Dear Certified Dental Technician Candidate:

Thank you for your interest in pursuing the CDT designation. You are to be congratulated for your commitment to attain the highest standards of professional excellence within the dental technology community.

You should know that this distinctive certification, when it is obtained, places you among the elite group of dental technology professionals who hold this designation. We, at the NBC Headquarters in Tallahassee, Florida, will be with you throughout the process, providing guidance, information, study material and advice, which will help you along the path to becoming a CDT.

This handbook contains the information you need in order to become a Certified Dental Technician. For more information about the NBC, visit our website at www.nbccert.org. The exam applications, order forms, and the exam schedules are also available on the website.

Once again, you have made an excellent choice in pursuing the CDT designation and we will be there to provide support for you along the way.

If you have any questions, please contact the NBC at certification@nbccert.org or call (800) 684-5310.

NBC
National Board for Certification in Dental Laboratory Technology
325 John Knox Road, #L103, Tallahassee, FL 32303
(800) 684-5310 Toll Free • (850) 205-5626
(850) 222-0053 Fax • www.nbccert.org

This publication is intended solely for use by candidates interested in seeking certification with the National Board for Certification in Dental Laboratory Technology. NBC reserves the right to amend the information contained in this handbook. For the most up-to-date information concerning the examinations, please contact NBC.

Revised 9/22/2015

The materials in this document are protected under provisions of US Copyright law. Any unauthorized distribution, reproduction or use by any means is strictly prohibited by law without prior written permission from the copyright owners.
Certified Dental Technician Examination Handbook and Application

NBC MISSION

The National Board for Certification in Dental Laboratory Technology provides professional certification to both dental technicians and dental laboratories.

NBC VISION

NBC is dedicated to administering and promoting globally recognized certification programs to assess the knowledge and skills of dental technicians and to review facility and staff training criteria for dental laboratories.

STATEMENT OF NONDISCRIMINATION

The Certified Dental Technician program is offered to all candidates that meet eligibility requirements regardless of age, race, religion, gender, national origin, marital status or disability.

AMERICANS WITH DISABILITIES ACT FOR EXAMINATION CANDIDATES

No individual with a disability will be deprived of the opportunity to take the NBC examinations solely by the reason of that disability. The NBC complies with the Americans with Disabilities Act and will provide reasonable accommodations for candidates with disabilities. An application requesting special accommodations and arrangements at regularly scheduled examinations must be submitted at least thirty (30) days prior to the examination, in writing, to the NBC. The request must include verification of the disability and the specific type of assistance needed. Please contact the NBC for an application form, if needed.

Please read all sections of this handbook. Information can also be found on the NBC website at www.nbccert.org. You can contact the NBC Headquarters at certification@nbccert.org or (800) 684-5310.
# TABLE OF CONTENTS

## How to Become a Certified Dental Technician
- What is Certification? ................................................................. 3
- What Are the Skill Standards? .................................................. 3
- The Examinations .................................................................... 4
- Annual Renewal ...................................................................... 4

## Overview of History, Regulation & Organization in Dental Laboratory Technology
- Early History ......................................................................... 5
- First Commercial Dental Laboratory .................................... 5
- National Organization ............................................................. 6
- Beginning of Certification ....................................................... 6
- Government Regulations ......................................................... 6
- Related Organizations and Institutions ............................... 7
- Other Standards .................................................................... 8

## Examination Application Process
- Eligibility for Testing .............................................................. 8
- Application Process and Fees ............................................... 9
- Exam Confirmation ................................................................. 9
- Examination Cancellation/Rescheduling Policy ..................... 10

## About the CDT Examinations
- Types of Examinations ............................................................ 11
- Comprehensive Exam ............................................................ 11
- Written Specialty Exam .......................................................... 11
- Practical Exam ..................................................................... 12
- Examination References ....................................................... 12
- Exam Preparation & Sample Questions ................................. 14
- The NBC Examiners ............................................................... 14
- The Grading System ............................................................... 15
- Notification of Grades ............................................................. 15
- Failing Grades .................................................................... 15

## Examination Content & Tasks
- Comprehensive Exam ............................................................ 16
- Written Specialty Exam .......................................................... 20
- Practical Exam ..................................................................... 21

## Appeals
- Procedural Appeals ................................................................. 24
- Grade Appeals ..................................................................... 24

## Application
- CDT Examination Application ........................................... 26
How to Become a Certified Dental Technician

WHAT IS CERTIFICATION?

Certification is the professional standard in dental laboratory technology. It is the means for the dental profession, the dental laboratory industry and all others with an interest to identify dental technicians and dental laboratories that have demonstrated their technical qualifications and their commitment to maintaining high standards in dental technology.

The CDT Program is a national program. Since certification is voluntary, it represents not only compliance with documented standards, but also a special personal commitment to quality and professionalism. Each Certified Dental Technician (CDT) has met industry standards of required knowledge and applied skills through the successful completion of examinations and compliance with continuing technical and regulatory education requirements.

The CDT is recognized and endorsed by the National Association of Dental Laboratories (NADL), the American Dental Association (ADA) and the American College of Prosthodontists (ACP). It also receives outstanding support and participation from U.S. military services. The CDT program adheres to national certification program standards.

For those engaged in the practice of dental technology, certification offers:
- An incentive to achieve proficiency;
- Criteria for maintaining continuing education;
- Improved career opportunities;
- Peer recognition; and
- Enhanced professional visibility.

For the dentist-client, certification offers:
- Reinforced credibility through the use of credentialed support services;
- A means to encourage proficiency and advancement; and
- An enhanced source of specialized expertise.

Finally, for the dental patient, dental technology certification could establish:
- An enhanced perception of the value of dental services; and
- A positive perception of (and respect for) the career of dental technology.

WHAT ARE THE SKILL STANDARDS?

The goal of the CDT examination is to measure competence or the mastery of a predetermined body of knowledge and the skills deemed to represent the successful, professional-level practice of dental technology. To become a CDT, a technician must demonstrate their knowledge and applied skills, from start to finish in their chosen specialty, in the manufacturing procedures common in contemporary practice. There are six (6) specialties currently recognized by the NBC: Ceramics, Complete Dentures, Crown & Bridge, Orthodontics, Partial Dentures and Implants.
THE EXAMINATIONS

The examinations given by the NBC are the result of years of continuing development. Questions on the tests originate with technicians in the field. Special task forces (comprised of technicians, laboratory owners, educators and dentists) have been appointed by the NBC to conduct regular reviews, revisions and updates of the exams. All examination content is also subject to ongoing statistical analysis based on actual usage of exam questions as well as peer review to ensure relevance to current practices in dental technology.

The following examinations must be passed successfully to become a Certified Dental Technician (CDT):

- The Written Comprehensive examination (or the Written Recognized Graduate examination, if eligible);
- The Written Specialty examination; and
- The Practical examination (in the same specialty area as the Written Specialty examination — Ceramics, Complete Dentures, Crown & Bridge, Orthodontics, Partial Dentures or Implants.)

Candidates may sit for the examinations in any order but all three (3) exams must be passed within four (4) years of the date that the first exam was passed.

ANNUAL RENEWAL

In order to retain certification, CDTs are required to apply annually to the NBC for renewal. To qualify for renewal, the CDT must attest that he or she has complied with the laws governing the practice of dental technology and dentistry in the applicable state, must submit proof of specific continuing education and must pay the renewal fee.

The current continuing education requirements are subject to change and are available by contacting the NBC Headquarters. Various types of continuing education are required and may include training on regulatory standards, infection control, scientific and/or technical topics and general professional development topics. Some of the ways the continuing education requirement may be met are through attendance at approved clinics, reading of accepted technical publications, completion of college level credit courses, or the development of original technical clinics or papers.

