CNOR Study Plan 2016
For applicants sitting for the exam between
July 1, 2016 and June 30, 2017

To use this plan
Use this study plan to supplement your clinical experience and expertise. Review the task and knowledge statements beginning on page 22 of the CNOR handbook. Highlight those statements that are less familiar and then match them to the reading assignments in this study plan. Give yourself credit for what are already identified as areas of strength and concentrate on subject areas in which you’d like to gain more information.

References cited in this plan
AORN Position Statements are found at http://www.aorn.org/guidelines/clinical-resources/position-statements
NOTE: Bolded items appear in multiple domains
**Primary General Readings:**

*AORN Guidelines: Medication safety*

*Alexander’s Care of the Patient in Surgery: Chapters 1, 2, 30*

*Berry and Kohn’s Operating Room Technique: Chapters 2, 3, 11, 21*

<table>
<thead>
<tr>
<th>Topic</th>
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</tr>
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</table>
| 1. Assess the health status of the patient | *Age specific,* anatomy & physiology, assessment, *cultural specific,* diagnostic studies, documentation, laboratory results, *nursing diagnosis,* *nursing process,* NANDA, Perioperative Nursing Data Set (PNDS), pathophysiology, physical assessment, preoperative fasting, vital signs | AORN Guidelines:  
- Healthcare information management  
- Moderate sedation/analgesia, p. 621  
Alexander’s: Chapters 26, 27  
B&K: Chapters 7, 8, 9, 25 |
| 2. Review of preoperative medications | Complementary/alternative medicine (CAM), *allergies,* herbs, illegal/illicit drugs, medication reconciliation, *pharmacology,* recreational drugs side effects | AORN Guidelines: Complementary care  
B&K: Chapter 23, p. 412-413 |
| 4. Obtain surgical consent | Alternatives, autonomy, benefits, complications, informed consent, patient rights, privacy, respect, risk | See Primary General Readings |
| 5. Ensure patient rights/advance directives, DNR | Advance directive, allow natural death (AND), CPR directive, DNR, living will, medical durable power of attorney, Patient Self-Determination Act (PSDA) | AORN Position Statement: Perioperative care of patients with do-not-resuscitate orders  
B&K: Chapters 8, 30 |
## Domain 2: Identify Expected Outcomes and Develop a Plan of Care 10%

**Primary General Readings:**

*Alexander’s Care of the Patient in Surgery*: Chapter 1; Unit II: Surgical interventions

*Berry and Kohn’s Operating Room Technique*: Chapters 2, 7, 21, 26

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<tbody>
<tr>
<td>1. Identify and plan for expected patient outcomes</td>
<td>Nursing diagnoses, preoperative nursing interventions, patient needs</td>
<td>See Primary General Readings</td>
</tr>
</tbody>
</table>
| 2. Develop an individualized plan of care                             | Age-specific, anxiety, behavioral responses, collaboration, comfort, cultural/ethnic diversity, legal/ethical standards, medications, pain management, physiological responses, patient-centered, resources, SCIP protocol, spiritual needs, transcultural | AORN Guidelines: Healthcare information management, p.491-492
 Alexander’s: Chapters 26, 27
 B&K: Chapters 8, 9, 11                                                 |
| 3. Prepare for perioperative safety needs                            | Chemical, radiation, fire, laser, positioning                              | AORN Guidelines:                                                                   |
|                                                                      |                                                                           | • Electrosurgery                                                                    |
|                                                                      |                                                                           | • Laser safety                                                                       |
|                                                                      |                                                                           | • Reducing radiological exposure                                                     |
|                                                                      |                                                                           | • Ambulatory supplement: reducing radiological exposure                             |
|                                                                      |                                                                           | • Positioning the patient                                                            |
|                                                                      |                                                                           | Alexander’s: Chapters 2, 3, 6                                                        |
|                                                                      |                                                                           | B&K: Chapter 13                                                                     |
| 4. Adhere to standard and transmission-based precautions              | Hand hygiene, PPE, contact, droplet, airborne                              | AORN Guidelines:                                                                   |
|                                                                      |                                                                           | • Hand hygiene                                                                       |
|                                                                      |                                                                           | • Transmissible infections                                                           |
|                                                                      |                                                                           | Alexander’s: Chapter 4, p. 80-84                                                    |
|                                                                      |                                                                           | B&K: Chapter 15, p. 254-256                                                        |
## Domain 3: Intraoperative Activities 27%

