



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 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.

The references below are intended solely for use of 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 document. This reference list was last revised in July 2023. 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.

For additional information regarding the NBC Examinations, please visit <https://nbcert.org/certificants/certified-dental-technician/cdt-application.cfm>.

3D Printing Custom Trays with Formlabs SLA 3D Printers

<https://dental.formlabs.com/indications/custom-impression-trays/guide/>

3D Printing Diagnostic Models with Formlabs SLA 3D Printers Application Guide. March 2021.

3M Lava Esthetic Fluorescent Full-Contour Zirconia Troubleshooting Guide

<https://multimedia.3m.com/mws/media/14617930/3m-lava-esthetic-trouble-shooting-guide-us.pdf>

3M Lava Esthetic Troubleshooting Guide

<https://multimedia.3m.com/mws/media/14617930/3m-lava-esthetic-trouble-shooting-guide-us.pdf>

3Shape (2017) 3Shape E scanner - Calibration

<https://www.youtube.com/watch?v=fBMZlZMrAEs>

3Shape 2019 Lab Technical Documentation

3Shape Academy

3Shape Dental System - Dongle Update

www.youtube.com/watch?v=SvYIREHh45s

3Shape Dental System 2021 User Manual

3Shape Lab Scanner Manual

3Shape User Manual

<http://embed.widencdn.net/pdf/plus/3shape/zxt3su9hdt/Minimum-PC-requirements-for-3Shape-software-packages.pdf?u=lmktbn>

3Shape YouTube Tutorial

<https://www.youtube.com/watch?v=VuImUtRvamI>

8 Deciding Factors: Cement- vs. Screw-Retained Implant Crowns

<https://glidewelldental.com/company/blog/8-deciding-factors-cement-vs-screw-retained-implant-crowns>

Amann Girrbach Processing Techniques ZOLID- DNA Generation

https://pdf.medicalexpo.com/pdf/amann-girrbach/guide-processing-techniques/71298-176036-_7.html

Asiga Max Manual

<https://www.whipmix.com/wp-content/uploads/2021/06/MAX-User-Guide-20190916.pdf>

Capturing Multiple Occlusal Relationships for the Maxilla and the Mandible with the Medit i500

<https://www.cad-ray.com/capturing-multiple-occlusal-relationships-for-the-maxilla-and-the-mandible-with-the-medit-i500/>

Carbon Academy

Cercon xt/ht: How to Finish Green State Zirconia

<https://www.youtube.com/watch?v=JJqcFhpLYEI>

Clinical Guideline for Full Contour Zirconia Restorations Produced Chairside with "CEREC Zirconia"

<https://assets.dentsplysirona.com/websites/my-cerec/pdf/Clinical-Guidelines-for-CEREC-Zirconia.pdf>

coDiagnostix Instructions for Use

<https://www.straumann.com/content/dam/media-center/digital/en-us/documents/knowledge-center/codiagnostix/coDiagnostix-10-IFU-EN-v14.4.pdf>

Dental 3D Printing Success, SprintRay, January 27, 2020

<https://sprintray.com/dental-3d-printing-success-handbook/>

Dental Appliance Manufacturers Audit Scheme

<http://www.damas.co.uk/blog/dental-laboratory-news/dental-laboratory-prescriptions/>

DentalCAM Manual

DentalDB Application - exocad

https://wiki.exocad.com/wiki/index.php/DentalDB_Application

Digital Restorative Dentistry: A Guide to Materials, Equipment, and Clinical Procedures. Springer Publishing, 2019

Evo820 (2020) Quality and Compliance Defined

<https://www.evo820.com/the-new-fda-regulatory-requirements-are-becoming-clear/>

Exocad Webshop

Exocad Wiki

<https://wiki.exocad.com/wiki/index.php>

Exocad. Free-Forming Adjustments - Adding or Removing Material, Smoothing

<https://wiki.exocad.com/wiki/index.php/Freeforming>

Exocad. Insights 2018: Exoplan Case Demonstration - Planning of Implants and design of a surgical guide.

