Coastal Bend COLLEGE

Administrative Master Syllabus

Cover Sheet

Purpose: The Administrative Master Syllabus provides a general course description, defines the required elements of the course, and establishes a faculty-driven foundation for course assessment to ensure continuous improvement in student learning, irrespective of the course timeframe, or mode of course delivery.

Course Title: Radiographic Imaging Equipment

Course Prefix and Number: RADR 2309

THECB Approval Number (10 digit): 5109110000

Department: Radiologic Technology **Division:** Nursing and Allied Health

Course Type: (check only one)

- [ ] **Academic General Education Course (From ACGM but not a CBC Core Course)**
- [ ] **Academic CBC Core Course**
- [x] **WECM Course (Special Topics or Unique Needs Course: Y [ ] or N [x])**

Weekly Contact Hours (Lecture – Lab – External): 3 - 1 - 0

Course Catalog Description:

Equipment and physics of x-ray production. Includes basic x-ray circuits. Also examines the relationship of conventional and digital equipment components to the imaging process.

Prerequisites/Co-requisites:

Prerequisites: Program Admission

Approval: **The contents of this document have been reviewed and are found to be accurate.**

Prepared by (Content Expert): Jacklynn Valadez Digitally signed by Jacklynn Valadez Date: 2021.11.09 11:13:52 -06'00'

Reviewed by Director or Coordinator: Virginia Wall Digitally signed by Virginia Wall Date: 2021.11.18 11:18:17 -06'00'

Approved by Dean of CTE or NAH or TGE: Loana Hernandez Digitally signed by Loana Hernandez Date: 2022.09.02 10:14:05 -05'00'

Revised 8/11/2021

Master Course Syllabus

Course Name: RADR 2309 Radiographic Imaging Equipment

Course Description: Equipment and physics of x-ray production. Includes basic x-ray circuits. Also examines the relationship of conventional and digital equipment components to the imaging process.

Semester Hour Credit: 3

Lecture Hrs. per Week/Lab Hrs. per Week/External Hrs. per Week: 3-1-0

Curriculum Capacity: 21

Face-to-Face Lab 21
Online Lab
Face-to-Face Lecture 21
Online
Virtual Face-to-Face
Interactive video (multi-locations)
Hybrid
Clinical

Recommended enrollment threshold: 21

Face-to-Face Lab 21
Online Lab
Face-to-Face Lecture 21
Online
Virtual Face-to-Face
Interactive video (multi-locations)
Hybrid
Clinical

Textbook and/or other major required readings:

Title: Radiologic Science for Technologist
Author: Stewart C. Bushong
Publisher: Elsevier
Edition: 12th
ISBN: 9780323661348

The Student Learning Outcomes for the course are the same regardless of modality or location.

Course Outcomes
(WECM or LDACGM)

- Differentiate between conventional and digital equipment.
- Explain the physics of x-ray production.
- Describe x-ray circuits.
- Relate conventional and digital equipment components to the imaging process.

The following general education course competencies (TGE) or Marketable SCAN Skills (CTE/NAH) are addressed in this course: General education course competencies (TGE) or Marketable SCAN Skills (CTE/NAH) assessed are indicated with an asterisk *.

- Evaluates the patient, equipment and procedure to identify variances that might affect the expected outcome.
- Recognizes hazards associated with their work environment and takes measures to mitigate them.
- Shares knowledge and expertise with others.
- Applying principles of ALARA to minimize exposure to patient, self and others.
- Selecting the appropriate protocol and optimizing technical factors while maximizing patient safety.
- Confirms that equipment performance, maintenance and operation comply with the manufacturer's specifications.

The following program student learning outcome are assessed for this course:

1. Students will produce diagnostic radiographs.
2. Students will demonstrate written communication skills.
3. Students will demonstrate professional behaviors.
4. Students will acquire professional oral and written communication skills.

Evaluation Methods:

Unit exams, quizzes, chapter assignments, online learning assignments

Course Grading: Please see individualized instructor policies for course evaluation methods. Students will be assessed on the same measure across each discipline as per CBC guidelines.

Major Course Assignments and/or exams counting for at least 10% of a final course grade:

Comprehensive final Circuit Group Project

Grade Scale:

A = 100.0 - 91.5 B = 91.4 - 82.5 C = 82.4 - 74.5 F = 74.4 - Below

Course Subject Matter Outline:

Unit 1: Essential Concepts of Radiologic Science; Basic Physics Primer Unit 2: The Structure of Matter; Electromagnetic Energy Unit 3: Electricity; Magnetism; Electromagnetism Unit 4: The X-Ray Imaging System

Additional Course Requirements:

Class Attendance and Classroom Conduct Policies

Attendance Policy: See Radiologic Technology Program Student Handbook.

Telephone Support: Toll Free: 866-722-2838 or Direct Line: 361-354-2508

I.T. Support Blackboard

http://coastalbend.edu/it/

IT Help Desk
1-361-354-2508
helpdesk@coastalbend.edu

Live Chat: Fall/Spring Hours: Monday - Thursday from 8 a.m. to 5 p.m. Summer Hours: Monday – Thursday from 7 a.m. to 6 p.m.

Tutoring Services: Coastal Bend College is committed to the academic success of all students enrolled at the college. A variety of services, including academic support, individual tutoring sessions, group tutoring sessions, and online tutoring, are available to students depending on the availability of tutors for the subject matter requested. All tutoring is provided at no cost to current CBC students who are currently enrolled at CBC. On-demand tutoring services are accessible 24 hours a day, seven days a week through the TutorMe platform, which may be accessed through your Blackboard account. To request a tutor, please complete the online tutor request form found at http://www.coastalbend.edu/tutoring/ to submit your request. If you have any questions about tutoring programs, you can contact to tutoring@coastalbend.edu.