Renewals are based on an annual renewal cycle. All new CDTs will be notified to which renewal cycle they have been assigned upon certification. An invoice is sent out to every CDT seventy-five (75) days prior to their certification renewal date.
Overview of History, Regulation & Organization in Dental Laboratory Technology

EARLY HISTORY

Dental disease has been treated since the first prehistoric toothache. Primitive history recorded incantations, chemical and vegetable plasters, and various rinses to treat oral pain. Substitutes for natural teeth were made very early from the bones and teeth of animals and later from other materials such as mother-of-pearl, ivory and jeweler’s enamel baked on carved bone or metal tooth plates.

Until the mid-eighteenth century, medical doctors concerned themselves little with the mouth. Dental ailments were treated largely by laymen. Only a very small amount of medical literature dealt with dental treatment until 1728, when a Frenchman, Pierre Fauchard, published the first major text dealing with dentistry: Le Chirurgien Dentiste. By incorporating into a single book everything known about the science and art of dentistry, Fauchard established a scientific basis for a new medical specialty and earned the title “The Father of Modern Dentistry.”

Dentistry was brought to colonial America around 1766; George Washington was among the most famous of early dental patients for whom prosthetic teeth were made. The various forms of dental treatments, techniques and materials used for the replacement of missing teeth soon started to evolve and expand.

FIRST COMMERCIAL DENTAL LABORATORY

As the art and science of dentistry continued to develop, certain dentists developed special processes and skills in fabricating prosthetic devices. Since these processes and skills were in demand by other dentists, the practice of sending out laboratory work to those possessing the processes began.

One doctor particularly noted for his prosthetic skills was Dr. W. H. Stowe who practiced in Boston. Dr. Stowe eventually found that he had little time for his own dental practice after accepting laboratory work from all the dentists who sought his services. In 1883, he began to separate his dental practice from his laboratory services, accepting laboratory work only from a limited number of dentists. However, the laboratory service was so successful that it suggested to him the potential for a dental laboratory serving the profession at large.

In 1887, Dr. Stowe opened a dental laboratory in Boston. He was later joined by his cousin, Frank F. Eddy. The laboratory, later to be known as Stowe and Eddy, is generally acknowledged to be the first commercial dental laboratory in America separate from a private dental practice.

The establishment of commercial dental laboratories led quickly to the training of apprentices. As these apprentices gained skills, they opened their own laboratories and the growth of the...
The early activities of NADL were concentrated in the areas of recognition and education. In 1954, the NADL Education Committee began the development of a certification program which would set skill standards for the individual dental technician. The following year, the NADL Executive Council elected seven persons to the newly formed National Board for Certification in Dental Laboratory Technology, which adopted policies and approved examinations for the certification program. The first Certified Dental Technician examinations were given in October of 1958, and the first CDT designations were awarded in March of 1959.

The examinations undergo continual upgrading and revision. As of early 2007, over 6,000 technicians held CDT designations and over 1,100 CDT examinations were given annually.

The authority of state governments to regulate the health professions is well established. Every state in the nation has exercised its authority over dental health services by enacting a Dental Practice Act, which establishes the basic relation between the dentist and the dental technician or commercial dental laboratory. In general, these acts state that the fabrication and repair of
dental prosthetic appliances are included in the definition of the practice of dentistry and that no unlicensed person may engage in any phase of such fabrication or repair unless it is at the direction of a licensed dentist. The required “direction” normally means the written dental prescription or work authorization of the dentist. The nature and format of the prescription is spelled out in varying degrees of detail by the different state Dental Practice Acts.

All state dental practice laws specify the functions which the dentist may perform, and the conditions under which he or she may perform them. Any unlicensed person found to perform these functions directly for the public is engaged in the illegal practice of dentistry.

During the past few decades, additional regulation has been imposed on dental laboratories in the form of occupational health and safety laws. These laws deal with the requirement for employers to provide safe and healthy workplaces for their employees, and they are promulgated and administered by both federal and state agencies, including the Occupational Safety and Health Administration (OSHA).

While there are fewer than half a dozen states having more specific regulatory legislation governing the operation of a commercial dental laboratory, there has long been a segment of the laboratory industry desiring the enactment of registration or licensing laws. This is a state-level issue and the decision to seek or oppose such legislation must remain in the hands of the respective states.

The National Board for Certification in Dental Laboratory Technology cannot participate in the influencing of legislation. However, it does encourage the protection of public health and welfare by maintaining the nationally recognized certification standards which form a solid foundation for either statutory or voluntary regulation of dental technology.

Dental laboratory owners and managers must also be aware of applicable state and local laws (zoning, taxation, etc.) which apply to all businesses.

RELATED ORGANIZATIONS AND INSTITUTIONS

In addition to those obligations which are set by law, there are also groups and institutions which are concerned with the maintenance of proper ethical and technical relationships between the dentist and the dental technician. These include dental schools, schools of dental technology, dental societies and dental laboratory associations.

The role of the dental school goes beyond imparting scientific information and skill to the dental student; it extends to giving students an understanding of the many intangible factors that contribute to the making of a professional person. Included in these factors are the fundamentals of ethics, which govern the graduate's conduct in practice and the relationship that must be maintained with auxiliary personnel and commercial dental laboratories.

Dental technology schools have similar responsibilities in the educating and training of dental technicians. Formal education in dental technology has grown from three accredited two-year programs in 1961 to approximately 18 today. The American Dental Association’s Commission on Dental Accreditation (ADA’s CODA) issues accreditation. The dental laboratory industry

continued...
is represented in the accreditation process by having a representative on the Commission, membership on its Dental Technology Education Committee, and numerous consultants who take part in the onsite inspections required for program accreditation.

The roles of the American Dental Association and the National Association of Dental Laboratories and their affiliated state-level associations include the establishment and maintenance of professional ethics and standards of conduct for their members. They are also active in promoting programs of continuing education for their members. Further, these organizations are primary sources of legislative initiatives regarding the laws governing the practice of dentistry and dental technology.

OTHER STANDARDS

As with most professions and industries, there are both technicians and dental laboratory owners/managers who desire to achieve and be recognized for their advanced levels of professionalism.

For the laboratory owner/manager, the NBC administers the Certified Dental Laboratory (CDL) program. The CDL program was created to promote and maintain a recognition that will assist dental laboratories in their continuing efforts to improve the quality and efficiency of the dental team’s service to the public. This is accomplished by:

- Promoting a means for identifying dental laboratories which meet specific standards established for the certification program; and
- Encouraging dental laboratories to improve the quality and efficiency of their services and facilities.

For more information about any of the programs offered by the NBC, please contact the NBC Headquarters or refer to the NBC website at www.nbccert.org.

Examination Application Process

ELIGIBILITY FOR CDT CERTIFICATION EXAMS

All technicians applying for the CDT examinations must:

1. Have a working knowledge of the English language.
2. Be a high school graduate (or the documented equivalent).
3. Be of satisfactory ethical and legal standing as defined by the NBC’s disciplinary standards.
4. Meet the technical prerequisites required for testing.

For technicians who are not current participants in the NBC’s Recognized Graduate (RG) program, the technical prerequisites for testing may be met by documenting at least five (5) years of training and/or experience in dental technology. Time spent in on-the-job training (including formal apprenticeships and training courses) or studying in a dental technology education program may be counted towards this requirement.
• An exception is made for graduates of a two-year, ADA-accredited dental technology education program. These candidates may apply for the CDT examinations after completion of two (2) years of practical experience in addition to (and not concurrent with) their course of study.

For technicians who are current Recognized Graduates and have taken and passed their RG examination within the last four (4) years, the technical prerequisites for testing may be met in one of the following ways:

1. Recognized Graduates from two-year ADA-accredited programs may sit for the CDT examinations without having to obtain additional education or on-the-job-experience, or
2. Recognized Graduates from non-ADA-accredited programs may sit for the CDT examinations after obtaining at least three (3) years of on-the-job experience.