https://www.youtube.com/embed/AJgjMUQ_LEE?start=0&autoplay=1&cc_load_policy=1

NBC DIGITAL WORKFLOW EXAMINATION REFERENCES
updated July 2023

| |
|---|
| FDA (2018) Product Code Classification Database https://www.fda.gov/medical-devices/classify-your-medical-device/product-code-classification-database; |
| fda.gov/media/134018/download |
| Fundamentals of CAD/CAM Dentistry, American College of Prosthodontists; 1st edition, April 7, 2019 |
| https://3shape.widen.net/view/pdf/3wnjmfe8f4/Dental-System-User-Manual---2.21.2-A-US.pdf?t.download=true&u=6xmdhr |
| https://biometricdental.com/12097-2/ |
| https://cdeworld.com/courses/5184-improving-prescriptions |
| https://dentagama.com/news/what-is-a-pfz-dental-crown |
| https://dental.formlabs.com/indications/surgical-guides/ |
| https://emeraldental.com/post/dental-milling-clean-machine-clean-mill.html |
| https://en.wikipedia.org/wiki/Software_protection_dongle |
| https://en.wikipedia.org/wiki/Thermocouple |
| https://exocad.com/our-products/exocad-dentalcad/bite-splint-module/ |
| https://primadigital.com/why-is-my-zirconia-chipping/ |
| https://pubmed.ncbi.nlm.nih.gov/28256479/ |
| https://secureframe.com/blog/how-to-become-hipaa-compliant |
| https://support.formlabs.com/s/article/Choosing-the-right-wash-solvent?language=en_US |
| https://support.formlabs.com/s/article/Form-Cure-Time-and-Temperature-Settings?language=en_US |
| https://support.formlabs.com/s/article/Isopropyl-Alcohol-IPA?language=en_US#:~:text=Isopropyl%20alcohol%20(IPA)%20dissolves%20liquid,L%2C%20or%20the%20Finish%20Kit. |
| https://wiki.exocad.com/wiki/index.php/Design_the_bite_splint_bottom |
| https://wiki.exocad.com/wiki/index.php/Smile_Creator_Photo_Protocol%E2%80%8B_%E2%80%8B#Smile_Creator_Photo_Protocol |
| https://www.3shape.com/-/media/files/case-studies-pdf/clinical-cases/screw-retained-bridge-design-protocol.pdf?v=c0a147f3-f401-44b8-8cd1-92e0dbbe750c |
| https://www.3shape.com/en/promo/dentsply-sirona-connect?fbclid=IwAR3p2cqDJiPSoy-MRpdacc0FessoMtZVDmeTyZBmlwd7sFJ-QC6mlrYoeX0 |
| https://www.aegisdentalnetwork.com/idx/2014/07/Material-Selection-Guidelines-for-Single-Unit-Implant-Crowns-and-Abutments |
| https://www.cad-ray.com/what-is-an-implant-scanbody-and-why-should-you-use-it/ |
| https://www.carbon3d.com/resources/whitepaper/new-capabilities-to-dental-model-creation |
| https://www.dentaleconomics.com/science-tech/article/16389513/so-you-want-to-purchase-an-intraoral-scanner |
| https://www.dentalportal.info/en-us/Global_Dental/R5/GLB_DEN_R5_Machine-maintenance.htm |
| https://www.dentsplysirona.com/content/dam/master/education/documents/upload/A/Atlantis%20abutment%20design%20guide_32670606-US-1704.pdf |
| https://www.hp.com/us-en/shop/tech-takes/what-does-defragging-do |
| https://www.mdpi.com/2304-6767/9/9/104/pdf |
| https://www.oralhealthgroup.com/features/principles-of-smile-design-treatment-planning/ |
| https://www.revopoint3d.com/three-3d-file-formats-that-revopoints-3d-scanners-output/ |
| https://www.speareducation.com/spear-review/2019/01/how-dentist-laboratory-relations-are-changing-in-the-digital-age |
| https://www.speareducation.com/spear-review/2022/05/dental-lab-outsourcing-good-bad-ugly |
| https://www.youtube.com/watch?v=AcktBRuOqjo |
| https://www.youtube.com/watch?v=bvBkmACNnoI |
| https://www.youtube.com/watch?v=cwwgPtSSwqc |
| https://www.youtube.com/watch?v=fBMZlzMRAEs&t=148s |
| https://www.youtube.com/watch?v=GMie7O1V8AY |