**Primary General Readings:**

*Alexander’s Care of the Patient in Surgery: Chapters 2, 4, 6*

*Berry and Kohn’s Operating Room Technique: Chapters 2, 11, 25, 27*

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| 1. Optimize **physiological patient responses** | Hyperthermia, hypothermia, infection control, infection prevention, patient temperature control, perfusion, surgical procedure, wound classification, wound healing | AORN Guidelines: Hypothermia  
B&K: Chapter 29 |
| 2. Optimize **behavioral patient responses** | Comfort, anxiety, medication, pain management, **cultural, ethical, and spiritual needs**, | See Primary General Readings |
| 3. Monitor and maintain patient and personnel **safety** | Body mechanics, **chemical**, counts, documentation, ergonomics, equipment, manufacturer’s instructions for use (IFU), **fire**, hazardous materials, lead aprons, National Patient Safety Goals, smoke plumes, **laser**, laser goggles, positioning, radiation, Universal Protocol, WHO checklist | AORN Guidelines:  
• Electrosurgery  
• Laser safety  
• Reducing radiological exposure  
• Ambulatory supplement: reducing radiological exposure  
• Sharps safety  
• Prevention of retained surgical items  
• Ambulatory supplement: prevention of retained surgical items  
• Healthcare information management  
Alexander’s: Chapters 3, 7  
B&K: Chapters 3, 13, 20, 22, 31 |
| 4. Prepare the surgical site | Patient dignity, modesty, privacy, positioning, skin prep antisepsis | AORN Guidelines:  
• Positioning the patient  
• Preoperative patient skin antisepsis  
B&K: Chapters 26 |
| 5. Monitor and evaluate effects of pharmacologic/anesthetic agents | Anesthesia agents, labeling, medications, pain management | AORN Guidelines:  
• Managing the patient receiving moderate sedation/analgesia  
• Medication safety  
• Ambulatory supplement: medication safety  
• Care of the patient receiving local anesthesia  
Alexander’s: Chapter 5  
B&K: Chapters 23, 24 |
### Domain 3: Intraoperative Activities 27% cont.

**Primary General Readings:**

*Alexander’s Care of the Patient in Surgery*: Chapters 2, 4, 6

*Berry and Kohn’s Operating Room Technique*: Chapters 2, 11, 25, 27

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<tr>
<td>6. Maintain sterility of surgical field</td>
<td>Aseptic technique, expiration date, instruments, package integrity, sterile, surgical products</td>
<td>AORN Guidelines: • Surgical attire • Hand hygiene • Sterile technique • Product selection • Prevention of transmissible infections • Ambulatory supplement: prevention of transmissible infections Alexander’s: Chapter 4 B&amp;K: Chapters 15, 16</td>
</tr>
<tr>
<td>7. Control environmental factors</td>
<td>Air exchanges, humidity, noise, room temperature, traffic</td>
<td>AORN Guidelines: • Environmental cleaning • Safe environment of care, part 2 Alexander’s: Chapters 3, 4 B&amp;K: Chapters 10, 11, 12</td>
</tr>
<tr>
<td>8. Specimen management</td>
<td>Documentation, explant, implant, verification</td>
<td>AORN Guidelines: • Specimen management • Autologous tissue management Alexander’s: p. 32-33 B&amp;K: Chapter 22</td>
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<tr>
<td>9. Anticipate and prevent hemodynamic complications</td>
<td>Autotransfusion, blood products, blood transfusion</td>
<td>Alexander’s: Chapter 11, p. 300, 302; Chapter 12, p. 359, 377; Chapter 23, p. 875; Chapter 28, p. 1109-1110, 1115 B&amp;K: Chapter 8, p. 133; Chapter 31, p. 608-615; Chapter 44, p. 915-916</td>
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Primary General Readings:

AORN Guidelines: Transfer of patient care information

Alexander’s Care of the Patient in Surgery: Chapter 2. Each chapter in Unit II has discharge planning information pertinent to that specialty.

