td>10. Y-piece</td>
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<td>11. CO₂ absorbent</td>
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<tr>
<td>12. Pressure gauge/manometer in the circle</td>
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<tr>
<td>13. Pop-off valve</td>
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<tr>
<td>14. Scavenger holding tank</td>
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<tr>
<td>15. Reservoir bag</td>
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</tbody>
</table>
16. Identify the direction of gas flow within the circle breathing system. Be able to demonstrate how gas would flow from the expiratory valve to the inspiratory valve, pop-off valve, or reservoir bag, and from the reservoir bag back to the inspiratory side of the breathing circuit: (5 points) ______

17. Turn on the oxygen tank and note the amount of pressure in the tank and the approximate volume in liters (5 points) ______

18. Demonstrate how to pressure check the circle system (25 points, each step is worth 5 points):
   - Close pop-off valve and place your thumb over end of Y-piece ______
   - Pressurize system (≥ 20 cmH₂O) ______
   - Flow meter off ______
   - Watch for pressure drop (Acceptable drop: < 5 cmH₂O pressure drop in 30 seconds) ______
   - Open pop-off valve (failure to open pop-off valve to decrease pressure costs 5 points) ______

19. Correctly connect a Bain non-rebreathing system (5 points) ______

20. Correctly connect Bain to the scavenger system (5 points) ______

21. Trace the flow of gas through the Bain system (5 points) ______

22. Demonstrate the following methods to pressure check the Bain system (10 points) ______
   - **Leak check for outer tubing and bag:** Hold off the ends of the system, pressurize the system by turning on the O₂ flow, turn OFF O₂, and check for leaks. If using the new Bain system, close the pop-off valve for the pressure check and then open it to release pressure from the system. Do Not Use the O₂ Flush. If the pop-off valve is left closed, subtract 5 points.
   - **Leak check of the inner tubing:** With O₂ flow ON, occlude the end of the inner tube in the Bain circuit and watch for the flow in the flow meter to decrease. (Note: This method will not work if there is a check valve built into the anesthetic machine which prevents back pressure from reaching the oxygen flowmeter). If the pop-off valve is closed, subtract 5 points.