Note: Effective May 2011, an RG may keep his or her designation indefinitely, pending that they maintain the renewal requirements. However, the RG examination will only substitute for the Written CDT Comprehensive examination for a four (4) year period. After four years, the RG must complete all three examinations to earn certification.

To see the list of dental technology education programs currently approved by the ADA, please visit their website at www.ada.org.

APPLICATION PROCESS AND FEES

Eligibility to take the CDT examinations will be determined by the NBC upon receipt of a completed application and payment of the examination fees.

The total for all three (3) required exams is $895, and is broken down as follows:

- Written Comprehensive examination $220
- Written Specialty examination $220
- Practical examination $455.

Please note that the Practical examination fee includes a $55 one-time application fee. Candidates who require a second attempt at the Practical exam may waive this application fee and will only be assessed the $400 examination fee.

If any of the exams are not passed on the first attempt, a new application and fee must be submitted before the candidate can retake the exam(s) in question.

EXAM CONFIRMATION

Exam dates are tentative until thirty (30) days prior to the exam. Please call the NBC to check on the expected status of exams prior to making travel arrangements. The NBC reserves the right to cancel the exams if there are not enough candidates registered. If this occurs, candidates are notified and rescheduled for the exam site listed as their second choice.

If an application is received well in advance of the registration deadline, candidates will receive a postcard notifying them that their application has been received and indicating the date and location for which they have been tentatively scheduled.

continued...
The examination dates are confirmed thirty (30) days prior to the exam date, after the registration deadline. For Practical exams, confirmation letters are mailed approximately four (4) weeks prior to the exam with molds, instructions, directions and exam site contact information. For Comprehensive exams and Written Specialty exams, confirmation letters with instructions and exam site contact information are mailed approximately two (2) weeks prior to the exam.

**EXAMINATION CANCELLATION/RESCHEDULING POLICY**

All candidates who have registered with the National Board for Certification in Dental Laboratory Technology (NBC) to take the CDT examinations are expected to attend their examinations as scheduled. In the unlikely event that a scheduling conflict or emergency situation arises, the NBC adheres to the following rescheduling and cancellation policies:

**WRITTEN EXAMINATIONS**

Candidates may reschedule written examinations by notifying the NBC in writing at least ten (10) business days prior to their scheduled examination.

Candidates who fail to notify the NBC in writing at least ten (10) business days prior to their scheduled examination will be charged a $25 administrative fee.

All rescheduled examinations must occur within one year of the originally scheduled examination; otherwise candidates forfeit all related examination fees.

Candidates that fail to appear for their scheduled examinations without advanced notice automatically forfeit all related examination fees.

**PRACTICAL EXAMINATION**

Candidates may reschedule practical examinations by notifying the NBC in writing prior to the published application deadline.

Candidates that fail to notify the NBC in writing prior to the published application deadline must get special permission from the NBC to reschedule and if allowed to do so, candidates will be charged a $100 administrative fee.

Rescheduled examinations must occur within one year of the originally scheduled examination; otherwise candidates forfeit all related examination fees.

**EMERGENCY SITUATIONS**

The NBC recognizes that there are sometimes unavoidable emergency situations which may interfere with a candidate’s ability to attend a scheduled examination. In emergency situations you should notify the NBC in writing as outlined above including supporting documentation if available (hospital receipt, military orders, police report, etc.). Acceptable reasons for failing to appear for an examination include but are not limited to death or serious illness, accident, jury duty or military deployment.
About the CDT Examinations

Types of Examinations

The goal of the CDT examinations is to measure competence or the mastery of a predetermined body of knowledge and the skills deemed to represent the successful, professional-level practice of dental technology. To become a CDT, a technician must demonstrate their knowledge and applied skills, from start to finish in their chosen specialty, in the manufacturing procedures common in contemporary practice.

Each of the CDT examinations must be passed successfully within a four (4) year period to become a CDT. The candidate must test in the same specialty area for both the Written Specialty exam and the Practical exam. The examinations may be taken in any order that the candidate desires.

The Written Comprehensive Exam

Current Recognized Graduates that have taken and passed the RG examination within the last four (4) years may waive the Comprehensive exam requirement, but all other technicians must pass the Comprehensive exam before being recognized as a CDT. The Comprehensive examination is the measure for basic knowledge in history, ethics and the various specialties.

The Comprehensive examination is a written multiple-choice test. There are 160 questions on the exam, covering basic dental laboratory knowledge: oral anatomy, tooth morphology, materials science, health & safety, fundamental theory and terminology across the specialties tested by the NBC (Ceramics, Complete Dentures, Crown & Bridge, Orthodontics, Partial Dentures and Implants).

As part of NBC’s ongoing efforts to ensure that the questions included in its written examinations are contributing to the reliability of the examinations, NBC includes an additional ten field test questions embedded on each examination form. These ten questions are not graded, but instead are used to gather statistical data to allow NBC to determine if the field test questions may be used on future examinations. Using field test questions is a common practice in the certification and licensure testing industry.

Candidates have up to two and three-quarter (2 3/4) hours to complete the examination; they may use as much or as little of this time as they require.

The Written Specialty Exam

The Written Specialty examination is a requirement for all CDT candidates. This exam tests a candidates’ knowledge in his or her chosen specialty area.

The Written Specialty examination consists of eighty (80) multiple-choice questions. Each test item will consist of a question and four (4) possible answers, or an incomplete statement and four (4) possible ways to complete the statement. Of the four possible responses, the candidate must select the best answer.

As part of NBC’s ongoing efforts to ensure that the questions included in its written examinations are contributing to the reliability of the examinations, NBC includes an additional ten field test questions embedded on each examination form. These ten questions are not graded, but instead...
are used to gather statistical data to allow NBC to determine if the field test questions may be used on future examinations. Using field test questions is a common practice in the certification and licensure testing industry.

Candidates have up to one and one-half (1 1/2) hours to complete the examination; they may use as much or as little of this time as they require.

THE PRACTICAL EXAM

The Practical examination is a requirement for all CDT candidates. This exam is a hands-on exam that requires candidates to demonstrate their competence over a range of procedures normally associated with their respective specialties. The Practical exam consists of preliminary procedures that must be performed in each candidates’ own laboratory prior to the exam date, plus specific steps which must be completed under the observation of three (3) NBC Examiners at the exam site.

Approximately four (4) weeks prior to the exam date, the NBC Headquarters provides candidates with detailed instructions, molds from which the candidates must work and a Candidate Identification Number. At the same time, candidates also receive contact information for the host facility so that they may contact the host about any specific needs they may have, including site soldering capabilities, available air hand piece connections or borrowing equipment (like porcelain ovens). Whenever possible candidates should bring their own equipment and supplies to the exam site (including porcelain furnaces and pumps, if needed). If this is impossible, candidates must contact the host facility for permission to borrow the items needed. Neither the NBC nor the exam host site can guarantee borrowed equipment or materials. Every effort will be made to assist candidates, but there is no guarantee that the equipment will function correctly (or as candidates are accustomed to) nor that time-critical equipment will be available only to a specific candidate.

On the day of the exam, candidates should arrive at about 7:00 am for an exam that begins at 7:45 am. Candidates must bring all preliminary work with them; verify their identity; locate the work station that displays their Candidate Identification Number; and set up their materials and equipment. The NBC Lead Examiner will give candidates specific information and instructions that must be followed. These instructions will be simple, but are extremely important. Candidates should be certain that they understand all instructions before proceeding with their examination.

Candidates have exactly five and one-quarter hours (5 1/4) to complete the examination; they may use as much or as little of this time as they require. During this period, the NBC Examiners will carry out specified security measures, monitor candidate work, and begin the evaluation of the work done in the preliminary portion of the examination.