Berry and Kohn’s Operating Room Technique: Chapters 6, 7, 21

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| 1. Communication techniques               | Barriers, hand-offs/hand overs, patient status | Alexander’s: Chapter 1, p. 9; Chapter 10, p. 270-271; Chapter 26, p. 1013, 1016; Chapter 27, p. 1091  
B&K: Chapter 1, p. 11; Chapter 2, p. 19; Chapter 6, p. 77-78; Chapter 25, p. 470-471; Chapter 41, p. 839 |
| 2. Interviewing techniques                | Preoperative assessment                        | Alexander’s: Chapter 1, p. 3-5; Chapter 26, p. 1009-1011; Chapter 30, p. 1169  
B&K: Chapter 21, p. 368-370                                                                      |
Alexander’s: Chapter 1, p. 13-14  
B&K: Chapter 2, p. 18; Chapter 10, p. 182-183                                                      |
| 4. Reporting to interdisciplinary team    | Allergies, critical lab values, medications, hand offs, hand offs/hand overs, HIPAA, implants, SBAR, verbal orders | Alexander’s: Chapter 1, p. 9; Chapter 10, p. 270-271  
B&K: Chapter 2, p. 18; Chapter 11, p. 197                                                        |
B&K: Chapter 2, p. 19; Chapter 21, p. 370-371                                                       |
**Primary General Readings:**

*Alexander’s Care of the Patient in Surgery:* Chapter 10. Each chapter in Unit II has discharge planning information pertinent to that specialty.

*Berry and Kohn’s Operating Room Technique:* Chapters 11, 30

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| 1. Interdisciplinary services for coordinating care | Continuity of care, **hand-off/hand over**, interdisciplinary, PACU, transfer of care criteria | AORN Guideline: Transfer of patient care information, p. 669-674
Alexander’s: Chapter 2, p. 22, 28
B&K: Chapter 25 |
| 2. Discharge planning for the patient leaving the facility | Discharge, regulatory guidelines, wound care | AORN Guidelines:
- Medication safety, p. 306,308;
- Moderate sedation/analgesia, p. 631-633
Alexander’s: Chapter 2, p. 18-22.; p. 41-42 |
Primary General Readings:

AORN Guidelines: Instrument cleaning; Packaging systems; Sterilization

Alexander’s Care of the Patient in Surgery: Chapter 4

Berry and Kohn’s Operating Room Technique: Chapters 17, 18

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| 1. Cleaning and disinfecting instruments and supplies                | Bioburden, biofilm, cleaning, critical item, decontamination, decontamination area, disinfection, documentation, enzymatic cleaner, FDA, germicide, high-level disinfection, loaner instrumentation, low-level disinfection, non-critical item, PPE, semi-critical item, Spaulding classification, ultrasonic cleaner | AORN Guidelines:  
  • High level disinfection  
  • Processing flexible endoscopes  
  Alexander’s: Chapter 8, p. 218-222                                                                                        |
| 2. Packaging and sterilization of instruments and supplies           | Dynamic air removal, gravity displacement, hydrogen peroxide gas plasma sterilization, immediate use sterilization, implants, load, packaging, prevacuum, steam, sterilization | See Primary General Readings                                                                                                                                 |
| 3. Documentation required for monitoring safe sterilization practices | Biological indicator, Bowie-Dick, chemical indicator, documentation, emulating indicators, load parameters, physical monitor, pressure, temperature, regulations, tracking | See Primary General Readings                                                                                                                                 |
| 4. Principles of transporting and storing equipment, sterile supplies, and instruments | Controlled conditions, event related, regulatory requirements, shelf life, storage, time related, tracking, transportation, vendors | AORN Guidelines:  
  • Environment of care, part 1, p. 251-253  
  • Environment of care, part 2: p. 272  
  AORN Position Statement: Role of the health care industry representative                                                                 |
  B&K: Chapter 7, p. 110; Chapter 13, p. 221-222; Chapter 14, p. 240-241                                                                 |
### Domain 7: Emergency Situations 11%

**Primary General Readings:**
*Alexander’s Care of the Patient in Surgery:* Chapter 28
*Berry and Kohn’s Operating Room Technique:* Chapter 13, 31

