

# RADT M14: RADIOGRAPHIC FILM CRITIQUE LAB

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**Originator**

rdarwin

**College**

Moorpark College

**Discipline (CB01A)**

RADT - Radiologic Technology

**Course Number (CB01B)**

M14

**Course Title (CB02)**

Radiographic Film Critique Lab

**Banner/Short Title**

Radiographic Film Critique Lab

**Credit Type**

Credit

**Start Term**

Spring 2021

**Catalog Course Description**

Provides radiographic film critique to integrate clinical practice and classroom education. Evaluates technical errors on radiographs and reviews strategies for avoiding future errors. Includes a review for licensure examinations.

**Taxonomy of Programs (TOP) Code (CB03)**

1225.00 - \*Radiologic Technology

**Course Credit Status (CB04)**

D (Credit - Degree Applicable)

**Course Transfer Status (CB05) (select one only)**

B (Transferable to CSU only)

**Course Basic Skills Status (CB08)**

N - The Course is Not a Basic Skills Course

**SAM Priority Code (CB09)**

C - Clearly Occupational

**Course Cooperative Work Experience Education Status (CB10)**

N - Is Not Part of a Cooperative Work Experience Education Program

**Course Classification Status (CB11)**

Y - Credit Course

**Educational Assistance Class Instruction (Approved Special Class) (CB13)**

N - The Course is Not an Approved Special Class

**Course Prior to Transfer Level (CB21)**

Y - Not Applicable

**Course Noncredit Category (CB22)**

Y - Credit Course

**Funding Agency Category (CB23)**

Y - Not Applicable (Funding Not Used)

**Course Program Status (CB24)**

1 - Program Applicable

**General Education Status (CB25)**

Y - Not Applicable

**Support Course Status (CB26)**

N - Course is not a support course

**Field trips**

Will not be required

**Grading method**

Letter Graded

**Does this course require an instructional materials fee?**

No

**Repeatable for Credit**

No

**Is this course part of a family?**

No

**Units and Hours**

**Carnegie Unit Override**

No

**In-Class**

**Lecture**

**Activity**

**Laboratory**

**Minimum Contact/In-Class Laboratory Hours**

52.5

**Maximum Contact/In-Class Laboratory Hours**

52.5

**Total in-Class**

**Total in-Class**

**Total Minimum Contact/In-Class Hours**

52.5

**Total Maximum Contact/In-Class Hours**

52.5

**Outside-of-Class**

**Internship/Cooperative Work Experience**

**Paid****Unpaid****Total Outside-of-Class****Total Outside-of-Class****Total Student Learning****Total Student Learning****Total Minimum Student Learning Hours**

52.5

**Total Maximum Student Learning Hours**

52.5

**Minimum Units (CB07)**

1

**Maximum Units (CB06)**

1

**Prerequisites**

RADT M03, RADT M03B and RADT M03L

**Corequisites**

RADT M04 and RADT M04L

**Limitations on Enrollment**

Criminal background clearance

Drug and alcohol clearance

Proof of freedom from and immunity to communicable diseases

No acrylic or long nails in clinical settings

Current negative TB test or chest x-ray

Others (specify)

Physical examination demonstrating general good health

No visible tattoos or visible body piercings except single studs in earlobes

**Other Limitations on Enrollment**

CPR BLS card from American Heart Association only.

Los Angeles City Hospital Fire and Life Safety card

Proof of health insurance

Proof of professional liability insurance

**Entrance Skills****Entrance Skills**

RADT M03, RADT M03B and RADT M03L

**Prerequisite Course Objectives**

RADT M03-Describe the components of the CT (computed tomography) imaging system

RADT M03-List the computer data processing steps

RADT M03-Name the common controls found on a CT operator console and describe the how and why each is used

RADT M03-Describe the principles of CT data acquisition

RADT M03-List and describe the steps in CT image reconstruction and display

RADT M03-Explain CT image post-processing and data management

RADT M03-Discuss image quality in reference to CT acquired images

RADT M03-Discuss general anatomical structures on CT and MR (magnetic resonance)images

RADT M03-Describe the relationship of each anatomical structure to surrounding structures on CT and MR images

RADT M03-Describe the function of each anatomical structure found on CT and MR images

RADT M03B-describe the various systemic classifications of disease in terms of etiology, types, common sites, complications and prognosis.

