

CASPER COLLEGE COURSE SYLLABUS

**RDTK 1680**

**Radiographic Positioning II**

**Semester/Year:** Fall 2015

**Lecture Hours:** 1.5 (1.5 CR)

**Lab Hours:** 1.5 (.5 CR)

**Credit Hours:** 2

**Class Time:** 12:30-1:45

**Days:** Monday & Tuesday

**Room:** HS 124/118

**Instructor's Name:** Fred Kuck B.S., R.T. (R) (ARRT)

**Instructor's Contact**

**Information:** Please leave message with date, time, and return contact information.

**Office Phone:** 268-2239

**Email:**

fredk@caspercollege.edu

**Office Hours:** HS 119 Monday/Tuesday 9:30-11:30

**Course Description:** Positioning skills and anatomy of the lower extremity, myelography, spine radiography, and arthrography. Mobile and surgical radiographic procedures will be demonstrated when applicable.

**Statement of Prerequisites:** RDTK 1580

**Goal:** Upon satisfactory completion of this course the student will have the knowledge and technical skills to competently and safely perform, at an entry level, medically diagnostic imaging related to the anatomy studied in this course. The student will also be able to demonstrate this knowledge by answering correctly any questions related to this material that may be asked on the ARRT Registry test for radiographers.

**Outcomes:**

1. Demonstrate effective oral and written communication
2. Use the scientific method
3. Solve problems using critical thinking and creativity
4. Use appropriate technology and information to conduct research
5. Describe the value of personal, civic, and social responsibilities

**Course Objectives:**

Procedure Comprehension

The student will:

1. Describe the anatomy visualized and identify anatomic parts on radiographs.
2. Describe the positions used, in terms of direction of the central ray, and part placement.
3. Name the size of film ordinarily used.
4. Name the contrast media, if any used.
5. Describe the preparation of the patient.
6. Identify radiographs of the basic positions.
7. Explain variations in tube/IR placement required to compensate for patient's inability to be moved.
8. Explain variations in technique required for various patient types.
9. Explain variations in technique required to avoid motion in uncooperative patients.

10. Describe characteristics of contrast media including, chemical make-up, identification system, water soluble vs. oil based media, ionic vs. non-ionic, concentration, uses, and double contrast technique.
11. Describe how to recognize various contrast media reactions and what actions must be taken by the radiographer to assist the physician, code team and patient in such a situation.
12. Demonstrate proper communication skills needed to successfully perform each procedure.
13. Understand the importance of radiation protection practices and how to utilize them for each procedure.
14. Gain a basic understanding of the use of computed and digital radiography.

### Procedure Practice

The student will, in a laboratory situation and given a phantom:

1. Correctly position the phantom, stabilizing or immobilizing as needed.
2. Select the correct film size.
3. Align the x-ray tube to part and film.
4. Adjust the cone or collimator to appropriate field size.
5. Demonstrate the application of necessary protective shielding.
6. Measure the part.
7. Select the appropriate technical factors for patient and film-screen combination.
8. Expose the film.
9. Evaluate film for accuracy of positioning.
10. Demonstrate effective problem solving and critical thinking skills.
11. Utilize proper radiation protection practices for the procedure.
12. Adjusting images obtained on CR/digital equipment and recognizing the use of acceptable technical factors for an optimal diagnostic image using these systems.

**Methodology:** Lecture, lab, demonstration, question/answer, collaborative critical thinking exercise, and assigned film critique packets. Your feedback is valuable as the instructor uses course evaluations in determining course methodology.

**Evaluation Criteria:** Grading Scale:

A	=	92 – 100%	(1052 – 1150 points)
B	=	83 - 91%	(949 – 1051 points)
C	=	75 - 82%	(856 – 948 points)
F	=	0 - 74%	(855 or less)

Grade Components:

Tests: 7 x 100 each	=	700 points
Final	=	200 points
Simulation Learning Unit	=	100 points
 Arthrogram Overview	=	 50 points
 Team Problem Solving Scenario	=	 <u>100 points</u>
 Total Points Possible:		 1150 points

**Casper College may collect samples of student work demonstrating achievement of the above outcomes. Any personally identifying information will be removed from student work.**

**Required Text, Readings, and Materials:**

Bontrager, K. & Lampignano, J. (2010). *Textbook of Radiographic Positioning and Related Anatomy (7<sup>th</sup> ed.)*(e-book edition). St. Louis. Mosby Elsevier.

**Class Policies:**

1. All Absences must be excused. (See Program Policies and Guidelines).
2. All assignments are due at the beginning of class. Late assignments will receive half credit if one day late, and will not be accepted after that time.
3. Appointments to discuss any material outside of class are encouraged.
4. With previous arrangements one test per semester may be made up. The makeup test must be taken during the same week that the test was given.
5. An open lab will be available to students wishing to gain extra help and practice. Times will be announced.