<table>
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<tbody>
<tr>
<td>1. Prepare for and manage anaphylaxis</td>
<td>Allergy, anaphylactic shock, anaphylaxis, latex free, latex safe, sensitivity, transfusion reaction</td>
<td>AORN Guidelines: Safe environment of care, Part 1: Medication safety, p. 306</td>
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<td>Alexander’s: p. 35-38, 64-65, 113</td>
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<tr>
<td>2. Prepare for and manage cardiac arrest</td>
<td>Advanced cardiac life support, basic life support, cardio-pulmonary resuscitation, ischemia, myocardial infarction</td>
<td>B&amp;K: Chapter 31, p. 599-606</td>
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<tr>
<td>3. Prepare for and manage Malignant Hyperthermia</td>
<td>Acidosis, calcium, Dantrium, dantrolene sodium, dysrhythmia, hypercarbia, hyperkalemia, hypermetabolic, hyperthermia, tachycardia, trigger</td>
<td>Alexander’s: p. 151-152, 277, 1017</td>
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<tr>
<td>4. Prepare for and manage respiratory complications</td>
<td>Airway obstruction, anoxia, arterial blood gas, aspiration, atelectasis, bronchospasm, difficult airway, hypoxia, laryngospasm, pneumothorax, pulmonary edema, pulmonary embolism</td>
<td>Alexander’s: p. 140-143, 274-275, 279-280</td>
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<tr>
<td>5. Prepare for and manage victims of trauma</td>
<td>ARDS, autotransfusion, blunt trauma, DIC, diagnostic tests, DNR, end of life care, MAST, mechanism of injury, multisystem, organ donor, rapid sequence intubation, shock, trauma, traumatic brain injury, triage</td>
<td>Alexander’s: Chapter 26, p. 1065-1069; Chapter 28</td>
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<td>B&amp;K: Chapter 3, p. 51-52; Chapter 7, p. 113-117; Chapter 29, p. 568-569; Chapter 37, p. 773; Chapter 45, p. 933-941</td>
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<tr>
<td>6. Prepare for and manage fire</td>
<td>Burn, explosion, flammable, fuel, ignition source, oxygen, RACE, PASS, thermal injury</td>
<td>AORN Guidelines: p. 242-246</td>
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<td>Alexander’s: p. 33-34, 244-246, 640</td>
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<td>B&amp;K: p. 218-220</td>
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<td>B&amp;K: Chapter 14, p. 246-247</td>
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### Domain 8: Management of Personnel, Services, and Materials 6%

**Primary General Readings:**

*Alexander’s Care of the Patient in Surgery: Chapter 1*

*Berry and Kohn’s Operating Room Technique: Chapter 6*

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| 1. Management of the interdisciplinary team | Allied health care providers, competency, delegation, mentor, management, patient acuity, scope of practice, staff education, supervision, support personnel, UAP | AORN Guidelines:  
• Standards of perioperative nursing, p. 693-707  
• Exhibit B, p. 711-732  
AORN Position Statement:  
• Safe staffing and on-call practices  
• Responsibility for mentoring  
B&K: Chapters 2, 4  
| 2. Principles of product evaluation and cost containment | Cost containment, environmental consciousness (go green), fiscal responsibility, product evaluation, product selection, recycling, reprocess, resource management, single-use device, supply management | AORN Guidelines for:  
• Sterilization  
• Product selection  
AORN Position Statements: Environmental responsibility  
Alexander’s: p. 102-103  
B&K: Chapter 17, p. 297-299; Chapter 25, p. 477-478 |
| 3. Management of ancillary personnel in the perioperative setting | Accountability, ethics, family, health care industry representative, loaner instrumentation, patient rights, patient privacy, student, vendor, visitor | AORN Position Statements:  
• Role of the healthcare industry representative in the perioperative setting  
• Allied health care providers and support personnel in the perioperative setting  
• Value of clinical learning activities in the periop setting in undergraduate nursing curricula  
Alexander’s: Chapter 2 |
| 4. Management of environment of care | Biologic implants, PPE, preventive maintenance, room turnover, spills, terminal cleaning, | AORN Guidelines:  
• Environmental cleaning  
• Autologous tissue management  
Alexander’s: Chapter 4, p. 120-121  
B&K: Chapter 12; Chapter 28, p. 553-557 |
### Domain 9: Professional Accountability 9%

**Primary General Readings:**


Alexander’s Care of the Patient in Surgery: Chapter 1

Berry and Kohn’s Operating Room Technique: Chapters 2, 4, 6

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<tr>
<td>2. Resources for professional growth</td>
<td>Best practice, certification, competency, continuing education, life-long learning, professional organization, self-assessment, staff education</td>
<td>See Primary General Readings</td>
</tr>
<tr>
<td>3. Participation in quality improvement activities</td>
<td>Audit, best practice, change, evidence-based practice, information literacy, measures, performance improvement, Plan-Do-Study-Act, quality assurance, quality improvement, research, risk management, shared governance</td>
<td>See Primary General Readings</td>
</tr>
</tbody>
</table>
| 4. Facilitating professional behavior           | Chain of command, collegiality, confidentiality, culture of safety, delegation, ethics, healthy work environment, horizontal violence, just culture, lateral violence, patient advocate, professional growth, professional standards | AORN Position statements: Criminalization of human errors  
Alexander’s: Chapter 3  
B&K: Chapters 1, 3 |