

# Contents

<b>INTRODUCTION TO THE CONTINUING EDUCATION (CE)</b>	
<b>CONTACT HOUR APPLICATION PROCESS</b> .....	<b>v</b>
<b>CHAPTER 1. Taking the Certification Examination</b> .....	<b>1</b>
General Suggestions for Preparing for the Exam	
About the Certification Exams	
<b>CHAPTER 2. Ethical and Legal Issues</b> .....	<b>9</b>
Ethics	
Ethical Principles	
Regulation of Nursing Practice	
Legal Aspects	
<b>CHAPTER 3. Theory: Nursing and Health</b> .....	<b>21</b>
General Comments Regarding Theory	
Nursing Theory	
Human Behavior	
Community-Level Behavior Change	
Organizational Change	
Family Dynamics	
Crisis Theory	
<b>CHAPTER 4. Leadership</b> .....	<b>33</b>
Leadership	
Team Building	
Case Management	
Total Quality Management	
Continuous Quality Improvement	
Outcome Evaluation	
Program Certification	
Magnet Recognition Program	
<b>CHAPTER 5. Research</b> .....	<b>43</b>
Problem Identification	
Research Method	
Qualitative Methods	
Ensuring Trustworthiness	
Quantitative Methods	
Data Collection Strategies	
Protection of Human Rights	
Data Analysis	
Evidence-Based Practice	
Outcomes Evaluation	

<b>CHAPTER 6. Communication, Education, and Counseling</b> . . . . .	<b>59</b>
Communication	
Patient Education and Adult Learning	
Patient Education Process	
Patient Education and Counseling	
Health Self-Management	
Discharge Planning	
<b>CHAPTER 7. Cardiac and Vascular Risk</b> . . . . .	<b>77</b>
Coronary Heart Disease	
Stroke	
Peripheral Vascular Disease	
Overall Cardiac and Vascular Risk	
<b>CHAPTER 8. Risk Reduction</b> . . . . .	<b>93</b>
Levels of Prevention	
Cardiovascular Disease Prevention	
Tobacco Use and Exposure	
Nutrition	
Exercise and Activity	
Cardiac Rehabilitation	
<b>CHAPTER 9. Hypertension Management</b> . . . . .	<b>107</b>
Normal Blood Pressure	
Regulation of Blood Pressure	
Hypertension	
Sleep Apnea and Hypertension	
Clinical Assessment With Hypertension	
Management of Hypertension	
<b>CHAPTER 10. Dyslipidemia Management</b> . . . . .	<b>123</b>
Understanding Lipoprotein Structure, Function, and Metabolism	
Hyperlipidemia	
Screening for Atherosclerosis Risk	
ATP III Guidelines	
Implications for Nursing Practice	
Treatment of Dyslipidemia	
Metabolic Syndrome	
New Approaches to Lipid Assessment	
<b>CHAPTER 11. Pathophysiologic Processes</b> . . . . .	<b>135</b>
Pathophysiologic Stimuli	
Cellular Structure and Function	
Cellular Injury and Death	
Vascular Structure and Function	
Cardiac Structure and Function	
Cardiac Muscle Cells	
Cerebral Circulation	
Vascular Cell Response to Injury	
Hypoxia and Ischemia	

Inflammation  
Atherosclerosis  
Thrombosis and Embolism  
Altered Vascular Function  
Altered Cardiac Function

**CHAPTER 12. Cardiac and Vascular Assessment . . . . . 163**

Basic Principles  
Subjective Information (History)  
Physical Examination  
Diagnostic Tests  
Laboratory Tests Using Blood  
Noninvasive Diagnostic Testing  
Diagnostic Ultrasonography  
Diagnostic Testing Using Radionuclides  
Invasive Diagnostic Testing

**CHAPTER 13. Cardiac and Vascular Disease Manifestations . . . . . 201**

Angina Pectoris  
Myocardial Infarction  
Valvular Heart Disease  
Mitral Stenosis  
Mitral Regurgitation  
Aortic Stenosis  
Aortic Regurgitation  
Infective Endocarditis  
Acute Pericarditis  
Dilated Congestive Cardiomyopathy  
Hypertrophic Cardiomyopathy  
Restrictive Cardiomyopathy  
Heart Failure  
Atrial Fibrillation  
Atrial Flutter  
First-Degree Atrioventricular Block  
Second-Degree Atrioventricular Block Type I  
Second-Degree Atrioventricular Block Type II  
Third-Degree Atrioventricular Block, Complete Heart Block  
Ventricular Tachycardia  
Ventricular Fibrillation  
Sudden Cardiac Death  
Pulmonary Artery Hypertension  
Carotid Artery Occlusive Disease  
Acute Management of Thrombotic CVA  
Abdominal Aortic Aneurysm  
Upper Extremity Arterial Occlusive Disease  
Lower Extremity Arterial Occlusive Disease  
Deep Vein Thrombosis  
Chronic Venous Insufficiency

<b>CHAPTER 14. Invasive Management of Cardiac and Vascular Disease</b> . . . . .	<b>273</b>
Percutaneous Coronary Intervention	
Coronary Atherectomy	
Percutaneous Transluminal Angioplasty of the Lower Extremity	
Percutaneous Transluminal Angioplasty of the Carotid Artery	
Percutaneous Transluminal Angioplasty of the Renal Artery	
Percutaneous Balloon Valvuloplasty	
Pacemakers	
Implantable Cardioverter Defibrillator	
Coronary Artery Bypass Graft Surgery	
Valvular Repair and Valvular Replacement	
Arterial Bypass Surgery	
Aneurysm Repair	
Carotid Endarterectomy	
Peripheral Thromboembolectomy	
Overview of Cardiac Transplantation	
<b>CHAPTER 15. Cardiovascular Pharmacology</b> . . . . .	<b>317</b>
Adrenergic Group	
Inotropic Agents	
Antidysrhythmics	
Vasodilators	
Calcium Channel Blockers	
Drugs Influencing the Renin-Angiotensin-Aldosterone System	
Diuretics	
Anticoagulant, Antithrombotic, and Thrombolytic Drugs	
Antihyperlipidemics	
Other Approaches to Hyperlipidemia	
<b>CHAPTER 16. Special Situations</b> . . . . .	<b>355</b>
Emergency Conditions	
Acute Heart Failure and Pulmonary Edema	
Race, Ethnic, Gender, and Cultural Considerations	
Comorbid or Concomitant Conditions	
Specific Nursing Interventions	
<b>CHAPTER 17. Psychosocial Aspects</b> . . . . .	<b>371</b>
Coping and Adaptation	
Quality of Life	
<b>APPENDIX A. Review Questions</b> . . . . .	<b>381</b>
<b>APPENDIX B. Answers to the Review Questions</b> . . . . .	<b>391</b>
<b>INDEX</b> . . . . .	<b>397</b>
<b>ABOUT THE AUTHOR</b> . . . . .	<b>409</b>