

Table of contents

Preface ix

Acknowledgments xi

1 Professional Conduct and Foundation Skills 1

Determining Your Role in a Veterinary Practice 1

Meeting Employer Expectations – 10 Behaviors to Master 4

Professional Appearance 8

Effective Communication Skills Within the Veterinary Practice 10

Verbal Communication 10

Non-verbal Communication 10

Client Communication 10

Written Communication 11

Computer Competency 11

Use and Misuse of Social Media 12

Determining Credible Web Sources 12

Anticipation of Workflow 12

Application of Veterinary Ethics 13

Human–Animal Bond 13

Grief Process 14

Foundation Skills – Veterinary Practice Math and Medical Terminology 14

Basic Math Used in the Veterinary Practice 14

Estimating 16

Volume Measurements – Dilutions 16

Drug Calculation 18

Medical Terminology 18

2 Laws, Policies, and OSHA Standards Affecting Veterinary Practice 21

Laws and Regulations for Veterinary Practices 21

Federal Laws 21

State Laws 23

Common or Case Law 24

Local Ordinances 25

Guidelines of Practice from Veterinary Organizations 26

Occupational Safety and Health Administration (OSHA) – Workplace Safety 26

Labeling 27

Personal Protection Equipment 27

3 Veterinary Business Protocols 33

Front Office Skills 34

Telephone Skills 34

Scheduling Appointments 35

Handling Non-Client Calls 37

Client Interactions at the Facility 38

Arrivals 38

Admitting Patients 39

Discharging Clients 39

Veterinary Medical Record Keeping Procedures 40

Computerized Versus Paper Patient Records 40

Paper Patient Record Assembly 41

Paper Filing Systems 41

Chronological Order or SOAP File Format 42

Transferring Medical Records 42

Forms, Certificates, and Logs 43

Day's End Protocols 45

Inventory Control 46

Daily Inventory Control 47

Ordering Supplies 48

Receiving Shipments 48

Handling Shipments and Invoices 48

Restocking Shelves 48

4 Facility and Equipment Maintenance – Cleaning for Disease Control 51

Basic Cleanliness and Orderliness 52

Cleaning 54

Disinfecting 54

Hospital Waste – Non-Hazardous versus Hazardous 55

Cleaning Techniques When Caring for Hospitalized Animals 57

Order of Cleaning 57

Facility Maintenance 60

Hospital Laundry 61

Equipment Maintenance 62

5 Anatomy and Physiology 73

“Speaking” Anatomy 73

Body Systems 75

Skeletal System 75

Muscular System 78

Cardiovascular System 78

Respiratory System 81

Immune System 81

Digestive System 82

Urinary System 84

Reproductive System 85

Nervous System 86

Endocrine System 88

Integumentary System 88

Suggested Reading 89

6 Introduction to Animals 91

Scientific Classification of Animals 91

Phenotypes 92

Introduction to Genetics 94

Breeds of Animals 96

Herding Group 96

Hound Group 96

Non-Sporting Group 97

Sporting Group 97

Terrier Group 99

Working Group 100

Toy Group 101

Cat Breeds 101

Pocket Pets 104

Determining the Sex of Companion Animals 107

7 Feeds and Feeding 111

Essential Nutrients –The Basics 112

Understanding Pet Food Labels 113

Learning to Read Labels 113

List of Ingredients 114

Adequacy Statement 114

Feeding Guidelines 115

Dry Matter Basis 115

Application of Basic Nutrition 115

Calorie Requirements 115

How Much to Feed 116

Prescription Diets 117

Feeding the Hospitalized Patient 117

Water Availability and Consumption 119

Feeding Livestock and Poultry 119

Feeding Other Species 120

References 120

Suggested Reading 120

8 Restraint of Animals 121

Restraint of Companion Animals 122

Patient Defenses 122

Assessing Behavior and Safely Approaching Companion Animals 123

Utilize Fear Free Techniques 129

Safely Moving Patients from One Location to Another 131

General Restraint Techniques for Dogs and Cats 133

Restraint for Examinations, Medications, and Procedures 134

Restraint Equipment 139

Restraint of Pocket Pets 143

Restraint of Pet Birds 143

Restraint of Livestock 144

Assessing Behavior and Safely Approaching Livestock 145

Restraint Techniques for Horses and Livestock 146

Reference 151

Suggested Reading 151

9 Knots and Ropes 153

Knot Tying Terminology 153

Types of Ropes 154

Prevent Fraying 154

Hanking a Rope 156

Types of Knots and Hitches 157

Types of Knots 157

Hitches 162

Suggested Reading 165

10 Management of Hospitalized and Boarding Pets 167

Housing Requirements – Kennel Set-up 168

Water and Food Consumption – Elimination 168

Environmental Considerations 169

Socialization and Exercising Hospitalized Patients 170

Patient Care Based on Reason for Being in the Hospital 170

Boarding 170

Surgical Patients 171

Recumbent Patient Care 171

Constipated Patients – Enemas 172

Contagious Patients 173