RADT M03B-define basic terms related to pathology.

RADT M03B-describe the basic manifestations of pathology conditions and their relevance to radiologic procedures.

RADT M03B-describe imaging procedures used in diagnosing disease.  
RADT M03B-describe the radiographic appearance of diseases.  
RADT M03B-identify imaging procedures and interventional techniques appropriate for diseases common to each body system.  
RADT M03B-identify and explain how to alter procedures and techniques to image specific pathologies.  
RADT M03L-execute medical imaging procedures under the appropriate level of supervision.  
RADT M03L-assess the patient and record clinical history.  
RADT M03L-select technical factors to produce quality diagnostic images with the lowest possible radiation exposure possible.  
RADT M03L-integrate the use of appropriate and effective written, oral and nonverbal communication with patients, the public, and members of the health care team in the clinical setting.  
RADT M03L-maintain patient confidentiality standards and meet Hospital Insurance Portability and Accountability Act(HIPAA)requirements.  
RADT M03L-provide patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture.  
RADT M03L-adapt procedures to meet age-specific, disease-specific and cultural needs of patients.  
RADT M03L-evaluate and critique radiographic procedures under the supervision of a licensed radiologic technologist.  
RADT M03L-critique images for appropriate anatomy, image quality, and patient identification with the clinical instructor.  
RADT M03L-demonstrate clerical duties needed to process the exam.  
RADT M03L-demonstrate competency in principles of radiation protection standards in accordance with California Radiation Health Code (Title 17).  
RADT M03L-produce a minimum of 12 radiographic competencies from the torso skeletal area, gastrointestinal system, genitourinary system, surgical procedures and computed tomography.

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## Requisite Justification

### Requisite Type

Corequisite

### Requisite

RADT M04

### Requisite Description

Course in a sequence

### Level of Scrutiny/Justification

Required by statute or regulation

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### Requisite Type

Corequisite

### Requisite

RADT M04AL

### Requisite Description

Course in a sequence

### Level of Scrutiny/Justification

Required by statute or regulation

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### Requisite Type

Enrollment Limitation

### Requisite

Admission to the Program  
Proof of Health Insurance  
Proof of Professional Liability Insurance  
Los Angeles City Hospital Fire and Life Safety Card  
CPR BLS Provider card from American Heart Association only.  
No visible tattoos or visible body piercings except single studs in earlobes.  
Physical examination demonstrating general good health.  
Current negative TB test or chest x-ray  
No acrylic or long nails in clinical settings  
Proof of freedom from and immunity to communicable diseases

Drug and alcohol clearance  
Criminal background clearance.

**Requisite Description**

Credit program requisite (credit only)

**Level of Scrutiny/Justification**

Required by statute or regulation

**Requisite Type**

Prerequisite

**Requisite**

RADT M03, RADT M03B and RADT M03L

**Requisite Description**

Course in a sequence

**Level of Scrutiny/Justification**

Required by statute or regulation

**Student Learning Outcomes (CSLOs)**

**Upon satisfactory completion of the course, students will be able to:**

- |   |  |
|---|--|
| 1 | prepare to sit for the American Registry of Radiologic Technologist (ARRT) exam. |
| 2 | prepare a resume and cover letter.   |

**Course Objectives**

**Upon satisfactory completion of the course, students will be able to:**

- |    |  |
|----|--|
| 1  | appraise technical and positioning errors on radiographs supplied.   |
| 2  | appraise artifacts on radiographs supplied.  |
| 3  | deliver oral and written presentations of various types of repeat errors on radiographs.   |
| 4  | identify methods for correcting technical, positioning, processing, motion and artifact errors.  |
| 5  | evaluate methods of reducing the number of repeat radiographs, thus reducing the radiation dose to the patient.                                  |
| 6  | deliver oral and written presentations of various examples of patient pathologies including patient history, etiology, diagnosis, and prognosis. |
| 7  | review anatomy and radiographic procedures in preparation for the American Registry of Radiologic Technologists (ARRT) exam.                     |
| 8  | participate in simulated ARRT exams, both written and computerized.  |
| 9  | prepare applications for the ARRT and State of California Licensure CRT (California Radiologic Technologist) for radiography and fluoroscopy.    |
| 10 | prepare a cover letter and resume.   |
| 11 | design, and create a professional leadership project that will enhance their knowledge as well as their team building abilities.                 |

