Study Plan 2020
For applicants sitting for the exam before June 30, 2020

References Cited in This Plan:


AORN Position Statements and endorsed documents are found at
http://www.aorn.org/guidelines/clinical-resources/position-statements
NOTE: Bolded items appear in multiple subject areas
Subject Area 1: Preoperative Patient Assessment and Diagnosis

12%

Primary General Readings:

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

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

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<tr>
<th>Topic</th>
<th>Key Words</th>
<th>Additional Readings</th>
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</table>
| 1: Assess the health status of the patient | Age-specific, anatomy & physiology, assessment, diagnostic studies, documentation, laboratory results, **nursing diagnosis**, **nursing process**, NANDA, **Perioperative Nursing Data Set (PNDS)**, pathophysiology, physical assessment, preoperative fasting, vital signs | AORN Guidelines for:  
• Information Management, p. 375; 377-378  
• Moderate Sedation/Analgesia, pp. 533-536; 548-549  
• Local Anesthesia: 444-446  
AORN Position Statement: Care of the Older Adult in Perioperative Settings  
Alexander’s: Chapter 5, p. 112; Chapters 26,27; Appendix A  
B&K: Chapters 7, 8, 9, 25 |
| 2: Review of preoperative medications | **Allergies**, complementary/alternative medicine (CAM), herbs, illegal/illicit drugs, medication reconciliation, **pharmacology**, recreational drugs side effects | AORN Guidelines for:  
• Complementary Care  
• Medication Safety, pp.466-468  
AORN Endorsed Document: Joint Position Statement on Substance Use  
Alexander’s: Chapter 19, p. 625; Chapter 29, pp. 1129-1130  
B&K: Chapter 23 pp. 412-413 |
| 3: Initiation of the **Universal Protocol** | Preoperative verification, site marking, surgical safety checklist, **The Joint Commission**, time out, wrong site, wrong procedure, wrong person | AORN Guideline: Team Communication, pp. 1074-1077  
AORN Position Statement: Preventing Wrong- Patient, Wrong-Site, Wrong-Procedure Events |
4: Obtain surgical consent

Alternatives, autonomy, benefits, complications, informed consent, patient rights, privacy, respect, risk

See Primary General Readings
AORN Guideline for Information Management, p. 382

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

6: Pain assessment

Allergies, analgesia, narcotics, NSAIDS, nonpharmacological interventions, opioids, pain block, pain intensity scales, PCA, pharmacology, regional anesthesia, self-report, signs, symptoms, The Joint Commission

Alexander’s: Chapters 5, 10, 26, 27
B&K: Chapters 8, 9, 30

7: Development of nursing diagnoses

NANDA, nursing diagnosis, PNDS

AORN Guideline: Information Management, pp. 377-378
AORN Endorsed Document: ANA Position Statement on Inclusion of Recognized Terminologies within HER and other HIT Solutions

Subject Area 2: Preoperative 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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<tr>
<th>Topic</th>
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</thead>
<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>
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</table>
Subject Area 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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<thead>
<tr>
<th>Topic</th>
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</thead>
</table>
| 1. Optimize physiological patient responses | Hyperthermia, hypothermia, infection control, infection prevention, patient temperature | AORN Guidelines for:  
- Hypothermia  
- Sterile Technique, p. 962 |
<table>
<thead>
<tr>
<th>2. Optimize behavioral patient responses</th>
<th>Comfort, anxiety, medication, pain management, cultural, ethical, and spiritual needs</th>
<th>See Primary General readings</th>
</tr>
</thead>
</table>
| 3. Monitor and maintain patient and personnel safety | Body mechanics, chemical, counts, deep vein thrombosis, documentation, ergonomics, equipment, manufacturer’s instructions for use (IFU), fire, hazardous materials, lead aprons, National Patient Safety Goals, smoke plume, laser, laser goggles, positioning, radiation, tourniquet, Universal Protocol, WHO checklist | AORN Guidelines for:  
- Energy-Generating Devices  
- Environment of Care  
- Information Management  
- Minimally Invasive Surgery  
- Pneumatic Tourniquet  
- Positioning the Patient  
- Prevention of Retained Surgical Items  
- Ambulatory Supplement: Prevention of Retained Surgical Items  
- Radiation Safety  
- Ambulatory Supplement: Radiation Safety  
- Management  
- Safe Patient Handling  
- Sharps Safety  
- Surgical Smoke Safety  
- Team Communication  
- Venous Thromboembolism  
AORN Position Statements for:  
- Distraction and Noise in the Perioperative Practice Setting  
- Patient Safety  
- Prevention of pressure Ulcers  
Alexander’s: Chapters 3, 8, 29 |
| 4. Prepare the surgical site | Patient dignity, modesty, privacy, positioning, skin prep antisepsis | AORN Guidelines:  
- Positioning the Patient  
- Patient Skin Antisepsis  
B&K: Chapter 26 |
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| 5. | Monitor and evaluate effects of pharmacologic/anesthetic agents | Anesthesia agents, labeling, **medications, pain management** | AORN Guidelines for:  
  • Care of the Patient Receiving Moderate Sedation/Analgesia  
  • Medication safety  
  • Ambulatory supplement: Medication safety  
  • Care of the patient receiving local anesthesia  
 AORN Endorsed Document: CDC Position Statement on Single-Dose/Single Use Vials  
 Alexander’s: Chapters 5, 10  
 B&K: Chapters 23, 24 |
| 6. | Maintain sterility of surgical field | Aseptic technique, expiration date, instruments, package integrity, sterile, surgical products | AORN Guidelines for:  
  • Surgical Attire  
  • Hand Hygiene  
  • Sterile Technique  
  • Product Selection  
 Alexander’s: Chapter 4  
 B&K: Chapters 15, 16 |
| 7. | Control environmental factors | Air exchanges, humidity, noise, room temperature, traffic | AORN Guidelines for:  
  • Design and Maintenance  
  • Environmental Cleaning  
 AORN Position Statements: HVAC Interim Guidance Statement  
 AORN Endorsed Document: Joint Commission- OR Relative Humidity  
 Alexander’s: Chapters 3, 4  
 B&K: Chapters 10, 11, 12 |
| 8. | Specimen management | Documentation, explant, **implant**, verification | AORN Guidelines:  
  • Specimen Management  
  • Autologous Tissue Management  
 B&K: Chapter 22 |
| 9. | Anticipate and prevent hemodynamic complications | Autotransfusion, blood products, blood transfusion | Alexander’s: Chapter 11, p. 295; Chapter 12, pp. 349-350; Chapter 23, p. 875; Chapter 28, pp. 1102-1104; Appendix A  
 B&K: Chapter 8, p. 133; Chapter 31, pp. 608-615; Chapter 44, pp. 915-916. |
**Subject Area 4: Communication 10%**

