

Knowledge Requirements

Valid for 2009 Exam Candidates or later

August 6, 2008

Required Reading List:

The following is a list of *required reference materials* that the resident/fellow is expected to learn with retention and comprehension. Pertinent sections of these resources should be studied and consulted throughout the resident's training. To facilitate this, the most recent edition of each resource is required to be provided on site at each Residency Training Facility. Computer access to the common veterinary and human medical databases must also be available on site at each Residency Training Facility.

Textbooks:

Physiology Textbooks – at least one each in General, Cardiovascular, Renal and Respiratory:

General

- ❖ Textbook of Medical Physiology, Boron and Boulpaep
- ❖ Review of Medical Physiology, Ganong, 22nd ed.
- ❖ Textbook of Medical Physiology, Guyton & Hall, 11th ed.
- ❖ Berne & Levy Physiology, Koeppen & Stanton, et al., 6th ed.

Cardiovascular

- ❖ Cardiovascular Physiology, Mohrman & Heller, 6th ed.
- ❖ Heart Physiology: From Cell to Circulation, Opie, 4th ed.

Renal

- ❖ Brenner & Rector's The Kidney, Brenner, 8th ed.
- ❖ Vander's Renal Physiology, Eaton, Pooler, & Vander, 6th ed.
- ❖ Renal Physiology, Koeppen and Stanton, 4th ed.
- ❖ Clinical Physiology of Acid-Base and Electrolyte Disorders, Rose & Post, 5th ed.

Respiratory

- ❖ Nunn's Applied Respiratory Physiology, Lumb, 6th ed.
- ❖ Respiratory Physiology, West, 8th ed.

Veterinary ECC Textbooks – all from Group A and at least one from Group B:

Group A

Small animal

- ❖ The Veterinary ICU Book, Wingfield & Raffe
- ❖ Small Animal Critical Care Medicine, Silverstein & Hopper
- ❖ Manual of SA Emergency & Critical Care Medicine, Macintire et. Al

Large animal

- ❖ Manual of Equine Emergencies: Treatment & Procedures, 3rd ed., Orsini & Divers

Group B

Small animal

- ❖ Veterinary Emergency and Critical Care Manual, Mathews, 2nd ed.
- ❖ Veterinary Emergency and Critical Care Procedures, Hackett

Large animal

The Equine Hospital Manual, Corley K and Stephen J eds. 2008

Human Intensive Care Textbook – at least one:

- ❖ Textbook of Critical Care, Shoemaker, et al., 4th ed.
- ❖ Textbook of Critical Care, Fink, et al., 2005 ed. (replaces Shoemaker 4th ed.)
- ❖ Critical Care Medicine, Parrillo and Dellinger, 3rd ed.
- ❖ The ICU Book, Marino and Sutin, 3rd ed.

Fluid Therapy / Acid-Base / Electrolyte Textbook – at least one:

- ❖ Fluid, Electrolyte, and Acid-Base Disorders in Small Animal Practice, DiBartola, 3rd ed.
- ❖ Fluid, Electrolyte, and Acid-Base Physiology, Halperin & Goldstein, 3rd ed.
- ❖ Clinical Physiology of Acid-Base and Electrolyte Disorders, Rose & Post, 5th ed.

Textbook on General Internal Medicine – at least one from the appropriate group:

Small Animal

- ❖ Textbook of Veterinary Internal Medicine, Ettinger & Feldman, 6th ed.
- ❖ Small Animal Medicine, Couto, 3rd ed.

Large Animal

- ❖ Equine Internal Medicine, Reed, Bayly & Sellon, 2nd ed.
- ❖ Large Animal Internal Medicine, Smith, 4th ed. (excluding food animal sections)

Textbook on Veterinary Surgery – at least one from the appropriate group:

Small Animal

- ❖ Small Animal Surgery, Fossum, 3rd ed.
- ❖ Textbook of Small Animal Surgery, Slatter, 3rd ed.

Large Animal

- ❖ Equine Surgery, 3rd Ed., Auer & Stick (Chapters 2-15)

Textbook on Anesthesia – at least one:

- ❖ Veterinary Anesthesia & Analgesia, McKelvey & Hollingshead, 3rd ed.
- ❖ Lumb & Jones' Veterinary Anesthesia and Analgesia, Tranquilli, et al., 4th ed.

Textbook on Mechanical Ventilation – at least one:

- ❖ Essentials of Mechanical Ventilation, Hess & Kacmarek, 2nd ed.
- ❖ Mechanical Ventilation, MacIntyre & Branson, 2nd ed.
- ❖ Principles and Practice of Mechanical Ventilation, Tobin, 2nd ed.
- ❖ Mechanical Ventilation: Physiological and Clinical Applications, Pilbeam & Cairo, 4th ed.

Textbook on Pharmacology – at least one:

- ❖ Small Animal Clinical Pharmacology and Therapeutics, Boothe
- ❖ Small Animal Clinical Pharmacology, Maddison et al., 2nd ed.
- ❖ Equine Clinical Pharmacology, Bertone & Horspool

Textbook on Toxicology – at least one:

- ❖ Veterinary Toxicology: Basic and Clinical Principles, Gupta
- ❖ Clinical Veterinary Toxicology, Plumlee
- ❖ Small Animal Toxicology, Peterson & Talcott, 2nd ed.