**Course Content**

**Lecture/Course Content**

None

**Laboratory or Activity Content**

- 40% Review for California and National boards
- 20% Oral presentation of radiographic errors/pathology
- 5% Complete board applications
- 5% Complete and present a professional leadership project

- 10% Prepare cover letter and resume
- 20% Evaluate and critique radiographic images

## Methods of Evaluation

**Which of these methods will students use to demonstrate proficiency in the subject matter of this course? (Check all that apply):**

- Problem solving exercises
- Skills demonstrations
- Written expression

**Methods of Evaluation may include, but are not limited to, the following typical classroom assessment techniques/required assignments (check as many as are deemed appropriate):**

- Classroom Discussion
- Individual projects
- Projects
- Problem-solving exams
- Participation
- Reports/Papers/Journals

## Instructional Methodology

**Specify the methods of instruction that may be employed in this course**

- Audio-visual presentations
- Distance Education
- Instructor-guided use of technology
- Lecture

**Describe specific examples of the methods the instructor will use:**

- PowerPoint presentations and computer practice exams

## Representative Course Assignments

### Writing Assignments

- Write a summary and analysis of radiographic and pathologic errors.
- Write answers on the mock board exam and turn it in for a grade.
- Write a cover letter and resume.

### Critical Thinking Assignments

- Organize and design a professional leadership project for a class presentation.
- Complete all radiation dose calculations during the mock board review exam.
- Assess and critique radiographic images.

### Reading Assignments

- Read and study assignments from the Lange Radiography Prep and Examination books.
- Review the California Department of Health-Radiologic Health Branch Title 17 regulations.

### Skills Demonstrations

- Complete the online mock credentialing exam.
- Complete the credentialing examination review books.
- Review a supplied radiograph and verbally appraise it for artifacts.

## Outside Assignments

### Representative Outside Assignments

- Prepare a 45 minute oral class presentation to Level One students.
- Complete all questions in the Rad Review, a computer-based ARRT review.

## Articulation

### Equivalent Courses at 4 year institutions

| University       | Course ID | Course Title                             | Units |
|------------------|-----------|--|-------|
| Cabrillo College | RT 61L    | Radiographic Positioning Lab II          | 1     |
| Yuba College     | RADT 8    | Radiographic Pathology and Film Critique | 3     |

## District General Education

### A. Natural Sciences

### B. Social and Behavioral Sciences

### C. Humanities

### D. Language and Rationality

### E. Health and Physical Education/Kinesiology

### F. Ethnic Studies/Gender Studies

## CSU GE-Breadth

### Area A: English Language Communication and Critical Thinking

### Area B: Scientific Inquiry and Quantitative Reasoning

### Area C: Arts and Humanities

### Area D: Social Sciences

### Area E: Lifelong Learning and Self-Development

### Area F: Ethnic Studies

## CSU Graduation Requirement in U.S. History, Constitution and American Ideals:

## IGETC

### Area 1: English Communication

### Area 2A: Mathematical Concepts & Quantitative Reasoning

### Area 3: Arts and Humanities

### Area 4: Social and Behavioral Sciences

### Area 5: Physical and Biological Sciences

### Area 6: Languages Other than English (LOTE)

## Textbooks and Lab Manuals

### Resource Type

Textbook

### Description

Saia, D.A. *Radiography PREP Program Review and Exam Preparation*. 9th ed., McGraw-Hill /Education/Medical, 2018.

### Resource Type

Textbook

### Description

Saia, D.A. *Lange Q and A Radiography Examination*. 11th ed., McGraw-Hill Education/Medical, 2018.

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## Library Resources

### Assignments requiring library resources

Radiographic and medical journal reading assignments using the Library's print and online resources.