**Primary General Readings:**

*AORN Guidelines*: Team Communication

*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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<thead>
<tr>
<th>Topic</th>
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</table>
| 1. Communication techniques | barriers, hand-offs/hand overs, patient status | Alexander’s: Chapter 10, pp. 261-262; Chapter 26, pp. 1004-1005; Chapter 27, p. 1156  
B&K: Chapter 1, p. 11; Chapter 6, pp. 77-78; Chapter 25, pp. 470-471; Chapter 41, p. 839 |
| 2. Interviewing techniques | Preoperative assessment | Alexander’s: Chapter 1, p. 3-5; Chapter 26, pp. 1001-1003; Chapter 30, p. 1156  
B&K: Chapter 21, pp. 368-370 |
| 3. Information technology | HIPAA, security rules, software applications | AORN Guideline: Information Management, pp. 384-387  
AORN Endorsed Document: ANA Position Statement on Inclusion of Recognized Terminologies within EHR  
Alexander’s: Chapter 1, pp. 13  
B&K: Chapter 2, p. 18; Chapter 10, pp. 182-183 |
| 4. Reporting to interdisciplinary team | Allergies, critical lab values, medications, hand offs/hand overs, HIPAA, implants, SBAR, verbal orders | AORN Guideline: Care of the Patient Receiving Local Anesthesia, pp. 600-601  
Alexander’s: Chapter 1, p. 9; Chapter 10, pp. 261  
B&K: Chapter 1, pp. 11-12; Chapter 11, p. 197 |
| 5. Patient education | Documentation, family, health literacy, HIPAA, read back, teach back | AORN Guideline: Care of the Patient Receiving Local Anesthesia, pp. 607-608  
Alexander’s: Chapter 10, p. 284; Chapter 26, pp. 1009-1010  
B&K: Chapter 21, p. 370-371 |
Subject Area 5: Transfer of Care 6%

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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<tr>
<th>Topic</th>
<th>Key Words</th>
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<tbody>
<tr>
<td>1. Interdisciplinary services for coordinating care</td>
<td>Continuity of care, hand-off/handover, interdisciplinary, PACU, transfer of care criteria</td>
<td>AORN Guideline: Team Communication Alexander’s: Chapter 2, pp. 21, 22, 24 B&amp;K: Chapter 25</td>
</tr>
<tr>
<td>2. Discharge planning for the patient leaving the facility</td>
<td>Discharge, regulatory guidelines, wound care</td>
<td>AORN Guidelines: • Medication safety, pp. 306, 308 • Care of the Patient Receiving Moderate Sedation/Analgesia, pp. 673-675 Alexander’s: Chapter 2, pp. 18</td>
</tr>
</tbody>
</table>

Subject Area 6: Instrument Processing and Supply Management 9%

Primary General Readings:

*AORN Guidelines*: Flexible Endoscopes; High-Level Disinfection; 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
<table>
<thead>
<tr>
<th>Topic</th>
<th>Key Words</th>
<th>Additional Readings</th>
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<tbody>
<tr>
<td>1. Cleaning and disinfecting instruments and supplies</td>
<td>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</td>
<td>Alexander’s: Chapter 8, pp. 210-211</td>
</tr>
<tr>
<td>2. Packaging and sterilization of instruments and supplies</td>
<td>Dynamic air removal, gravity displacement, hydrogen peroxide gas plasma sterilization, immediate use sterilization, implants, load, packaging, prevacuum, steam, sterilization</td>
<td>See primary readings</td>
</tr>
<tr>
<td>3. Documentation required for monitoring safe sterilization practices</td>
<td>Biological indicator, Bowie-Dick, chemical indicator, documentation, emulating indicators, load parameters, physical monitor, pressure, temperature, regulations, tracking</td>
<td>See primary readings</td>
</tr>
<tr>
<td>4. Principles of transporting and storing equipment, sterile supplies, and instruments</td>
<td>Controlled conditions, event related, regulatory requirements, shelf life, storage, time related, tracking, transportation, vendors</td>
<td>AORN Position Statement: Role of the Health Care Industry Representative</td>
</tr>
<tr>
<td>5. Safe handling of hazardous/biohazardous materials</td>
<td>Blood, bloodborne pathogen, chemotherapy drugs, CJD, ETO, glutaraldehyde, radioactive materials</td>
<td>AORN Guidelines:</td>
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<tr>
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<td></td>
<td>• Environment of Care, pp. 156-162</td>
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<td>• Instrument Cleaning, pp. 424-430</td>
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<td>B&amp;K: Chapter 7, p. 110; Chapter 13, pp. 221-222; Chapter 14, pp. 240-241</td>
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### Subject Area 7: Emergency Situations 11%

#### Primary Chapter Readings:

*Alexander’s Care of the Patient in Surgery*: Chapter 28, Trauma Surgery  
*Berry and Kohn’s Operating Room Technique*: Chapter 13, Potential sources of injury to the caregiver and the patient; Chapter 31, Potential Perioperative Complications

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<thead>
<tr>
<th>Topic</th>
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</table>
| 1. Prepare for and manage anaphylaxis      | Allergy, anaphylactic shock, anaphylaxis, latex free, latex safe, sensitivity, transfusion reaction | AORN Guideline:  
• Environment of care, pp. 154-156  
Alexander’s: Chapter 3, pp. 48-49; Chapter 4, p. 95 |
| 2. Prepare for and manage cardiac arrest   | Advanced cardiac life support, basic life support, cardio-pulmonary resuscitation, ischemia, myocardial infarction | B&K: Chapter 31, pp. 599-606                                                                        |
| 3. Prepare for and manage Malignant Hyperthermia | Acidosis, calcium, Dantrium, dantrolene sodium, dysrhythmia, hypercarbia, hyperkalemia, hypermetabolic, hyperthermia, tachycardia, trigger | Alexander’s: Chapter 5, pp. 138-139; Chapter 26, p. 1008  
MHAUS website: https://www.mhaus.org/ |
| 4. Prepare for and manage respiratory complications | Airway obstruction, anoxia, arterial blood gas, aspiration, atelectasis, bronchospasm, difficult airway, hypoxia, laryngospasm, pneumothorax, pulmonary edema, pulmonary embolism | Alexander’s: Chapter 5, pp. 124-129; Chapter 10, pp. 265-266; 272                                      |
| 5. Prepare for and manage victims of trauma | 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 | Alexander’s: Chapter 26, pp. 1051-1053  
B&K: Chapter 3, pp. 51-52; Chapter 7, pp. 113-117; Chapter 29, pp. 568-569; Chapter 37, p. 773; Chapter 45, pp. 933-941 |
| 6. Prepare for and manage fire             | Burn, explosion, flammable, fuel, ignition source, oxygen, RACE, PASS, thermal injury | AORN Guidelines:  
• Energy-Generating Devices, pp. 109-113  
• Environment of Care, pp. 144-149 |
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<tr>
<td>7. Prepare for and manage terrorism</td>
<td>Bioterrorism, bomb, mass casualty</td>
<td>Alexander’s: Chapter 4, pp. 67-69 B&amp;K: Chapter 14, pp. 246-247</td>
</tr>
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**Subject Area 8: Management of Personnel, Services, and Materials 6%**

**General Chapter Readings:**

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

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

- Safe Staffing and On-Call Practices
- Responsibility for Mentoring B&K: Chapters 2, 4 National Council of State Boards of Nursing, [https://www.ncsbn.org/1625.htm](https://www.ncsbn.org/1625.htm) |
|-------|-----------|---------------------|
| 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 for:
- Sterilization
- Product Evaluation AORN Position Statements:
- Environmental Responsibility
- Healthy Perioperative Practice Environment Alexander’s: Chapter 4, p. 84 B&K: Chapter 17, pp. 297-299; Chapter 25, pp. 477-478 |
| 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 |
Subject Area 9: Professional Accountability 9%

**General Chapter 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>
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<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, delegation, ethics, healthy work environment, horizontal violence, just culture, lateral violence, patient advocate, professional growth, professional standards | AORN Position Statements for:  
  - Criminalization of Human Errors  
  - Safe Staffing and On-Call Practices  
  - Responsibility for Mentoring AORN Endorsed Document: ANA Position Statement on Incivility, Bullying, and Workplace Violence B&K: Chapters 1,3 |