Study Plan 2019
For applicants sitting for the exam before June 30, 2019

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:

* 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

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<tr>
<th>Topic</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:  
  - Patient Information Management  
  - Moderate Sedation/Analgesia, pp. 644-648; 659-660  
  - Local Anesthesia: 601-602  
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 Guideline for Complementary Care  
Alexander’s: Chapter 19, p. 625; Chapter 29, pp. 1129-1130  
B&K: Chapter 23 pp. 412-413 |
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: Patient Information Management, p. 582-586 |
Subject Area 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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<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>
<tr>
<td>2. Develop an individualized plan of care</td>
<td>Age-specific, anxiety, behavioral responses, collaboration, comfort, cultural / ethnic diversity, legal/ethical standards, pain management, physiological responses, patient-centered, resources, SCIP protocol, spiritual needs</td>
<td>AORN Guideline: Patient Information Management, pp. 578-580 Alexander’s: Chapter 6, p. 160; Chapter 22, pp. 812-813; Chapters 10, 26, 27 B&amp;K: Chapters 8, 9, 11</td>
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3. Prepare for perioperative safety needs

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| **Chemical, radiation, fire, laser, positioning** | | AORN Guidelines for:  
• Energy-Generating Devices  
• Radiation Safety  
• Ambulatory Supplement: Radiation Safety  
• Positioning the Patient  
Alexander’s: Chapters 2, 3, 6, 8  
B&K: Chapter 13 |

4. Adhere to standard and transmission-based precautions

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</table>
| **Hand hygiene, PPE, contact, droplet, airborne** | | AORN Guidelines: Hand Hygiene; Transmissible Infections  
AORN Endorsed Document: ANA Position Statement on Immunizations  
Alexander’s: Chapter 4  
B&K: Chapter 15, pp. 254-256 |

**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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<tr>
<th>Topic</th>
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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  
• Transmissible infections, p. 520  
Alexander’s: Chapter 9; Chapter 10, pp. 267-268; Unit II  
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, 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:**  
- Environment of Care, Part I  
- Energy-Generating Devices  
- Radiation Safety  
- Ambulatory Supplement: Radiation Safety  
- Surgical Smoke Safety  
- Minimally Invasive Surgery  
- Positioning the Patient  
- Sharps Safety  
- Pneumatic Tourniquet  
- Prevention of Retained Surgical Items  
- Ambulatory Supplement: Prevention of Retained Surgical Items  
- Patient Information Management  
- Team Communication  
- Venous Thromboembolism  
**AORN Position Statements:** 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  
- Preoperative Patient Skin Antisepsis  
**B&K:** Chapter 26 |
| 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 |
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| **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  
• Prevention of Transmissible Infections  
• Ambulatory Supplement: Prevention of Transmissible Infections  
Alexander’s: Chapter 4  
B&K: Chapters 15, 16 |
| **7. Control environmental factors** | Air exchanges, humidity, noise, room temperature, traffic | AORN Guidelines for:  
• Environmental Cleaning  
• Safe Environment of Care, Part 2  
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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<tr>
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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 |
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
### Subject Area 6: Cleaning, Disinfecting, Packaging, Sterilizing, Transporting, and Storing Instruments and Supplies 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

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

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<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>
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</table>
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 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 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 Position Statement: Role of the Health Care Industry Representative

5. Safe handling of hazardous/biohazardous materials  
Blood, bloodborne pathogen, chemotherapy drugs, CJD, ETO, glutaraldehyde, radioactive materials  
AORN Guideline: Environment of Care Part 1  
B&K: Chapter 7, p. 110; Chapter 13, pp. 221-222; Chapter 14, pp. 240-241

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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<tr>
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| 1. Prepare for and manage anaphylaxis | Allergy, anaphylactic shock, anaphylaxis, latex free, latex safe, sensitivity, transfusion reaction | AORN Guideline:  
- Safe environment of care, Part 1, pp. 255-257  
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, cardiopulmonary 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

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, p. 131-134
     - Environment of Care, Part 1, pp. 246-250
   - Alexander’s: Chapter 2, pp. 28-29; Chapter 8, pp. 235-236; Chapter 19, p. 630

7. Prepare for and manage terrorism
   - Bioterrorism, bomb, mass casualty
   - Alexander’s: Chapter 4, pp. 67-69
   - B&K: Chapter 14, pp. 246-247

**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
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AORN Position Statements:  
• 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) |
| 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  
• Healthy Perioperative Practice Environment  
Alexander’s: Chapter 4, p. 84  
B&K: Chapter 17, pp. 297-299; Chapter 25, pp. 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  
B&K: Chapter 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 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, pp. 103-104  
B&K: Chapter 12; Chapter 28, pp. 553-557                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
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>
<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 Statement:  
  - Criminalization of Human Errors  
AORN Endorsed Document: ANA Position Statement on Incivility, Bullying, and Workplace Violence  
B&K: Chapters 1,3 |