### Sufficient Library Resources exist

Yes

### Example of Assignments Requiring Library Resources

Conduct research, possibly using the Library's online databases, on professional leadership in radiologic technology to organize and design a professional leadership project for a class presentation.

## Distance Education Addendum

### Definitions

#### Distance Education Modalities

Hybrid (51%–99% online)

Hybrid (1%–50% online)

100% online

### Faculty Certifications

Faculty assigned to teach Hybrid or Fully Online sections of this course will receive training in how to satisfy the Federal and state regulations governing regular effective/substantive contact for distance education. The training will include common elements in the district-supported learning management system (LMS), online teaching methods, regular effective/substantive contact, and best practices.

Yes

Faculty assigned to teach Hybrid or Fully Online sections of this course will meet with the EAC Alternate Media Specialist to ensure that the course content meets the required Federal and state accessibility standards for access by students with disabilities. Common areas for discussion include accessibility of PDF files, images, captioning of videos, Power Point presentations, math and scientific notation, and ensuring the use of style mark-up in Word documents.

Yes



## Regular Effective/Substantive Contact

### Hybrid (1%–50% online) Modality:

| Method of Instruction                        | Document typical activities or assignments for each method of instruction   |
|--|---|
| Asynchronous Dialog (e.g., discussion board) | <p>The online instructor will provide lesson plans that require activities such as reading course material from a mandatory textbook. Additionally, the instructor may engage students using the following communication activities available in the online classroom: contact students via e-mail within the course shell, by campus e-mail, and/or MyVCCCD. Learning objectives; students may complete homework through the workbook system provided by a publishing company and use a "discussion" tool to post questions and interact with the instructor and classmates.</p> <p>Students may test their knowledge with interactive online quizzes provided by the publishing company.</p> <p>Students may engage in internet searches and library online database resources on topics corresponding to course content</p> <p>Students may submit questions to the instructor by email or ask in person in a virtual classroom; the instructor may create student groups or group activities using the online course.</p> <p>Quizzes may be issued (using a course-specific timeline) in which students will be tested on their knowledge of the material. Assignments may include exercises through which students explore course concepts using a textbook and/or additional research. Students can submit their assignments online and get feedback from the instructor and/or students as determined per assignment. This can be an interactive process in that students can receive feedback and then be able to improve their submittal if necessary.</p> |
| E-mail                                       | <p>Contact students via e-mail within the course shell, bu campus e-mail, and/or MyVCCCD.</p>   |
| Other DE (e.g., recorded lectures)           | <p>The online instructor will provide lesson plans that require activities such as reading course material from a mandatory textbook and participating in discussion forums or chat room topics. The "Announcement" tool will be used to remind students of important assignments and due dates. To provide students with an online schedule of class events the "calendar" tool will be used to schedule virtual classroom sessions in the online course shell.</p>  |
| Synchronous Dialog (e.g., online chat)       | <p>Meet with students for study sessions and online office hours using an online communication tool. Additionally, the instructor may engage students using the following communication activities available in the online classroom.</p> <p>Students may view publisher based PowerPoint slides and/or text-based lessons corresponding to course content and learning objectives. Students may complete homework through the online course, and/or using the workbook provided by the publishing company; students may test their knowledge with interactive online quizzes provided by the publishing company. Students may engage in internet searches and library online database resources on topics corresponding to course content and learning objectives.</p> <p>Quizzes/tests may be issued (using a course-specific timeline) in which students will be tested on their knowledge of the material. Assignments may include exercises through which students explore course concepts using a textbook and/or additional research. Students can submit their assignments online and get feedback from the instructor. Students may submit questions to the instructor by email or ask in person. The instructor may create student groups or group activities using the online course.</p>  |