After 5 ¼ hours all candidates will be excused so that the NBC Examiners may perform their evaluations. This process may take several hours depending on the number of candidates and other factors, but typically ends by 7:00 p.m., at which time candidates will be asked to claim their materials and equipment and depart the facility. It is strongly suggested that candidates who must make flight arrangements plan to depart well after 7:00 pm on exam day, or the morning after the exam.

EXAM REFERENCES

The NBC examinations were developed on the basis of practice in the field and are not based on a specific textbook or course of study. Therefore, many sources of information are appropriate for study and review. The references listed in this publication must not be regarded as the only useful
Publications. They should be considered only as representative sources of the types of information covered by the examination.

There are several useful study materials available for purchase through the NADL’s online store at www.nadl.org. The study materials that can be found there include, but are not limited to, Visual Reference Guides (one per each specialty), an Examination Preparation Guide, and the U.S. Air Force Manuals (which includes Dental Laboratory Technology, Basic Sciences, Removable Prosthodontics, and Orthodontics (2005), Air Force Pamphlet 47-103, Volume One and Dental Laboratory Technology, Fixed and Special Prosthodontics (2005), Air Force Pamphlet 47-103, Volume Two.)

Other recommended publications include:

**GENERAL REFERENCES**

United States Air Force Manuals

Academy of Denture Prosthetics
Glossary of Prostodontic Terms
St. Louis, C.V. Mosby Co. (no longer published)

Brand, Richard W. and Donald Isselhard
Anatomy of Orofacial Structures
St. Louis, C.V. Mosby Co., 1986

**CERAMICS AND CROWN & BRIDGE**

Dykema, Roland; Goodacre; Phillips
Modern Practice in Crown & Bridge Prosthodontics
Philadelphia, W.B. Saunders Co., 1986 (no longer published)

Morrow, Robert M.; Rudd; Eismann
Dental Laboratory Procedures: Fixed Partial Dentures,
Volume II
St. Louis, C.V. Mosby Co.

Murray, Henry V.; and Troy Sludre
Fixed Restorative Techniques
Chapel Hill, University of NC Press, 1989

**COMPLETE DENTURES**

Morrow, Robert M.; Rudd; Eismann
Dental Laboratory Procedures: Complete Dentures,
Volume I
St. Louis, C.V. Mosby Co., 1986 (no longer published)

Sowter, John B.
Removable Prostodontic Techniques
Chapel Hill, University of NC Press, 1986

**ORTHODONTICS**

McNamara Jr., Dr. James A.
Orthodontics and Dentofacial Orthopedics
Needham, MA Needham Press, 2001

Willison, CDT, Brian D. Warunek, DDS,MS, Stephen P.
Practical Guide to Orthodontic Appliances
Tonawanda, NY, Great Lakes Orthodontics

**PARTIAL DENTURES**

Henderson, Davis; and Victor Steffel
McCracken’s Removable Partial Dentures (6th Edition)
St. Louis, C.V. Mosby Co., 1981 (no longer published)

Morrow, Robert M.; Rudd; Eismann
Dental Laboratory Procedures: Removable Partial Dentures, Volume III
St. Louis, C.V. Mosby Co., 1986 (no longer published)

Sowter, John B.
Removable Prostodontic Techniques
Chapel Hill, University of NC Press, 1986

**IMPLANTS**

Babbush, DDS, MScD, Charles A., Hahn, DDS, Jack A.,
Krauser, DMD, Jack T. and Rosenlicht, DMD, Joel L.
Dental Implants: The Art and Science, 2nd Edition
Maryland Heights, MO, Saunders, 2011

Misch, DDS, MDS, Carl E.
Contemporary Implant Dentistry, 3rd Edition
St. Louis, MO, Mosby, Inc., 2008

Misch, DDS, MDS, Carl E.
Dental Implant Prosthetics
St. Louis, MO, Mosby, Inc., 2005

Shafie, Dr. Hamid
Clinical and Laboratory Manual of Implant Overdentures
St. Louis, MO, Blackwell Publishing Company, 2007

White, Graham E.
Osseointegrated Dental Technology
Quintessence Publishing, 1993
EXAM PREPARATION & SAMPLE QUESTIONS

Preparation for all of the exams leading to certification begins at the technician’s first introduction to the dental laboratory. Ideally, it is a process of training, education, experience and continuing education. In publishing this manual, the NBC is not attempting to teach the competencies measured by its examinations, but rather to give technicians an understanding of examination content, structure and procedures so that they may approach the CDT examinations with the confidence that comes from knowing what to expect.

It is to each candidate’s advantage to plan, study and practice for their examinations. Candidates are required to complete all parts of their examinations without assistance. Exam Proctors and NBC Examiners may not define terms or answer questions relating to exam content.

The Comprehensive examination is designed to measure the equivalent of a formal education in dental technology. Technicians who have on-the-job training or have learned their skills in other settings may find it useful to review certain parts of various publications to broaden and/or reinforce their understanding of dental technology. Technicians who have experience in narrowly defined specialty areas should use the preparation for this examination as an opportunity to broaden their theoretical knowledge to include fundamental concepts throughout the range of specialties offered in dental laboratories.

For the Comprehensive exam and the Written Specialty exams, candidates will be instructed to read the question carefully, select the best answer and then locate the question number on the answer sheet and mark the circle corresponding to the answer selected. The questions on the examinations will look something like this:

1. The cutting edge of an anterior tooth is called:
   A. Buccal
   B. Incisal
   C. Distal
   D. Mesial

2. What is measured by a Boley gauge?
   A. Inches
   B. Centimeters
   C. Millimeters
   D. Picas

Practical exam candidates should bring their preliminary work and should be prepared to complete all other portions of their examination on-site. The Practical examinations are designed to enable candidates to display their abilities by performing representative procedures that are normally associated with practice in their respective specialties. Day-to-day, hands-on experience is the primary preparation for this portion of the examination. In addition, candidates may be able to improve their comfort and performance levels by studying, planning and practicing the required steps prior to the exam date. To help reduce the stresses on exam day, candidates should ensure their readiness by bringing or arranging for their equipment and materials and by having a plan. It may also help candidates to realize that time management is important.

THE NBC EXAMINERS

The NBC Practical exams are evaluated at the exam location by three (3) NBC Examiners. The NBC Examiners are selected by the NBC on the basis of their technical qualifications and backgrounds;
their education, training, geographical location and employment represent a diversity of perspectives. They are specially trained and monitored by the NBC to achieve fair and uniform grading standards throughout the country. They score using strict objectivity and are instructed to make assessments on the basis of general acceptability rather than compliance with their personal preferences and standards. All NBC Examiners are volunteers and they are not paid for their services to the CDT program.

**THE GRADING SYSTEM**

Grading is not a comparative process. All grades are based on a standard that the NBC believes to represent basic competence in dental technology and in each of the specialties represented.

For the Comprehensive exam and the Written Specialty exams, grading is completed using the standardized grade sheets completed by the candidates during the exams. It is important that these sheets are completed properly to ensure accurate grading.

During the Practical exams, three (3) NBC Examiners will independently evaluate the work of each candidate. Examiners will use their professional judgment when grading examinations and may deduct points for any aspect of the exam which has been specified for grading when they find it to be aesthetically, anatomically or functionally incorrect. Grade sheets completed by the NBC Examiners at the exam site are returned to the NBC Headquarters for compilation and determination of all candidates’ grades. Because the scores assigned from each of the NBC Examiners are determined individually and because they are compiled for the determination of the final grades, no single NBC Examiner can determine the final grade for any candidate. No examination scores are available at the examination site.

