

General Chairside Assisting (GC)

Exam Outline and References

The GC exam is a component of the Certified Dental Assistant[™] (CDA®) certification program and tests knowledge-based competence.

The purpose of the GC exam is to ensure that individuals meet the minimum national standard for knowledge-based competence in general chairside assisting tasks critical to the health and safety of patients and dental healthcare personnel.

CDA exams

Radiation Health and Safety (RHS[®]) Infection Control (ICE[®]) General Chairside Assisting (GC)

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GC Exam

Exam Weighting by Domain

- I. Evaluation (17%)
- II. Patient Management and Administration (17%)
- III. Chairside Dentistry (50%)
- IV. Dental Materials (16%)

Exam Administration

Number of Multiple-Choice Questions	95
Time for Exam (minutes)	75

Testing Options

This exam is administered in-person and through remote online proctoring. The candidate may choose the method they prefer. Remote proctoring allows candidates to take exams using their own computer while being remotely monitored by webcam and microphone.

How DANB exams are administered

DANB uses computer adaptive testing (CAT). Exams are scored based on the level of difficulty of the questions answered correctly. This method can more accurately pinpoint a candidate's ability level. Each candidate is presented with the same percentage of questions from each domain. The average candidate will answer around 50% of the questions correctly.

GC Exam Outline

I: Evaluation (17%)

- A. Preliminary examination.
 - 1. Patient's general physical condition
 - 2. Vital signs
 - 3. Health and dental histories
 - 4. Diagnostic data
- B. Head, neck and oral cavity, including but not limited to:
 - 1. tooth anatomy and morphology.
 - 2. dental arches.
 - 3. tooth functions.
 - 4. tooth surfaces.
 - 5. tooth angles and divisions.
 - 6. occlusion and malocclusion.
 - 7. circulatory and lymphatic systems.
 - 8. muscular/skeletal system.
 - 9. nervous system.
- C. Chart conditions of the oral cavity.
- D. Treatment documentation
 - 1. Treatment and prescriptions
 - 2. Patient consent
 - 3. Patient compliance
- E. Medical conditions that can cause medical emergencies or complications, including but not limited to:
 - 1. neurological disorders (e.g., syncope, hyperventilation, seizure, stroke).
 - 2. allergic reactions.
 - 3. respiratory disorders (e.g., asthma, COPD).
 - 4. cardiovascular disease (e.g., myocardial infarction, acute myocardial infarction, hypertension).
 - 5. endocrine conditions (e.g., diabetes mellitus, hypoglycemia).

II: Patient Management and Administration (17%)

- A. Patient Management
 - 1. Patient management, including but not limited to:
 - a. anxiety.
 - b. behavior management (e.g., pediatric, special needs).

- 2. Oral health education, including but not limited to:
 - a. nutrition.
 - b. effects of systemic diseases.
 - c. fluoride.
 - d. oral healthcare habits.
 - e. home-care therapy.
 - f. plaque control (e.g., brushing, flossing, irrigation aids).
 - g. special dental health needs (e.g., due to physical status or age).
 - h. removable and non-removable appliances and prostheses.
 - i. pre- and post-treatment instructions.
 - j. advantages and disadvantages of various restorative materials and procedures.
 - k. caries development and management.

B. Administration

- 1. Legal record maintenance, including but not limited to:
 - a. patient communications and dental and medical consultations.
 - b. patient data and records.
- 2. Legal responsibilities and regulations, including but not limited to:
 - a. Occupational Safety and Health Administration (OSHA) regulations.
 - b. Centers for Disease Control and Prevention (CDC) guidelines.
 - c. Health Insurance Portability and Accountability Act (HIPAA) regulations.
 - d. dentist-patient relationship.
 - e. responsibilities of the dental assistant to prevent/respond to legal actions (e.g., lawsuits).
 - f. standard of care.
 - g. responsibilities of the dental assistant in relation to the state dental practice act.
- 3. Inventory management, including but not limited to:
 - a. order supplies, instruments and equipment.
 - b. store supplies.
 - c. reorder supplies.
- 4. Equipment/instrument maintenance, including but not limited to:
 - a. nitrous oxide and oxygen tanks.
 - b. rotary instruments.
 - c. traps and suction lines.
 - d. laboratory equipment.
- 5. Emergency kit maintenance.

III: Chairside Dentistry (50%)

- A. Four handed dentistry techniques.
 - 1. Prepare treatment room.
 - 2. Prepare treatment trays.
 - 3. Seat and prepare a patient, position dental team and adjust equipment.
 - 4. Transfer instruments.
 - 5. Maintain field of operation, including but not limited to the use of:
 - a. dental dams.
 - b. moisture control devices.
- B. Intraoral procedures and armamentarium, including but not limited to:
 - 1. temporary and permanent restorations.
 - a. crown and bridge preparation/cementation.
 - b. occlusal registration/equilibration/adjustment.
 - c. cavity preparation and restoration (e.g., composite and amalgam restorations).
 - d. suture placement/removal.
 - e. temporary restorations.
 - f. final impressions.
 - g. matrix bands.
 - h. topical anesthetic application.
 - i. local anesthetic administration.
 - 2. bleaching/whitening.
 - 3. desensitize teeth.
 - 4. oral surgery.
 - a. implants.
 - b. extractions.
 - c. dry socket.
 - d. incision and drainage.
 - e. nitrous oxide/oxygen analgesia administration.
 - f. post-operative treatment and complications.
 - 5. preventive dentistry.
 - a. oral prophylaxis.
 - b. sealant application.
 - c. coronal polishing.
 - d. topical fluoride application.

