CAÑADA COLLEGE **RADIOLOGIC TECHNOLOGY PROGRAM COURSE SYLLABUS RADT 418 CLINICAL EDUCATION I - FALL 2012**

| INSTRUCTORS : | P.D. Jones |
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Letter Grade 4.5 units **GRADING METHOD:**

Wightman

PREREQUISITIES: Acceptance in the Radiologic Technology Program and concurrent enrollment in RADT 410, completion of RADT 400 and 408

COURSE STATUS: Non-transferable, but degree applicable

COURSE DESCRIPTION: This course is designed for the first semester radiologic technology student. It is the first segment of the first rotation. It consists of orientation to clerical procedures, image processing, darkroom procedures, patient transportation procedures, supplies and equipment procedures and radiographic room procedures. Students will observe and participate in radiographic positioning and other procedures appropriate to the student's current level of education.

COURSE CONTENT: The content of this course is dictated by the individual affiliated clinical education centers. Students are assigned to specific work areas in which a variety of radiographic procedures are performed. These may vary from center to center, but most centers provide comparable educational experiences for students. There may be variations due to a particular focus in the clinical education center.

*IN SOME FACILITIES, THE SCHEDULING OF FLUOROSCOPIC PROCEDURES HAS BEEN RESTRICTED TO SPECIFIC DAYS OF THE WEEK. THIS SITUATION MAY PRECLUDE ASSIGNED STUDENTS FROM PRACTICE IN THESE AREAS. IN SUCH CASES, STUDENTS WILL BE GIVEN THE OPPORTUNITY TO PRACTICE ROOM SET-UP AND PATIENT POSITIONING IN SUITABLY EQUIPPED ROOMS. ACTUAL PRACTICE IN THESE PROCEDURES WILL BE PROVIDED IN THE NEXT ROTATIONS.

STUDENT LEARNING OUTCOMES:

- ORIENTATION TO CLERICAL PROCEDURES The student will relate clerical A. procedures required to:
 - 1. Explain the image and examination filing and storage system used in the clinical facility
 - 2. Make new and succeeding volume film jackets
 - 3. Know where to find and file film jackets
 - 4. Process requisitions
 - 5. Process completed reports
 - 6. Describe the patient preparation for all contrast studies and special procedures
 - 7. Perform telephone procedures
 - 8. Locate and understand department procedure manuals
 - 9. Understand and utilize department paging system.
 - 10. Understand department emergency systems.

- B. IMAGE PROCESSING The student will demonstrate the ability to process images as described below:
 - 1. Describe and employ appropriate safe lighting in the darkroom
 - 2. Use appropriate equipment to place patient identification information on image prior to processing.
 - 3. Store film safely in films bins
 - 4. Load film into processor or reader correctly
 - 5. Load imaging receptor correctly with film or imaging plate.
 - 6. Clean inside and outside of imaging receptors and store properly.
 - 7. Identify procedures for cleaning processor and know who is responsible for processor maintenance
 - 8. Make film copies
 - 9. Demonstrate knowledge of quality control procedures for analog and digital imaging.
 - 10. Describe the process by which analysis of repeated films is performed
- C. SUPPLIES AND EQUIPMENT The student:
 - 1. Identify location and contents of main store room
 - 2. Describe equipment and supplies needed for radiographic and fluoroscopy room
 - 3. Restock items missing from radiographic and fluoroscopy rooms
 - 4. Explain the purposes for the "CRASH CART" and major items stored in it.
 - 5. Demonstrate operation of oxygen and suction equipment
- D. TRANSPORTATION The student will:
 - 1. Identify transportation needs from information on patient requisition
 - 2. Safely transport patients by wheelchair, gurney and bed.
 - 3. Maintain IV, oxygen, and drainage equipment during transport
 - 4. Understand special considerations for transporting patients who have undergone invasive procedures (i.e. catherizations, special procedures)
 - 5. Employ appropriate lifting and moving techniques to preserve the safety of patients and avoid injury to self and other assisting.
 - 6. Document transportation of patients for nursing personnel and radiology personnel
 - 7. Know which procedures require the patient's chart to accompany patient to the department
- E. GENERAL PATIENT CARE The student will:
 - 1. Provide for the comfort, safety, confidentiality and assure the dignity of all patients
 - 2. Properly identify the patient for the appropriate procedure
 - 3. Properly dress/gown patient for examination
 - 4. Perform vital signs and CPR as appropriate for health care professionals
 - 5. Care for IV lines and other tubes that are attached to the patient
- F. EQUIPMENT The student will:
 - 1. Demonstrate the ability to properly manipulate all radiographic and fluoroscopy equipment
 - 2. Demonstrate proper use of positioning aids, restraining devices and image receptor holders.
 - 3. Demonstrate the proper use of footboard, hand holders and shoulder harness.
 - 4. Demonstrate proper use of accessory equipment as appropriate to radiographic and fluoroscopy rooms:
 - a. Calipers
 - b. Lead markers
 - c. Lead strips
 - d. Electronic and manual locks and tube and table angulation devices