With the instructions and the materials mailed to Practical exam candidates about thirty (30) days before the exam date, there is a list of the items to be graded. In determining final grades, each item is weighted according to what the NBC considers to be its criticality to the success of the completed appliance or restoration. Candidates will see their score for each item when they receive their grades. Further, each examination is divided into “subtests” representing the different types of skills that are being tested. Each candidate must achieve a passing grade in each of these “subtest” areas during the same exam administration to pass the Practical examination.

**NOTIFICATION OF GRADES**

For the Written Comprehensive exam and the Written Specialty exams, candidates will be mailed their grades within four (4) weeks after the examination. For the Practical exams, candidates will be mailed their grades within six (6) weeks after the examination. Examination results are reported directly to each candidate in writing and are otherwise held as confidential. Because results are sent by mail, it is important that all candidates maintain a current mailing address with the NBC Headquarters. Examination results are not available by telephone or email. Candidates who have taken and passed all three examinations can expect to receive their new CDT welcome packet within six (6) weeks.

**FAILING GRADES**

A candidate who is unsuccessful in any of the CDT examinations must repeat that entire examination. Credit for passing the Comprehensive exam, the Written Specialty exam or the Practical examination may be retained for up to four (4) years. From the date of passing the first examination, the candidate has four (4) years to successfully pass the other required exams. Candidates may repeat examinations one or more times as needed.
Examination Content & Tasks

COMPREHENSIVE EXAM

The Comprehensive examination is the measure for basic knowledge in history, ethics and the specialties. The content on the Written Comprehensive Examination is derived from the current NBC Job Task Outline, which can be found on the NBC website under Certification Program Standards at https://nbccert.org/about-national-board-certification/certification-standards.cfm. The following subjects may be included:

GENERAL
I. Anatomy & Terminology
   A. Occlusion
   B. Tooth morphology
   C. Basic anatomical landmarks
   D. Identification of muscles
II. Materials
   A. Gypsum products
   B. Waxes
   C. Resins
   D. Metals
   E. Acids
III. Fabrication & Technique
   A. Handling and interpretation of dental prescriptions or work authorizations
   B. Use and maintenance of laboratory equipment
   C. Weights, measures and chemical symbols used in the laboratory
IV. The Dental Profession & the Dental Laboratory Industry
   A. History
   B. Industry and professional organizations
   C. The CDT program
   D. Dental laws and ethics
   E. Infection control

CERAMICS
I. Impression Materials
   A. Types
   B. Handling
   C. Custom trays
II. Cast Fabrication
   A. Materials-physical properties
      1. Stone
      2. Epoxy and resins
      3. Refractory materials
   B. Techniques
   C. Dies
      1. Types of preparations
      2. Margins
      3. Undercuts
      4. Alternatives to die preparation
      5. Spacers-lubricant
      6. Die stability
III. Articulation
   A. Types
   B. Uses
   C. Occlusal registrations
   D. Mounting procedures (face bows, etc.)
IV. Materials- Types, Physical Properties & Handling Characteristics
   A. Gypsum
   B. Waxes
   C. Metals, alloys and solder
   D. Porcelain, composites and stains
   E. Separating materials
   F. Fluxes and anti-fluxes
   G. Alcohols
   H. Acids and pickling agents
I. Wetting agents
J. Wax solvents
K. Abrasives and polishing agents
L. Laboratory gases
M. Investments/refractories
V. Pattern Design & Fabrication
   A. Abutments
   B. Pontics
   C. Connectors
VI. Spruing
   A. Sprue materials
   B. Techniques
      1. Venting
      2. Reservoirs
      3. Auxiliary sprues
      4. Direct and indirect
      5. Specific gravity

VII. Investing
   A. Technique
      1. Hygroscopic
      2. Thermal
      3. Vacuum pressure
   B. Handling

VIII. Wax Elimination (Burnout)

IX. Casting & Divesting
   A. Centrifugal
   B. Induction
   C. Vacuum
   D. Weights and measures
   E. Divesting

X. Finishing Procedures for Substructures

XI. Soldering — Pre- & Post-porcelain

XII. Tooth Morphology/Terminology
   A. Anatomy
   B. Occlusal function
   C. Contour

XIII. Metal Preparation
   A. Aluminum oxide blasting
   B. Cleaning (steam, ultrasonic)
   C. Oxidation

XIV. Opaque Technique
   A. Spraying
   B. Brush
   C. Instruments

XV. Porcelain Application
   A. Internal modifications
   B. Contouring
   C. Buildup and condensing

XVI. Firing Technique
   A. Opaque
   B. Body
   C. Add-on
   D. Stain and glazes

XVII. Finishing

**COMPLETE DENTURES**

I. Oral Anatomy & Physiology
   A. Muscles
   B. Anatomical landmarks
   C. Occlusion

II. Impressions — Materials & Handling
   A. Preliminary impressions
   B. Custom trays
   C. Final impressions

III. Casts — Materials & Fabrication

IV. Trial Denture Bases

V. Occlusal Rims

VI. Articulators & Articulation of Casts

VII. Prosthetic Teeth
   A. Selection (types and materials)
   B. Arrangement

VIII. Denture Base Fabrication

IX. Flasking
   A. Gypsum materials
   B. Mold preparation

X. Packing & Processing Dentures
   A. Materials
   B. Casting methods
   C. Processing equipment and techniques
   D. Remount and corrections
   E. Removing cast from dentures

XI. Finish & Polish Denture Base
   A. Equipment (lathes, handpieces)
   B. Abrasives and polishing agents
   C. Techniques & procedures

XII. Post-delivery Laboratory Procedures
   A. Rebase
   B. Reline
   C. Repairs

**CROWN AND BRIDGE**

I. Impression Materials
   A. Types
   B. Handling
   C. Custom trays

II. Cast Fabrication
   A. Materials
   B. Techniques
   C. Dies

*continued...*
III. Articulation
   A. Types
   B. Uses
   C. Occlusal registrations
   D. Mounting procedures (face bows, etc.)

IV. Materials- Types, Physical Properties & Handling Characteristics
   A. Gypsum
   B. Waxes
   C. Metals, alloys and solder
   D. Composites and resins
   E. Separating materials
   F. Fluxes and anti-fluxes
   G. Alcohols
   H. Acids and pickling agents
   I. Wetting agents
   J. Wax solvents
   K. Abrasives and polishing agents
   L. Laboratory gases
   M. Investments/refractories

V. Pattern Design & Fabrication
   A. Abutments
   B. Pontics

VI. Spruing
   A. Sprue materials
   B. Techniques

VII. Investing

VIII. Wax Elimination (Burnout)

IX. Casting & Devesting

X. Finishing Procedures
   A. Full cast (finishing and polishing)
   B. Substructure (finishing)

XI. Soldering
   A. Technique
   B. Investing
   C. Devesting

XII. Tooth Morphology/Terminology
   A. Anatomy
   B. Occlusal function
   C. Contour

ORTHODONTICS

I. Orthodontic Appliances — Fixed
   A. Types
      1. Passive

II. Orthodontic Appliances — Removable
   A. Types
      1. Passive
      2. Active
      3. Functional
   B. Identification
   C. Function

III. Materials
   A. Wire
   B. Plastics
   C. Waxes

IV. Clasps
   A. Types
   B. Functions and uses

V. Auxiliaries
   A. Springs
   B. Screws
   C. Coil spring (open and closed)
   D. Labial bows
   E. Other (bands, etc.)