Feral and Quarantine Animal Housing 173

Pocket Pets and Birds 174

Treatments and Procedures 174

Medical Records 174

Understanding the Disease Process 174

Treatment Plan Protocols 175

In-hospital Grooming 179

Combing and Brushing 179

Clipping Hair or Fur 179

Identifying Ectoparasites	180
Bathing and Dipping	181
Collection of Fecal and Urine Samples	182
Pain Evaluation and Monitoring	183
Discharging Patients	184
Veterinary Hospice Care	184
Euthanasia and Post Mortem Protocols	185
After the Euthanasia	186
Reference	187
Suggested Reading	187
11 Clinical Techniques	189
Toenail Trimming	190
Clipping Birds' Wings	191
Expressing Anal Glands	192
Administration of Medications	193
Ear Cleaning and Medicating	194
Topical Medications	196
Oral Medications	197
Ophthalmic Medications	200
Syringes and Needles	201
Preparing Syringe and Needle for Use	203
Solution Bottle Preparation	204
Preparing Vaccines	204

Injections	205
Subcutaneous Injections	206
Subcutaneous Fluid Administration	206
Intramuscular Injections	207
Intranasal Infusion	208
Monitoring IV Fluid Administration and IV Catheter Maintenance	208
Wound Care and Bandaging	210
Apply a Simple Bandage	211
Bandage Failure	214
Bandage Removal	214
Emergency Support	214
Maintenance of Crash Cart Kit or Emergency Station	215
Suggested Reading	215
12 Laboratory Skills	217
Maintenance of Stain Sets	218
Staining Protocol	219
Laboratory Log Book	219
Maintenance of the Common Laboratory Equipment in the Veterinary Lab	220
Binocular Microscope	220
Centrifuge	221
Refractometer	222
Sample Collection	222
Parasitology	223

Blood Collection and Handling 229

Equipment Set-up 229

Blood Sample Handling 230

Blood Chemistry and Electrolyte Determinations 234

Serologic Test Kits 235

Urine Collection 235

Microbiology – Sample Collection 238

Necropsy: Preparation and Follow-Up 240

Preparing Samples for Shipment to Reference Laboratory 241

Vaginal Cytology Collection 242

13 Pharmacy Skills 243

Controlled Drugs 244

Reading a Prescription 245

Labeling a Prescription Container 246

Safe Handling of Dispensed Drugs 247

Prescription Packaging 248

Explaining Prescriptions to the Owner 248

Classification of Medications 250

Suggested Reading 250

14 Surgical Room Skills 251

Cleaning and Maintaining the Surgery Suite 252

Gas Anesthesia Machine 255

Cleaning the Surgical Instruments 256

Assembling Surgical Packs	257
Cold Sterilization	269
Surgery Skills and Maintaining an Aseptic Environment	270
Pre-Surgical Phase	270
Peri-Surgical Phase	274
Post-Surgical Phase	278
Post-Surgical Emergencies	279
Client Communication	279
Removing Sutures	279
Reference	281
15 Dental Skills for the Veterinary Assistant	283
Assistant's Role in Veterinary Dentistry	283
Dental Anatomy	283
Dental Terminology	284
Directional Terms	284
Dental Formulas	285
Age Approximation Based on Dental Eruption	285
Head Type	285
Dental Instruments, Equipment, and Maintenance	285
Preparation of Dental Instruments	287
Sharpening Hand Instruments	287
Power Scalers	287
Selection of the Correct Handpiece Tip	288

Air-Driven Dental Units 288

Dental Prophylaxis 289

Polishing Follows Dental Cleaning 289

Charting the Oral Examination 289

Triadan Numbering System 289

Anatomical Numbering System 290

Charting Symbols 291

Basics of Pocket Pet Dentistry 292

Dental Formula for Pocket Pets 292

Ferret Dentition 292

Hedgehog Dentition 292

Intraoral Radiography 293

Patient Positioning for Dental Radiography 293

Manual Developing of Dental Radiographs 294

Patient Care and Clean-up 294

Client Education 294

Daily Dental Care 295

Dental Patient Discharge Instructions 295

Suggested Reading 295

16 Diagnostic Imaging and Endoscopy 297

Introduction to Diagnostic Imaging 298

Digital Radiography 298

Advanced Imaging Technologies 298

Quality Assurance 299

Radiation Safety 299

Radiography Abbreviations 301

Radiography Procedure 302

Radiography Log 302

Measuring the Anatomy with Calipers 302

Setting Exposure Factors Using the Technique Charts 303

Cassette Selection 304

Film Labeling 304

Taking a Radiograph 304

Developing Radiographic Film 306

Cassette Routine Maintenance 307

Patient Film Filing 307

Darkroom Maintenance 307

Checking for Light Leaks 308

Processor Maintenance 308

Diagnostic Ultrasonography 309

Set-up for Ultrasonography 309

Endoscopy 310

Introduction to Endoscopy 310

Parts of an Endoscope 310

Endoscopy Preparation 311

Endoscopy: Post Procedure 312

Gas Sterilization 314

Cold (Liquid) Sterilization 314

End of Procedure Cleaning 315

References 315

Suggested Reading 315

Appendix: Suffixes, Prefixes, and Anatomic Terms (Roots) 317

Glossary 323

Index 331