Textbook on Clinical Pathology – at least one:

- ❖ Fundamentals of Veterinary Clinical Pathology, Stockham & Scott, 2nd ed.
- ❖ Duncan & Prasse's Veterinary Laboratory Medicine: Clinical Pathology, Latimer et al., 4th ed.
- ❖ Small Animal Clinical Diagnosis by Laboratory Methods, Willard & Tvedten, 4th ed.

Textbooks on Specific Areas of Internal Medicine – for Small Animal Trainees only – each is required:

- ❖ Veterinary Pediatrics, Hoskins, 3rd ed.
- ❖ Kirk's Current Veterinary Therapy XIII and XIV, Bonagura
- ❖ Respiratory Disease in Dogs and Cats, King
- ❖ Canine and Feline Endocrinology and Reproduction, Feldman & Nelson, 3rd ed.
- ❖ Infectious Diseases of the Dog and Cat, Greene, 3rd ed.
- ❖ Essentials of Veterinary Ophthalmology, Gelatt, 2nd ed.

Text on Neurology – at least one:

- ❖ Fundamentals of Veterinary Clinical Neurology, Bagley
- ❖ Handbook of Veterinary Neurology, Lorenz & Kornegay, 4th ed.
- ❖ BSAVA Manual of Canine and Feline Neurology, Platt and Olby, 3rd ed.

Text on Oncology:

- ❖ Small Animal Clinical Oncology, Withrow & MacEwen, 4th ed.

Textbook on Cardiology – at least one:

- ❖ Textbook of Canine and Feline Cardiology, Fox, et al., 2nd ed.

- ❖ Small Animal Cardiovascular Medicine, Kittleson & Keinle

Textbooks on Specific Areas of Internal Medicine – for Large Animal Trainees only – each is required:

- ❖ Equine Neurology, Reed & Furr
- ❖ Equine Infectious Diseases, Sellon & Long

Journals:

- ❖ Journal of Veterinary Emergency and Critical Care
- ❖ Journal of the American Veterinary Medical Association
- ❖ American Journal of Veterinary Research
- ❖ Veterinary Surgery
- ❖ Journal of Veterinary Internal Medicine
- ❖ Veterinary Clinics of North America (small or large animal as pertains to the practice)
- ❖ Compendium of Continuing Education for Veterinarians
- ❖ Critical Care Medicine
- ❖ New England Journal of Medicine

Large Animal Specific:

- ❖ Equine Veterinary Journal
- ❖ Equine Veterinary Education
- ❖ Clinical Techniques in Equine Practice

Supplemental Reading List:

The following is a list of suggested resources that may aid the resident with learning specific and specialized facets of emergency and critical care medicine.

Textbooks:

- ❖ Review of Veterinary Physiology, Engelking
- ❖ Renal Pathophysiology, Rennke, 2nd ed. (2006)
- ❖ Respiratory Pathophysiology, West, 7th ed.
- ❖ Veterinary Emergency Medicine Secrets, Wingfield, 2nd ed.
- ❖ Critical Care – Quick Look Series, Murtaugh, 2nd ed.
- ❖ Handbook of Hemodynamic Monitoring, Darovic
- ❖ Introduction to Critical Care Skills, Flynn & Bruce
- ❖ Principles and Practice of Intensive Care Monitoring, Tobin
- ❖ Hemodynamic Waveform Analysis, Ahrens
- ❖ Hemostasis and Thrombosis, Colman et al, 5th ed.
- ❖ Clinical Blood Gases: Application and Non-invasive Alternatives, Malley
- ❖ All You Need to Know to Interpret Blood Gases, Martin, 2nd ed.
- ❖ Textbook of Diagnostic Radiology, Thrall, 5th ed.
- ❖ Complications in SA Surgery, Lipwitz, Caywood, et al

- ❖ Handbook of Veterinary Anesthesia, Muir & Hubbell, 4th ed.
- ❖ Handbook of Veterinary Pain Management, Gaynor, Muir
- ❖ Rapid Interpretation of Ventilator Waveforms, Waugh et al., 2nd ed.
- ❖ Management of the Mechanically Ventilated Patient, Pierce, 2nd ed.
- ❖ Mechanical Ventilation Manual, American College of Chest Physicians
- ❖ Pharmacologic Approach to the Critically Ill Patient, Chernow, 2nd ed.
- ❖ Drugs for the Heart, 6th Ed., Opie & Gersh
- ❖ Canine and Feline Cardiology, Tilley, 4th ed.
- ❖ Essentials of Canine and Feline Electrocardiography, Tilley
- ❖ Small Animal Gastroenterology, Strombeck, 3rd ed.

Journals:

- ❖ Journal of the American Animal Hospital Association
- ❖ Veterinary Anesthesia and Analgesia
- ❖ Veterinary Radiology and Ultrasound
- ❖ British Veterinary Journal / The Veterinary Journal
- ❖ Canadian Veterinary Journal
- ❖ Topics in Companion Animal Medicine (previously Clinical Techniques in Small Animal Practice)
- ❖ Journal of Small Animal Practice
- ❖ Journal of Trauma
- ❖ Intensive Care Medicine
- ❖ Chest
- ❖ Current Opinions in Critical Care
- ❖ Critical Care Clinics
- ❖ Circulation

Other textbooks and current references may be pertinent. Knowledge of basic and applied anatomy and physiologic principles is assumed. Although the majority of certification questions will be taken from literature published in the five years prior to the examination, questions may also come from older articles considered significant and essential.