VI. Acrylics
   A. Vacuum formed
   B. Sprinkle technique
   C. Dough pack (cold cure)
   D. Light cured
   E. Heat cured
   F. Finishing and polishing

VII. Soldering/Welding
   A. Materials
   B. Equipment
   C. Finishing and polishing

VIII. Appliance Repair
   A. Replace auxiliaries
   B. Acrylic repair
   C. Metal repair
   D. Infection control

IX. Study Casts
   A. Pouring
   B. Trimming
   C. Measurements
   D. Infection control

X. Equipment
A. Hand instruments
B. Bench equipment
C. Maintenance and safety

XI. Splints

PARTIAL DENTURES

I. Components of Framework
   A. Major connectors (types and functions)
   B. Minor connectors (types and functions)
   C. Direct retainers
   D. Indirect retainers
   E. Rests
   F. Denture bases
   G. Vertical stress eliminators

II. Cast Fabrication
   A. Impression materials and handling
   B. Cast materials and handling
   C. Diagnostic casts
   D. Master cast preparation

III. Articulation of Casts
   A. Jaw relations records
   B. Hand articulation-plasterless articulators

IV. Survey & Design
   A. Surveyors (path of insertion)
   B. Technique for surveying
   C. Clasp selection
   D. Major connectors
   E. Beading outline
   F. Relief for acrylic retention

V. Refractory Cast Fabrication
   A. Refractory materials (qualities)
   B. Duplication

VI. Preparation of Refractory Cast - Transfer Design

VII. Fabrication of Partial Dentures
   A. Pattern application
   B. Spruing
   C. Investing
   D. Burnout
   E. Casting (types)
   F. Retrieval of casting
   G. Altered (split) cast technique
   H. Finishing and polishing of metal framework
   I. Selection and arrangement of artificial teeth
   J. Fabrication of resin saddles

VIII. Repairs & Additions

IX. Wrought Metals

IMPLANTS

I. Case Acceptance
   A. Implant technologies
   B. Case design
   C. Guide stent

II. Master (Definitive) Cast
   A. Impression
   B. Soft tissue cast

III. Removable Prosthesis
   A. Baseplate
   B. Occlusal rim
   C. Verification jig
   D. Denture teeth

IV. Bar/Substructure
   A. Design, wax and cast
   B. Scan, design and mill
   C. Verification and fit
   D. Solder or weld nonparallel bar/substructure
   E. Finish and polish

V. Screw-Retained Fixed Removable (Hybrid) Prosthesis
   A. Identify/selection of components
   B. Parallelism
   C. Framework

VI. Cementable Fixed Prosthesis
   A. Abutments
   B. Parallelism
   C. Coping/substructure

VII. Materials and Equipment for Manufacturing Prostheses
   A. Selection and properties of materials including:
      i. Gypsum products
      ii. Separating mediums
      iii. Pattern materials
      iv. Abrasives and polishing agents
      v. Solder and flux
      vi. Restorative materials
      vii. Refractory and investment
      viii. Ceramic
      ix. Sealers, die hardeners and spacers
   B. Selection of instruments and equipment
      i. Computer assisted manufacturing
   C. Safety

continued...
WRITTEN SPECIALTY EXAM

The Written Specialty examination is the measure for specific knowledge in the specialty area selected by the candidate. The content on the Written Specialty Examinations are derived from the current NBC Job Task Outline, which can be found on the NBC website under Certification Program Standards at https://nbccert.org/about-national-board-certification/certification-standards.cfm. The following breakdown outlines some of the subjects that may be included:

CERAMICS

This examination is similar to the Crown & Bridge examination with the addition of specific concentration on porcelain and porcelain-fused-to-metal restorations and materials.

COMPLETE DENTURES

Subject matter includes oral anatomy; occlusion; the physical properties and correct handling of materials; fabrication procedures and techniques; and the design and use of restorations and appliances normally associated with the Complete Denture specialty.

CROWN & BRIDGE

Subject matter includes tooth morphology; occlusion; the physical properties and correct handling of materials; fabrication procedures and techniques; and the design and use of restorations normally associated with the Crown & Bridge specialty.

IMPLANTS

Subject matter includes implants for both fixed and removable prostheses, case acceptance and materials and equipment for manufacturing implant prostheses.

ORTHODONTICS

Emphasis in this examination is on the design and function of orthodontic appliances, including materials and fabrication techniques, terminology and occlusion.

PARTIAL DENTURES

Subject matter includes the theory of survey and design; physical properties and correct handling of materials; fabrication procedures and techniques; and the design and use of restorations and appliances normally associated with the Partial Denture specialty.
PRACTICAL EXAM

The Practical examination is a hands-on exam that requires a candidate to demonstrate their competence over a range of procedures normally associated with their chosen specialty. The Practical exam consists of preliminary procedures that must be performed in the candidate’s own laboratory prior to the examination date, plus specific steps which must be completed under the observation of the NBC Examiners at the exam site.

The following breakdown gives a general outline of the Practical Exams, including the preliminary work and onsite work:

CERAMICS

Ceramics candidates pour casts, fabricate removable dies and identify marginal finish lines in advance of the examination. They are instructed to mount their casts on two semi-adjustable articulators. They also make a metal coping which is to be finished at the test site. Candidates must wax and cast a framework for a three-unit bridge; this framework is to be opaqued and ready to receive porcelain at the test site. Another metal coping is to be made and metal-finished in preparation for opaque. At the test site, they will:

- Complete a porcelain butt margin crown on the metal-finished coping;
- Metal-finish the unfinished coping;
- Complete a porcelain-fused-to-metal bridge on the cast and opaque framework;
- Wax one additional coping.

In the Ceramics test, candidates’ grades are reported in three sub-tests: (1) the model and die work, metal finishing and waxing steps; (2) the three-unit PFM bridge; and (3) the porcelain butt margin crown.

COMPLETE DENTURES

In advance of the examination day, candidates must pour and mount casts on semi-adjustable articulators according to NBC instructions. They must then setup and process a complete set of maxillary and mandibular dentures. At the test site, they will:

- Make and finish a maxillary custom tray;
- Arrange 1 x 28 anatomical teeth in full balance, using the previously mounted casts;
- Wax and Contour the 1 x 28 setup;
- Make two denture repairs (one tooth replacement and one fracture repair);
- Make a maxillary stabilized baseplate and wax an occlusal rim on it.

Candidates’ grades are grouped into three sub-tests. One sub-test consists of the grades on the setup accomplished at the test site; another covers all of the preliminary procedures; and the third includes all other procedures on the examination.

CROWN & BRIDGE

In the preliminary part of this test, candidates must pour casts, fabricate individual removable dies and mount their casts on semi-adjustable articulators according to the written instructions.
Candidates must wax and cast a three-unit bridge and an onlay, leaving them unfinished as specified in the written instructions. At the test site, they will:

- Wax a central incisor and a three-unit bridge;
- Solder, finish and polish the cast, segmented 3-unit bridge;
- Wax an MOD restoration, and finish and polish cast MOD.

In the Crown & Bridge test, candidates’ grades are reported in three parts: (1) the preliminary assignments; (2) the waxing assignments; and (3) all of the metal work.

**Implants**

In the preliminary part of this test, candidates must pour casts, with appropriate soft tissue material, for both fixed and removable tasks. They will be required to construct a Hader Bar, construct a baseplate, set teeth, and process, finish and polish a complete denture. At the test site, candidates are instructed to:

- Produce a diagnostic wax up of two single-units;
- Create a matrix and fabricate a screw retained custom abutment, and a screw retained custom substructure;
- Fabricate a verification jig;
- Construct a stable substructure with Hader Bar attachment;
- Complete a 1 x 14 set up and wax up.

In the Implant test, candidates’ grades are reported in three parts: (1) the preliminary assignments; (2) the fixed assignments; and (3) the removable assignments.

**Orthodontics**

Prior to the examination, candidates in the Orthodontic specialty need only prepare their casts using the NBC test molds. All other assignments, the fabrication of three appliances, are done at the test site:

- One Hawley-type appliance
- One removable modified mandibular unilateral sagittal appliance
- One fixed mandibular lingual arch.

In the Orthodontic test, candidates’ grades are reported in three parts: Each appliance represents one sub-test score.