- G. RADIATION PROTECTION The student will:
 - 1. Utilize equipment provided by the department as appropriate to protect patients from unnecessary exposure to radiation
 - 2. Utilize appropriate radiation hygiene for protection of self and other health care workers
 - 3. Apply principles of ALARA
 - 4. Apply principles of the radiation control act, Title 17
- H. RADIOGRAPHIC POSITIONING The student will be able to place a patient in all positions required to perform routine radiographic procedures.
- I. RADIOGRAPHIC PROCEDURES The student will be able to prepare the radiographic room, prepare the contrast media and assist the technologist and/or the radiologist as required for the following examinations:
 - a. Fluoroscopic procedures*
 - b. Urinary examinations
 - c. Routine adult chest examinations
 - d. Routine abdomen examinations
 - e. Routine extremity examinations

REQUIRED: Clinical Education Manual RADT 418

Student Handbook

Introduction to Radiologic Sciences and Patient Care, 5th ed., Adler, a. & Carlton, R., Elservier

Merrill's Atlas of Radiographic Positioning and Procedures (3 volume set),

12th ed., Frank, D. et al. Elsevier Radiographic Image Analysis, 3rd ed., Martensen, K. M., Elsevier Radiographic Imaging/Physics texts used for Phys 405

diographic Imaging/Physics texts used for Phys²

Pocket notebook

Medical dictionary

Anatomy text

Physiology text

| GRADING POLICIES: | A - 92 to 100% | |
|-------------------|--------------------------------------------------|--|
| | B - 83 to 91% | |
| | C - 75 to 82% | |
| | D - 66 to 74% | |
| | F - 65% and below | |
| 40% | Clinical Education Midterm and Final Evaluations | |
| 60% | Completion of Clinical Education Manual: | |
| | 1. Radiographic Image Analysis (4) | |
| | • Hand <i>or</i> wrist (non-trauma) | |
| | • Foot or ankle (non-trauma) | |
| | • Abdomen, supine | |
| | • Chest, PA and Lateral | |
| | 2. Ancillary Competencies – 6-8 | |
| | 3. Clinical Competencies – 5 | |
| | 4. Weekly Rating Forms (one per week) – 14 | |
| | 5. Daily Task Inventory (updated daily) | |
| | 6. Clinical Coordinator Evaluation | |
| | | |

- 7. Clinical Coordinator Observation
- 8. Additional assignments as requested

ATTENDANCE REQUIREMENTS: Attendance requirements are in accordance with those specified in the Cañada College Catalog and California Law (Title 17, Health) and accreditation standards.

Cañada College, General Requirements: "When repeated absences place the probability of the student's success in doubt, the Professor may drop the student from the course.

Absence means nonattendance for whatever reason. It is the prerogative of the professor to determine when absences are excessive. A guideline used by many professors to determine when absences are considered excessive is when the student has been absent twice the number of clock hours that the class meets during a week, or a pro-rata value designed to relate to shorter than semester length courses or practicum intensive programs."

Although students <u>must make-up all hours missed in clinical education</u> and complete a "Change in Assignment" form, attendance will affect the final grade as follows:

| 0 - 3 Absences | No effect on grade |
|-----------------------|------------------------------------------|
| 4 - Absences | 5% Grade drop (1 letter grade) |
| 5 - Absences | Additional 3% drop in final grade |
| 6 - Absences | Additional 3% drop in final grade |
| 7 - Absences | Additional 3% drop in final grade |
| 8 - Absences | Additional 3% drop in final grade |
| 9 - Absences | FAIL COURSE |

See detailed attendance regulations in the college catalog and in the clinical education handbook (D. Attendance).

ACADEMIC INTEGRITY: Students attending colleges in the San Mateo Community College District are expected to conduct themselves in a manner compatible with the District and College function as an education institution s outlined in the Canada College Catalog and in the Student Handbook. Three forms of academic dishonesty of which you should be aware of and which will not be tolerated in this class are:

- 1. PLAGIARISM: Plagiarism consists of using another author's words or ideas without proper documentation of that author. Plagiarism takes the form of direct quotation without the use of quotation marks or other documentation, paraphrasing without proper identification or documentation. The fabrication of sources, or the art, deliberately or unintentionally, of passing another's work off as your own are also considered plagiarism.
- 2. FALSIFICATION: Falsification consists of deliberately changing results, statistics, or any other kind of factual information to make it suit your needs. It also consists of deliberately changing a source's intent by misquoting it or using it out of context.
- 3. MULTIPLE SUBMISSIONS: If you wish to turn in the same work or use the same research, in whole or part, for more than one course, you must obtain permission to do so from all instructors involved.

SMCCD policy states that violators of these regulations will be subject to disciplinary action, including possible cancellation of registration, and may be denied future admission to the Colleges of the San Mateo County Community College District. In this class, the first offense will result in an "F" for the assignment in which dishonesty occurred. If it happens twice, you will be withdrawn from the course and your action will be reported to the Vice President of Student Services.

Violations of academic integrity policies will be reported to appropriate accreditation committees and certification and licensing boards.