**NDT 275: DR/CR**

**Instructor:** Scott Ballard

**Office:** IA-124

**Phone:** 541-917-4586 (messages will be checked weekly)

**Email:** [ballars@linnbenton.edu](mailto:ballars@linnbenton.edu)

**Office Hours:** **The primary way to communicate with the instructor is email**. We will schedule Zoom and telephone conferences as needed, but all communication will start with email.

**CRN:**  43489

**Credits:**  5

**Prerequisites:** NDT130 Radiation Safety and NDT 140 RT Level-I

**Class Meeting Days/Times/Locations:**

* Days: Monday/Wednesday
* Times: 8:00-12:00 (unless otherwise stated)
  + Daily assignments, Quizzes, Lab videos, guest lectures will be posted on Moodle by 8:00 am
  + Regular lectures will begin at 10:00 am
* Location: The Stratosphere

**Course Description:**

NDT 275 is designed in accordance with the ASNT, SNT-TC-1A recommended practice and conforms with NAS-410 to meet Computed (CR) & Digital (DR) Radiographic Testing (RT) Level-I requirements.

**Course Outcome:**

Upon completion of NDT 275 the student will be able to:

* Radiographic Testing – In accordance with ASNT, CP-105 (Course Outlines for Qualification of NDT Personnel) will be presented and understood.
* **Students who successfully complete this course will still satisfy the minimum requirements for classroom training for Computed Radiographic Testing Level I i.e. 40 hours of structured classroom training.**
* **Certificates of Completion of the ASNT Required Classroom instruction time will be given for successful completion of this course, however, the proctoring of these final written exams is TBD.**
* Pass the ASNT general knowledge CR/DR, 40 question written exam with a score of **70% or higher**
* Pass the 30 question CR/DR equipment specific exam with a score of **70% or higher**
* Pass the general knowledge written exam and specific with a **composite score of 80% or higher**.

**Required Text/Supplies/Software:**

* RT-Radiographic Classroom Training Book, 2nd edition, 2016–
  + Available at ASNT Store <https://www.asnt.org/Store/Browse?category=PTP%20Series%3A%20Classroom%20Training%20Books>
  + (ISBN 978-1-57117-376-8)
* Students will need a computer with internet to access many of the class online resources.
* We will be using each of the following platforms throughout the term:
  + LBCC Student Email – I will communicate to you using your LBCC email address.
  + MS Word/PowerPoint, Google Docs/Google Forms/Google Sheets/Google Slides
  + Moodle – familiarize yourself with Moodle, we will be working to use Moodle as much as possible

**Class Structure:**

The class will require students to access video lectures, PowerPoint Lessons, listen, read, take notes, learn & apply mathematical equations, apply and synthesize concepts specific to Radiographic Testing. Class sessions will include:

* **FULL DISCLOSURE:** it is likely the curriculum delivery will evolve throughout the term as it is my goal to teach in the least restrictive, most accessible way for students and since we’re charting new territory, the methods will change as needed.
* Lectures – you will receive a Google calendar invite, requesting you join a Zoom lecture at our specified class time
  + All lectures will be recorded, stored and available for students to access on the Moodle Portal….
  + Lecture Notes – lectures will be accompanied with lecture/discussion notes to guide your learning. Access to Notes TBA – likely will be emailed or possibly made available on Moodle.
* Worksheets – will be emailed, sent through Google Forms or accessed on Moodle,
* Quizzes using –
  + Google Forms
  + Moodle
  + Email
* Guest speakers, virtual field trips, group activities
  + Assessment of these activities might include an online, interactive discussion in small groups, short write-ups documenting what you’ve observed and learned, worksheets and quizzes.
* Labs – there will be labs in a variety of forms including:
  + Simulations
  + Radiographic video demonstrations with techniques to follow from Dr. Emily
  + Technical report writing

**Attendance/Participation:**

The number 1 reason employees are fired in the manufacturing industry is attendance and tardiness, consequently, our industry partners request that we hold our students accountable for attendance and punctuality. This term, due to the current situation, we will not be counting daily attendance, however, points will be allocated for participation in our live classroom lectures and labs.

**Course Evaluation:**

* Assignments, notes, quizzes, activities & Participation approx. **75%**
* ASNT Cert Tests (time, method, location **TBA**) approx. **25%**

Students who may need accommodations due to documented disabilities, who have medical information which the instructor should know, or who need special arrangements in an emergency should speak with their instructor during the first week of class. If you believe you may need accommodations but are not yet registered with the Center for Accessibility Resources (CFAR), please visit the [CFAR Website](http://www.linnbenton.edu/cfar) for steps on how to apply for services or call 541-917-4789.

**LBCC Comprehensive Statement of Nondiscrimination**  
LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, and use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information, see Board Policy P1015 in our [Board Policies and Administrative Rules](http://www.linnbenton.edu/board-policies-and-administrative-rules). Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: [linnbenton-advocate.symplicity.com/public\_report](http://linnbenton-advocate.symplicity.com/public_report)