**Partial Dentures**

The preliminary portion of the Partial Dentures examination requires candidates to pour several sets of casts, survey and design maxillary and mandibular frameworks, make refractory casts and make one chrome partial framework casting, unfinished. At the test site, candidates are instructed to:

- Survey and design, according to given specifications, one maxillary and one mandibular framework and prepare the casts for duplication;
- Weld or solder a wrought wire clasp to a framework that is brought to the test;
- Make wax patterns on two refractory casts fabricated in the preliminary portion of the examination;
• Finish and polish the casting that is brought to the test site.

In the Partial Dentures test, candidates’ grades consist of four parts: (1) the preliminary work; (2) design; (3) waxing; and (4) metal work.

Materials and specific instructions for the examination will be mailed to candidates approximately four (4) weeks before the exam date. The candidate instruction booklet should be read by each candidate immediately upon receipt. All of the instructions should be followed carefully and completely.

The Practical examination candidate instruction booklet for each specialty is made up of four (4) parts:

1. A list of materials to bring to the exam site.
2. Instructions for pouring casts and other procedures which must be done in advance of the exam date.
3. A complete list of the procedures you will be asked to perform at the examination.
4. The standards that will be applied in evaluating the examination and the specific items that will be graded.

The NBC uses both the U.S. Postal Service and parcel delivery services. This makes it imperative that all candidates maintain a correct, current street address and mailing address on file with the NBC Headquarters. If a candidate relocates and fails to notify the NBC on a timely basis, resulting delays and/or the cost of new exam materials will be the candidate’s responsibility.
Appeals

The following appeals will be considered by the NBC:

**PROCEDURAL APPEALS**

If a candidate believes that any circumstance, event or procedure at the exam site had an adverse effect on their ability to successfully complete the examination, the Exam Proctor or the NBC Lead Examiner must be advised of the candidate's concerns before the candidate departs from the exam site. If a candidate is uncomfortable speaking with the Exam Proctor or the NBC Lead Examiner, the candidate may speak to the host representative or one of the other NBC Examiners. Either way, a written record must be created at the exam site. Any comments regarding circumstances, events or procedures at the exam site that are not logged while there will not be considered for appeal.

Candidates must also notify the NBC Headquarters in writing of their request for appeal within 48 hours (or two business days) of the exam date. The written request for appeal should include a detailed description of the event, circumstance, or procedure that affected the candidates’ performance on the examination. No procedural appeals received later than 48 hours (or two business days) after the examination date will be considered.

The complaint and supporting information shall be reviewed to determine if unsatisfactory examination conditions did exist. Upon determination that a candidate did not have a “fair” opportunity to take the exam under acceptable conditions, a solution will be developed with the candidate based on the particular situation. If it is determined that the conditions were acceptable, the candidate has the option to appeal to the NBC Board of Trustees.

**GRADE APPEALS**

All grade appeals for Comprehensive or Written Specialty exams must be filed by the candidate with the NBC, in writing, no later than two (2) weeks after the receipt of examination results. Grade appeals may be requested if the candidate feels there has been an error in the reporting or the reading of the answer sheets. The candidate should submit a written request for a score review to verify accuracy in the calculation of the grade, to the NBC Headquarters no later than two (2) weeks after the receipt of examination results.

Candidates who take the Practical examination receive a detailed written report of the percentage grade assigned to each evaluated aspect of their exam materials. If a candidate feels there has been an error in reporting the percentage grade for one or more specific line items in the report, the candidate should submit a written request for a score review to verify accuracy in the calculation and reporting of the specific line item(s). This request should be filed by the candidate with the NBC, in writing, no later than two (2) weeks after the receipt of examination results.

Upon receipt of a written request for a grade appeal, the grades will be recalculated by hand and verified. If a change is required, the NBC will alter the grade as appropriate. Either way, the candidate will be notified of the outcome as soon as a determination has been made.
Consideration of grade appeals will NOT include requests for additional points, exceptions or revisions to the standards, or re-submission or re-evaluation of examination assignments that have been removed from the security of the test site.

**QUESTION COMMENTS:**

For all written examinations, a candidate is allowed to make comments pertaining to the examination items. A special form is provided to all written examination candidates at the test site for them to document this feedback.

Comments will only be accepted by candidates if they turn in this documentation at the examination site. All comments are reviewed by subject matter experts, designated by the appropriate examination committee, throughout the year. While responses to comments are not provided back to the candidate, the comments will be used to help ensure the maintenance of the examinations.
Certified Dental Technician Examinations Application

This application should be used for candidates applying to take all CDT examinations within a one or two day period. This includes the Comprehensive exam, the Written Specialty exam and the Practical exam.

**ELIGIBILITY FOR CDT CERTIFICATION EXAMS**

*All* technicians applying for the CDT examinations must:
1. Have a working knowledge of the English language.
2. Be a high school graduate (or the documented equivalent).
3. Be of satisfactory ethical and legal standing as defined by the NBC’s disciplinary standards.
4. Meet the technical prerequisites required for testing.

For technicians who are *not* current participants in the NBC’s Recognized Graduate (RG) program, the technical prerequisites for testing may be met by documenting at least five (5) years of training and/or experience in dental technology. Time spent in on-the-job training (including formal apprenticeships and training courses) or studying in a dental technology education program may be counted towards this requirement.

- An exception is made for graduates of a two-year, ADA-accredited dental technology education program. These candidates may apply for the CDT examinations after completion of two (2) years of practical experience in addition to (and not concurrent with) their course of study.

For technicians who are *current* Recognized Graduates and have taken and passed their RG examination within the last four (4) years, the technical prerequisites for testing may be met in one of the following ways:
1. Recognized Graduates from two-year ADA-accredited programs may sit for the CDT examinations without having to obtain additional education or on-the-job-experience, or
2. Recognized Graduates from non-ADA-accredited programs may sit for the CDT examinations after obtaining at least three (3) years of on-the-job experience.

Note: Effective May 2011, an RG may keep their designation indefinitely, pending that they maintain the renewal requirements. However, the RG examination will only substitute for the Written CDT Comprehensive examination for a four (4) year period. After four years, the RG must complete all three examinations to earn certification.

**APPLICATION INSTRUCTIONS**

1. Type or print all answers clearly in ink.
2. Use extra sheets of paper if more space is needed for requested information.
3. Be honest, accurate and thorough in completing all sections of this application. The National Board for Certification in Dental Laboratory Technology (NBC) reserves the right to reject any application if the NBC has evidence that the applicant has made a false or misleading statement in the application or any supporting documents.
4. Payment is due with this application. The check or money order, payable to the National Board for Certification, must be in the amount of the application and examination fee for this candidate only. The NBC also accepts Visa, MasterCard and American Express.
5. The NBC Headquarters should receive all applications by the published deadline. Any late applications must be accompanied by the late fee and are subject to NBC approval. Applications are accepted in the order in which they are received, up to the capacity of each exam site.
6. Exam dates are tentative until thirty (30) days prior to the exam. Please call the NBC to check on the expected status of exams prior to making travel arrangements. The NBC reserves the right to cancel the exams if there are not enough candidates registered.
7. Once an exam has been confirmed, candidates are required to attend their selected examination. Failure to do so may result in the forfeiture of all examination fees. Please read the CDT Examination Handbook for additional details about rescheduling and cancellations.

All CDT candidates should thoroughly read the CDT Examination Handbook for further details and information regarding certification and procedures.
Application for Certified Dental Technician
All CDT Examinations

I. APPLICANT INFORMATION

☐ Dr. ☐ Mr. ☐ Mrs. ☐ Ms. ☐ Miss ☐ Other ______________________

Name __________________________________________________________________________

(First) (Middle Initial) (Last)

Street Address _____________________________________________________________________
_________________________________________________________________________________

City ________________________________________ State ________________ Zip ____________

Home or Cell Phone ____________________________ FAX _______________________________

Work Phone __________________________________ E-mail _______________________________

Date of Birth ______________________________________________________________________

II. WRITTEN EXAM SELECTION

(if you are not taking a Written exam, skip this section)

1. I hereby apply for certification testing in the specialty of dental laboratory technology indicated below. Please check next to the written examinations which you will be taking.