IV: Dental Materials (16%)

- A. Impression materials, including but not limited to:
 - 1. alginates.
 - 2. elastomerics.
 - 3. waxes.
- B. Operative materials
 - 1. Amalgams
 - 2. Bleaching/whitening agents
 - 3. Cements
 - 4. Composites
 - 5. Etchants
 - 6. Dentin bonding agents
 - 7. Glass ionomers
 - 8. Pit and fissure sealants
 - 9. Post-extraction dressings
 - 10. Temporary restorations
 - 11. Liners and bases
 - 12. Finishing, polishing and cleaning agents
- C. Laboratory materials
 - 1. Acrylic products and acrylic substitutes
 - 2. Dental waxes
 - 3. Gypsum products

GC Exam Suggested References

DANB exam committees use the following textbooks and reference materials to develop this exam. This list does not include all available study materials; these are the resources that exam committees have determined provide the most up-to-date information needed to meet a determined level of competence on this exam. It is not an endorsement of the publications. Any one reference will likely not include all the study material required to pass the exam. **Please note that previous editions of the resources below may be used for study purposes if the previous version was published within the past 7 years, unless noted otherwise.**

Suggested Exam Preparation References

- 1. Bird, Doni L. and Debbie S. Robinson. *Essentials of Dental Assisting*. 6th ed. Saunders, 2017.
- 2. Bird, Doni L. and Debbie S. Robinson. *Modern Dental Assisting*. 13th ed. Saunders, 2020.
- 3. Eakle, Stephan W. and Kimberly G. Bastin. *Dental Materials: Clinical Applications for Dental Assistants and Dental Hygienists*. 4th ed. Saunders, 2020.
- 4. Little, James W., Donald A. Falace, Craig S. Miller and Nelson L. Rhodus. *Dental Management of the Medically Compromised Patient*. 9th ed. Mosby, 2018.
- 5. Phinney, Donna J. and Judy H. Halstead. *Dental Assisting: A Comprehensive Approach*. 6th ed. Cengage, 2018.

Additional/Optional Study Resources

- 1. American Dental Assistants Association (ADAA). www.dentalassistant.org
 - General Chairside Assisting: A Review for a National Chairside Exam (Course #613).
- 2. The DALE Foundation. www.dalefoundation.org.
 - DANB GC Review Part I
 - DANB GC Review Part II
 - DANB GC Practice Test

Acronyms

The following table lists acronyms that you may find on this exam. When you take the exam, the full list of acronyms will be available to you.

Abbreviation	What it stands for
ADA	American Dental Association
CDC	Centers for Disease Control and Prevention
DHCP	Dental Healthcare Personnel
EPA	Environmental Protection Agency
FDA	Food and Drug Administration
HIPAA	Health Insurance Portability and Accountability Act
HIV	human immunodeficiency virus
OSHA	Occupational Safety and Health Administration
CPR	cardiopulmonary resuscitation
HVE	high-volume evacuation
IV	intravenous
TMJ	temporomandibular joint
AED	automated external defibrillator
AHA	American Heart Association
bis-GMA	bisphenol A-glycidyl methacrylate
CAD/CAM	computer-aided design / computer-aided manufacturing
COPD	chronic obstructive pulmonary disease
CVA	cerebrovascular accident
DEA	Drug Enforcement Administration
IRM	intermediate restorative material
LED	light-emitting diode
mL	milliliter
mm	millimeter
MOD	mesial, occlusal, distal
mW/cm ²	milliwatts per square centimeter
N ₂ O	nitrous oxide
O ₂	oxygen
OTC	over-the-counter
RPD	removable partial denture
ZOE	zinc oxide-eugenol

Exam Development and Maintenance

How exams are developed

DANB exams are developed using this exam outline, which is annually reviewed by subject matter experts. The outline is developed using a content validation study, which includes a job analysis survey where practicing DANB certificants and certificate holders are asked how often tasks are performed and how critical competent performance of tasks is to the health and safety of the public and oral healthcare worker. This study is conducted every five to seven years to ensure the outline is consistent with current clinical practices. DANB's Board of Directors approves all updates to DANB exam outlines.

How the passing standard is determined

The exam passing standard is evaluated and a Standard Setting Study is conducted the year following a Content Validation Study. DANB uses a modified Angoff standard setting method and convenes a panel of subject matter experts to evaluate and make judgements about the difficulty of the exam items and the criticality of the content of the exam items. Modified Angoff standard setting methods are commonly used to set the passing standards for certification exams.

How exams are scored

In a criterion-referenced examination, a candidate must obtain a score equal to, or higher than, the passing score to pass the test. A minimum passing scaled score of 400 must be obtained to pass the exam with scores ranging from 100 to 900 points. Exam results are reported as a "scaled score" which is neither a "number correct" nor a "percent correct" score. Performance on the exam is not compared to the performance of others taking the exam.

State Regulations

Each state's dental board implements regulations and establishes rules for delegating legally allowable duties to dental assistants. Passing one or more of the DANB component exams or earning DANB certification only conveys authority to perform these duties in those states that recognize these exams or this certification as meeting state dental assisting requirements. This information is available at www.danb.org.