Beeville	Alice	Kingsville	Pleasanton
3800 Charco Road Beeville, TX 78102 1-866-722-2838	704 Coyote Trail Alice, TX 78332 1-866-891-2981	1814 Brahma Blvd. Kingsville, TX 78363 1-866-262-1615	1411 Bensdale Pleasanton, TX 78064 1-866-361-4222

Grady C. Hogue Learning Resource Center (Library): Located on the Beeville campus, the operation hours are Monday - Friday from 8:00 a.m. to 5:00 p.m.

(Summer semesters will observe the CBC campus operation hours) For locations and hours of the CBC library in Alice, Kingsville, and Pleasanton sites please visit the library web page link below.

Grady C. Hogue Learning Resource Center (Library): http://lrc.coastalbend.edu/about

Financial Aid: Resources are available for students for financial aid, work study, and veteran benefits. For additional information, visit our website at http://coastalbend.edu/finaid or contact us at 361-354-2238. Office hours: Monday - Friday from 8:00 a.m. to 5:00 p.m.

ADA Statement: No qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of the College District, or be subjected to discrimination by the College District. Nor shall the College District exclude or otherwise deny equal services, programs, or activities to an individual because of the known disability of an individual with whom the individual is known to have a relationship or association. 42 U.S.C. 12132; 28 CFR 35.130(g). See at: GA (Legal)

Students with Disabilities: Please notify your instructor of any modification/adaptation you may require to accommodate a disability-related need. You will need to provide documentation to the Director of Accessibility Services so the most appropriate accommodations can be determined. Specialized services are available through the Office of Accessibility Services (OAS) (SSB 4.104, 471-6259). For more information, please email oas@coastalbend.edu.

Scholastic Dishonesty: Each student is charged with notice and knowledge of the contents and provisions of Coastal Bend College's rules and regulations concerning student conduct. All students shall obey the law, show respect for properly constituted authority, and observe correct standards of conduct. Scholastic dishonesty shall constitute a violation of these rules and regulations and is punishable as prescribed by Coastal Bend College Policies FLB (Local) and FM (Local). Scholastic dishonesty shall include, but not be limited to, cheating on a test, plagiarism, and collusion. See at: FLB (Local) and FM (Local).

Use of E-mail for Official Correspondence to Students: All students should be familiar with the college's official email student notification policy. Students are expected to check their CBC email on a frequent and regular basis to stay current with college-related communications, recognizing that certain communications may be time-critical.

Copyright Law and Intellectual Property Rights Policy: Copyright is the right of an author, artist, composer or other creator of a work of authorship to control the use of his or her work by others. Protection extends to literary works, musical works, dramatic works, pantomimes and choreographic works, pictorial and graphic works, sculpture, motion pictures and other audiovisual works, sound recordings and architectural works. Generally speaking, a copyrighted work may not be reproduced by others without the copyright owner's permission. The public display or performance of copyrighted works is similarly restricted. Generally, the unauthorized reproduction, performance or distribution of a copyrighted work is copyright infringement and may subject the infringer to civil and criminal penalties. The Fair Use Doctrine outlines exceptions to this Law and is outlined in Coastal Bend College Policy, CT (Legal).

Coastal Bend College, its faculty, students and employees must comply with Copyright Law. Detailed information on Copyright Law and Intellectual Property Rights is available in Coastal Bend College Policy CT (Legal) and CT (Local).

Questions regarding this information should be directed to the Director of Library Services at: library@coastalbend.edu or the Office of Marketing and Public Relations at: socialmedia@coastalbend.edu.

Intellectual Property: Student /Third Party Works: Rights to copyrightable or patentable works created by a student or a third party, that is, not a College District employee, shall reside with the author/ creator. Detailed information on Copyright Law and Intellectual Property Rights is available in Coastal Bend College Policy CT (Legal) and CT (Local).

Questions regarding this information should be directed to the Director of Library Services at: library@coastalbend.edu or the Office of Marketing and Public Relations at: socialmedia@coastalbend.edu.

NOTE: The College website (http://coastalbend.edu) serves as the main source with the most current version of the Coastal Bend College Board Policies and the Coastal Bend College Catalog.

Student success is our number one priority at Coastal Bend College and we realize that prompt, effective communication (such as emails, assignment feedback, discussion boards and announcements) plays a significant role in achieving that goal. It is vitally important that you have the proper contact information for your instructor. This should include their phone number, email address, and if applicable, their office number, and office hours. **Faculty schedules can be located online at http://coastalbend.edu/hb2504/**

If you have any problems contacting your instructor, or do not receive a prompt response to your inquiries, please contact the Dean or Division Coordinator/Program Director as soon as possible. Their contact information is provided below:

Dean of Nursing and Allied Health: Loana Hernandez, RN 361-664-2981 ext. 3037 lhernandez@coastalbend.edu	Director of Radiography: Virginia Wall, BSRS, R.T.(R) 361-354-2501 vtwall@coastalbend.edu

We wish you all the best in your education and encourage you to contact us if you have any questions or concerns.

Keeping student success in sight, faculty in each of the courses will review the course information, including specific reading schedules, assignments, and testing information, with students during the first week of class.

Additionally, the course information will be posted to Blackboard.

This master syllabus is subject to change due to unforeseen circumstances.