☐ Written Comprehensive Exam
☐ Written Specialty Exam (choose a specialty below)
   ☐ Complete Dentures ☐ Partial Dentures ☐ Crown & Bridge ☐ Ceramics ☐ Orthodontics ☐ Implants

2. Preferred Examination Location/Date (refer to www.nbccert.org for exam schedule):

City ________________________________________ Date ________________________________

Exam applications are processed in the order in which they are received. If the exam location of your choice is full, the NBC will notify you and ask that you make another selection. Applications may not be accepted after the deadline specified for an exam without NBC approval and a late fee of $25 per written examination. Check with the NBC prior to making your travel arrangements in case there is a cancellation.

III. PRACTICAL EXAM SELECTION

(if you are not taking the Practical exam, skip this section)

1. Please check the box next to the practical examination specialty in which you will be testing.

☐ Complete Dentures ☐ Partial Dentures ☐ Crown & Bridge ☐ Ceramics ☐ Orthodontics ☐ Implants

Revised 9/22/2015
2. Preferred Examination Location/Date (refer to www.nbccert.org for exam schedule):

City ___________________________ Date ___________________________

Exam applications are processed in the order in which they are received. If the exam location of your choice is full, the NBC will notify you and ask that you make another selection. Applications may not be accepted after the deadline specified for an exam without NBC approval and a late fee of $50. Check with the NBC prior to making your travel arrangements in case there is a cancellation.

IV. LANGUAGE REQUIREMENT

Do you read, speak and write the English language?  □ Yes  □ No

V. LEGAL REQUIREMENT

Have you been convicted of illegal practice of dentistry?  □ Yes  □ No

VI. EDUCATION

1. Did you graduate from high school or the equivalent (such as earning a GED)?  □ Yes  □ No

2. List post-secondary studies and degree(s) earned, if any:

Name of Institution           Courses or Major     Degree Earned            Year of Graduation
_________________________________________________________________________________
_________________________________________________________________________________
_________________________________________________________________________________

VII. APPLICANT’S CURRENT EMPLOYMENT

1. Present Employer ________________________________________________________________

2. Business Address _______________________________________________________________

City ___________________________ State ________________ Zip ____________

3. Date of Employment _________________________  □ Full-time  □ Part-time (hrs. per week____)

4. Name and title of present supervisor ______________________________________________

5. Brief description of the work you do _______________________________________________

6. Are you responsible for supervising the performance of other technicians or production personnel on a daily basis?  □ Yes  □ No

7. Are you regularly or occasionally responsible for the instruction or training of other technicians?  □ Yes  □ No

continued...
VIII. APPLICANT’S PREVIOUS EMPLOYMENT

The NBC requires that CDT applicants have at least five years of education and/or employment in dental technology, unless the applicant is a Recognized Graduate (see Eligibility for CDT Certification Exams). You must supply such information as the NBC might need to verify compliance with this requirement — including the complete mailing addresses and names of employers and supervisors. This requirement is interpreted to mean five (5) years of full-time employment (at least 35 hours per week) and additional credit is not awarded for formal education concurrent with employment claimed towards this requirement.

1. Most Recent Employer _____________________________________________________________
   Business Address ___________________________________________________________________
   City ___________________________ State ____________ Zip ____________
   Telephone: ________________________________
   a. Dates employed:
      from (month and year) ______________________ until (month and year) __________________
      □ Full-time □ Part-time (hrs. per week____)
   b. Job title and brief description of duties performed ____________________________________
      ____________________________________________________________________________
      ____________________________________________________________________________
      ____________________________________________________________________________
   c. Name of Supervisor ____________________________________________________________

2. Employment prior to position listed above _____________________________________________
   Business Address ___________________________________________________________________
   City ___________________________ State ____________ Zip ____________
   Telephone: ________________________________
   a. Dates employed:
      from (month and year) ______________________ until (month and year) __________________
      □ Full-time □ Part-time (hrs. per week____)
   b. Job title and brief description of duties performed ____________________________________
      ____________________________________________________________________________
      ____________________________________________________________________________
      ____________________________________________________________________________
   c. Name of Supervisor ____________________________________________________________

Please use additional pages if needed to report at least five years of dental technology training, education and experience.
IX. APPLICANT’S AFFIDAVIT

I have read and understand the CDT examination handbook and application. I agree to submit to testing for certification according to the requirements and procedures specified by the NBC.

I agree to indemnify and hold harmless the NBC, its Trustees, officers, employees and agents, and the institution where the CDT examination is administered from any and all liability for injury or damages suffered by me, or which I might cause to others, during the course of taking my examination.

I agree to abide by the laws and regulations which govern the practice of dentistry and the practice of providing dental laboratory technology services, restorations and services to the dental profession.

I affirm that all statements made by me in this application are true and correct to the best of my knowledge. I understand that any misrepresentation of facts made in this application for testing or in future applications to the NBC for certification testing or renewal, or in my personal claim to certification (use of the CDT designation and logo), may be found cause for suspension or denial of certification or eligibility for certification testing.

I understand that NBC operates its examinations with specific procedures that ensure the integrity of the examination process. I understand that if I fail to follow NBC’s policies and procedures that my examination results will not be valid and I would be required to retest at my own expense.

Any application submitted hereafter will be considered an addendum to this application.

I hereby verify that I have _____ years of education and/or employment in dental laboratory technology.

Applicant’s Signature __________________________________________ Date ____________________________

X. PAYMENT

☐ All CDT Exams — $895
☐ Written Comprehensive Exam Only — $220
☐ Written Specialty Exam Only — $220
☐ Practical Exam Only — $455

Any applications submitted after the published deadline must be accompanied by a late fee of $100 ($25 per written exam and $50 for the Practical exam) and are subject to NBC approval.

☐ Enclosed is Check #_________ in the amount of $ __________________ payable to the NBC.

☐ Please charge my credit card ☐ VISA ☐ MC ☐ AMEX Amount $ _______________

Credit Card # ____________________________ Exp. ____________ CCV Code* __________

* Credit Card Verification (CCV Code): This is the 3-digit number that appears on the reverse side of your credit card. For American Express cards only, this is the 4-digit number on the front of your card.

Cardholder Name ______________________________ Signature ____________________________

Billing Address _____________________________________________________________________

Phone ____________________________________________________________________________

The fees published in this application are subject to change. For more information about testing & other programs please visit our website at www.nbccert.org.

Please send completed application and fee to:
NBC
325 John Knox Road, #L103
Tallahassee, FL 32303
(850) 222-0053 Fax

If you have not signed your application or enclosed the required fees, your application will not be processed.
CHECKLIST

HAVE YOU:

- read this handbook in its ENTIRETY?
- COMPLETELY filled out the application(s)?
- SIGNED the application affidavit?
- enclosed the appropriate FEE(S)?
- kept a COPY of the entire application for your records?

WE RECOMMEND THAT YOU KEEP THIS CANDIDATE HANDBOOK FOR REFERENCE THROUGHOUT THE ENTIRE APPLICATION AND EXAMINATION PROCESS.

This handbook contains information about how to become nationally certified in dental laboratory technology. To avoid problems in processing your application, it is important that you follow the guidelines outlined in this handbook and that you comply with the required deadlines. If you have questions about the policies, procedures or processing of your certification after reading this handbook, please go to our website at www.nbccert.org, or email us at certification@nbccert.org. Additional copies of this handbook may be obtained by emailing certification@nbccert.org, by calling (800) 684-5310 or by sending a written request to the NBC at the address below.