|   |  |
|---|--|
| <p>Video Conferencing</p>   | <p>It will include lectures and study sessions. The instructor may involve students in active learning with the following activities:<br/>         Students may view instructor shared power points slides, video lessons and/or text-based lessons corresponding to course content and learning objectives. Students may complete homework through the online course. Students may use the workbook provided by the publishing company. Students may engage in internet searches and library online database resources on topics corresponding to course content. Students may test their knowledge with interactive online quizzes provided by the publishing company. Students may submit questions to the instructor via email or ask in person in a virtual classroom; the instructor may create student groups or group activities using the online course. Quizzes/tests may be issued (using a course-specific timeline) in which students will be tested on their knowledge of the material. Assignments may include exercises through which students explore course concepts using a textbook and/or additional research. Students can submit their assignments online and get feedback from the instructor. Students may submit questions to the instructor by email or ask in person and/or use "chat" to post a question(s). The instructor may create student groups or group activities using the online course.</p>  |
| <p><b>Hybrid (51%–99% online) Modality:</b><br/> <b>Method of Instruction</b></p> | <p><b>Document typical activities or assignments for each method of instruction</b></p>  |
| <p>Asynchronous Dialog (e.g., discussion board)</p>                               | <p>The online instructor will provide lesson plans that require activities such as reading course material from a mandatory textbook. Additionally, the instructor may engage students using the following communication activities available in the online classroom: contact students via e-mail within the course shell, by campus e-mail, and/or MyVCCCD. Learning objectives; students may complete homework through the workbook system provided by a publishing company and use a "discussion" tool to post questions and interact with the instructor and classmates. Students may test their knowledge with interactive online quizzes provided by the publishing company. Students may engage in internet searches and library online database resources on topics corresponding to course content. Students may submit questions to the instructor by email or ask in person in a virtual classroom; the instructor may create student groups or group activities using the online course. Quizzes may be issued (using a course-specific timeline) in which students will be tested on their knowledge of the material. Assignments may include exercises through which students explore course concepts using a textbook and/or additional research. Students can submit their assignments online and get feedback from the instructor and/or students as determined per assignment. This can be an interactive process in that students can receive feedback and then be able to improve their submittal if necessary.</p> |
| <p>E-mail</p>   | <p>Contact students via e-mail within the course shell, bu campus e-mail, and/or MyVCCCD.</p>  |
| <p>Other DE (e.g., recorded lectures)</p>   | <p>The online instructor will provide lesson plans that require activities such as reading course material from a mandatory textbook and participating in discussion forums or chat room topics. The "Announcement" tool will be used to remind students of important assignments and due dates. To provide students with an online schedule of class events the "calendar" tool will be used to schedule virtual classroom sessions in the online course shell.</p>   |

## Synchronous Dialog (e.g., online chat)

Meet with students for study sessions and online office hours using an online communication tool. Additionally, the instructor may engage students using the following communication activities available in the online classroom.

Students may view publisher based PowerPoint slides and/or text-based lessons corresponding to course content and learning objectives. Students may complete homework through the online course, and/or using the workbook provided by the publishing company; students may test their knowledge with interactive online quizzes provided by the publishing company. Students may engage in internet searches and library online database resources on topics corresponding to course content and learning objectives.

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## Telephone

It will include lectures and study sessions.

The instructor may involve students in active learning with the following activities:

Students may view instructor shared power points slides, video lessons and/or text-based lessons corresponding to course content and learning objectives. Students may complete homework through the online course. Students may use the workbook provided by the publishing company. Students may engage in internet searches and library online database resources on topics corresponding to course content. Students may test their knowledge with interactive online quizzes provided by the publishing company. Students may submit questions to the instructor via email or ask in person in a virtual classroom; the instructor may create student groups or group activities using the online course.

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**100% online Modality:**

| Method of Instruction                        | Document typical activities or assignments for each method of instruction  |
|--|--|
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**Examinations****Hybrid (1%–50% online) Modality**

Online

On campus

**Hybrid (51%–99% online) Modality**

Online

On campus

**Primary Minimum Qualification**

RADIOLOGIC TECHNOLOGY

**Review and Approval Dates****Department Chair**

04/29/2020

**Dean**

04/30/2020

**Technical Review**

04/30/2020

**Curriculum Committee**

05/05/2020

**DTRW-I**

10/08/2020

**Curriculum Committee**

09/15/2020

**Board**

11/10/2020

**CCCCO**

12/02/2020

**Control Number**

CCC000620293

**DOE/accreditation approval date**

MM/DD/YYYY