**Last Date to Change to Audit Status or to Withdraw with a W Grade:**

Last day to withdraw is November 13th.

**Note: You cannot withdraw from this course without withdrawing from the program.**

**Student Rights and Responsibilities:** Please refer to the Casper College Student Conduct and Judicial Code for information concerning your rights and responsibilities as a Casper College Student.

**Chain of Command:** If you have any problems with this class, you should first contact the instructor to attempt to solve the problem. If you are not satisfied with the solution offered by the instructor, you should then take the matter through the appropriate chain of command starting with the Department Head/Program Director, the Dean, and lastly the Interim Vice President for Academic Affairs.

**Academic Dishonesty:** (Cheating & Plagiarism) Casper College demands intellectual honesty. Proven plagiarism or any form of dishonesty associated with the academic process can result in the offender failing the course in which the offense was committed or expulsion from school. See the Casper College Student Code of Conduct for more information on this topic.

**Official Means of Communication:** Casper College faculty and staff will employ the student's assigned Casper College email account as a primary method of communication. Students are responsible to check their account regularly. This is also, where you will find course evaluation links during course evaluation periods.

**ADA Accommodations Policy:** If you need academic accommodations because of a disability, please inform me as soon as possible. See me privately after class, or during my office hours. To request academic accommodations, students must first consult with the college's Disability Services Counselor located in the Gateway Building, Room 344, (307) 268-2557, [bheuer@caspercollege.edu](mailto:bheuer@caspercollege.edu). The Disability Services Counselor is responsible for reviewing documentation provided by students requesting accommodations, determining eligibility for accommodations, and helping students request and use appropriate accommodations.

**Calendar or schedule indicating course content:**

<b>Aug. 24</b>	Course Introduction/Review
<b>25</b>	Chapter 4- Humerus and Shoulder
<b>Aug. 31</b>	Humerus and Shoulder cont'd
<b>Sept. 1</b>	Humerus and Shoulder cont'd
<b>Sept. 7</b>	<b>NO CLASS / Labor Day</b>
<b>8</b>	<b>Test 1: Humerus and Shoulder Girdle</b>
<b>14</b>	<b>Arthrogram Overview assignment / teams formed</b> Lecture/Lab Clavicle, Scapula, AC Joints
<b>15</b>	Clavicle, Scapula, AC Joints cont'd
<b>21</b>	<b>Test 2: Clavicle, scapula, AC Joints</b>
<b>22</b>	Chapter 6-Toe/foot/calcaneus
<b>28</b>	Toe/foot/calcaneus cont'd.
<b>29</b>	<b>Test 3 - Ch. 6 – Toe/Foot/Calcaneus</b>
<b>Oct. 5</b>	<b>Arthrogram Overview presentations.</b> Lecture Ch. 6- Ankle/leg/knee
<b>6</b>	Ch. 6- Ankle/leg/knee
<b>12</b>	Ankle/leg/knee cont'd.
<b>13</b>	LAB/HSSC
<b>Oct. 19-20</b>	<b>Fall Break: No Class</b>
<b>26</b>	<b>Test 4 - Ch. 6 Ankle/leg/knee</b>
<b>27</b>	Lecture-Ch. 7- Femur/Pelvis/Hip/SI Joints
<b>Nov. 2</b>	Femur/Pelvis/Hip/SI Joints cont'd
<b>3</b>	Femur/Pelvis/Hip/SI Joints cont'd
<b>9</b>	<b>Test 5 – Ch. 7 Femur/Pelvis/Hip/SI Joints</b>
<b>10</b>	Lecture – Ch. 8 – Cervical/Thoracic Spine <b>(Teams may schedule collaborative problem solving assignment for lab)</b>
<b>16</b>	Cervical/Thoracic Spine cont'd.
<b>17</b>	Lab - Cervical/Thoracic Spine
<b>23</b>	<b>Test 6-Ch. 8 Cervical/Thoracic Spine</b>
<b>24</b>	Lecture – Ch. 9 – Lumbar/Scoliosis/Sacrum-Coccyx
<b>30</b>	Lumbar/Scoliosis/Sacrum-Coccyx cont'd.
<b>Dec. 1</b>	Lab Lumbar/Scoliosis/Sacrum-Coccyx
<b>2</b>	Lecture – Myelography
<b>7</b>	<b>Test 7- Ch. 9 and Myelography</b>
<b>8</b>	<b>Collaborative Presentations</b> (at assigned time)
<b>14-17</b>	<b>Comprehensive Final exam week of December 9-12: TBA</b>

Schedule subject to change with notification from instructor.