NBC DIGITAL WORKFLOW EXAMINATION REFERENCES
updated July 2023

| |
|--|
| https://www.youtube.com/watch?v=iwiO3NEOExA |
| https://www.youtube.com/watch?v=JijHVLdo-z8 |
| https://www.youtube.com/watch?v=Lg3zOO0ev5I |
| https://www.youtube.com/watch?v=m8QRhYQtuts |
| https://www.youtube.com/watch?v=ViK32ppPRwo |
| https://youtu.be/2sMOJptGJaY |
| https://youtu.be/QGHdFdXHy6U |
| IFU from Ivoclar https://www.ivoclar.com/en_us/eifu?ref-number=686876 |
| Install .dme Files in 3Shape Software (custhelp.com) |
| Institute of Digital Dentistry |
| JDT Nov Dec 2018. CBCT Guided Implant Surgical Consulting and Fabricating CAD/CAM Surgical Guides |
| Journal of Clinical and Experimental Dentistry. Effect of different sintering process on flexural strength of translucency monolithic zirconia. Niwut Juntavee and Surawut Attashu. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6174017/#:~:text=Sintering%20process%20is%20responsible%20for,strength%20of%20translucency%20monolithic%20zirconi |
| Medit support article https://support.medit.com/hc/en-us/articles/360020886672-Precautions-for-use |
| Meshmixer Basics, Import Formats help.autodesk.com |
| Meshmixer Manual |
| Mod Institute - e-book |
| Planmeca Planmill 30 C User Manual https://www.planmeca.com/globalassets/planmeca/1-planmeca-usa-modernization/cadcam/dental-mills/planmill-30-s/documents/planmill-30-s-manual-20172300d.pdf |
| Pocket Dentistry Chapter 7-Color and Shade https://pocketdentistry.com/7-color-and-shade/ |
| Protecting the Patient, Application of HIPAA/PCI in Dentistry, April 5, 2018 https://dentallabs.org/protecting-the-patient-application-of-hipaa-pci-in-dentistry/ |
| Roland DG Quick Tip: How to Keep Track of Your Milling Bur Life. WhipMix. https://info.whipmix.com/roland-quick-tip-how-to-keep-track-of-your-milling-bur-life |
| Roland DWX-52DCI User Manual https://downloadcenter.rolanddg.com/contents/manuals/DWX-52DCI_USE_EN_R2.pdf |
| Roland User Manual https://downloadcenter.rolanddg.com/contents/manuals/DWX-52DCI_USE_EN_R2.pdf |
| Sprintray.com https://support.sprintray.com/hc/en-us/articles/360060394114-Cleaning-the-Optical-Path-of-SprintRay- |
| Step by Step Instructions on the intraoral scanbodies-Straumann152.820-en_low.pdf |
| support.sprintray.com/hc/en-us/articles/360042008453 |
| The Battle of File Formats: STL vs OBJ vs Ply. Published by Medit. https://biometricdental.com/12097-2/ |
| The Partial Denture with Metal Framework - Publisher: Bego |
| Vaniman Manufacturing, Inc. (2013-2022) Applications – Dust Collection While Milling Zirconium https://www.vaniman.com/dust-collection-while-milling-zirconium/ |
| Video-3Shape E Scanner Calibration https://www.youtube.com/watch?v=fBMZlzMRAEs |
| Zahn Academy (2020) Dental Lab Life: Designing an Abutment in 3Shape https://www.youtube.com/watch?v=xJPqjpU3kcE |

Have a suggestion for a great digital workflow reference that is not included on the list? Email it to certification@nbcert.org.