Hazard Community and Technical College  
Southeast Kentucky Community and Technical College  

Regional Radiography Program  

Course Syllabus  

COURSE NUMBER AND SECTION: COURSE NAME  
IMG 201 Merged 45C1/C8C1: Clinical III  
Summer 2019, In person, MTWR, 8:00-4:30  

Instructor Contact Information  

Instructor Name/Title: Homer Terry, M.S., RT(R)(M)(QM)  
Program Coordinator  
Office Hours: As posted on door schedule  
Office Location: Bailey-Stumbo Building  
A233, Hazard campus  
Phone Number: 606-487-3389  
Email Address: Homer.Terry@kctcs.edu  

Instructor Name/Title: Astor Halcomb Jr., M.S., RT(R)(CT)  
Clinical Coordinator  
Office Hours: As posted on door schedule  
Office Location: Belinda-Mason Building  
235, Whitesburg Campus  
Phone Number: 606-589-3310  
Email Address: Astor.Halcomb@kctcs.edu  

Course Information  

Course Description  
Continues IMG 111 by focusing on the application and evaluation of radiography in the clinical setting. Integrates concepts and the knowledge of anatomy, pathology, procedures, patient care, and imaging principles. Emphasizes on radiographic mobile studies and image analysis. Develops technical skills and procedural knowledge through observation and participation in radiographic studies with opportunities for more responsibility and independence with previously learned procedures.  

Components: Clinical: 3 credits (180 contact hours)  

Pre-requisite: IMG 111 with a grade of C or greater.  

Start Date: 6/17/19  
Midterm: 7/09/19  
End Date: 7/28/19
Textbook Information and Supplies


4. Radiography Faculty. (Revised 2018). *Regional Radiography Program Student Handbook*

Course Competencies/Student Learning Outcomes

*Upon completion of this course, the student can:*

1. Demonstrate patient care, procedural and technical skills in the performance of radiographic procedures.
2. Demonstrate progression in the performance of clinical skills.
3. Critique image analysis.

Course Structure, Evaluation, and Grading Methods

1. A minimum of six (6) progress evaluations must be successfully completed in order to receive a minimum credit.

2. Category Evaluation should be completed on Category I, II, III, and IV.

3. The clinical grade is determined by an average of the following:

   a. number of progress evaluations
      
   b. average score of progress evaluations
      
   c. number of affective evaluations
      
   d. average score of affective evaluations
      
   e. average score of semester performance evaluations
      
   f. film critique

   *Image critique* will be on July 11th and July 25th and will require a joint meeting of the entire class.

4. Clinical affective evaluations must be turned in every two weeks, excluding the first week. Multiple affective evaluations for the same 2-week period will be averaged together and counted as one. (Turn in on 7/11/19 and 7/25/19)
5. Affective evaluations will not be accepted past their due date. Late affective evaluations may result in a grade of “0” for that 2 week period. Exceptions for emergencies and extended illness will be handled on an individual basis.

6. All clinical evaluations are available for the student’s review in the appropriate faculty member’s office.

A letter grade of “C” or better is required in IMG 201 for continuance in the radiography program.

*Any student with perfect attendance will receive an additional 2 points on final course grade (must pass the course to receive these points).

Grading Policy/Scale

<table>
<thead>
<tr>
<th>Score</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-92</td>
<td>A</td>
</tr>
<tr>
<td>91-84</td>
<td>B</td>
</tr>
<tr>
<td>83-78</td>
<td>C</td>
</tr>
<tr>
<td>77-0</td>
<td>E</td>
</tr>
</tbody>
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Class Policies/Procedures

Inclement Weather Class Policy/Procedure
During periods of inclement weather, all courses scheduled BEFORE 11:00 a.m., will be cancelled. Learners will be asked to report at 11:00 for their 11:00 courses.

Students are encouraged to listen to local media broadcasts regarding closing or delays at their particular college. Students are to adhere to these announcements concerning late or closed classes.

General Class Make-up/Late Assignment Class Policy/Procedure (including weather related make-up plan)
Considering the severity of some inclement weather and winter and road conditions in Eastern Kentucky any student missing his/her clinical because of obvious inclement weather will not be considered an incident of absence and therefore will not be reprimanded, although this policy is not to be abused. Any suspected abuse of this policy will be addressed by the Program Coordinator.

If a student is absent from clinical due to inclement weather he/she must follow the attendance procedure.
All clinical time must be completed before the end of the semester term. Make up hours must be approved by HCTC/SKCTC faculty and that student’s clinical instructor. Any clinical time missed (excused or unexcused) must be made up to the satisfaction of the Clinical Instructor and Radiography Faculty within 30 days. A clinical time change form with the appropriate signatures must be submitted within 10 days of the absence. Failure to follow this policy will result in a one letter grade reduction. Continued failure to comply will result in further reduction of grade by 5 additional points and a mandatory meeting with program faculty. Persistent failure to follow this policy will result in dismissal from the program.

Attendance Class Policy/Procedure
A significant portion of the educational process in radiography is the development of a strong sense of responsibility on the part of each student to the patient, fellow radiographer, the department, hospital, and faculty. One of the primary manifestations of this responsibility is regular, punctual attendance in clinical and didactic areas. Since it is recognized that absence is occasionally unavoidable, the following policy has been established:

Absences must be reported to the appropriate program faculty (HCTC) at 487-3389 or (SKCTC) at 589-3310 no later than 8:30 a.m. for clinical and didactic assignments. The clinical instructor or chief technologist must also be notified of clinical absence. Notification by voice mail is unacceptable. Failure to notify faculty will result in an additional incident of absence.

Any didactic work missed must be made up to the satisfaction of the instructor involved. One day or consecutive days of excused absence, regardless of length, are considered one incident of absence. Radiography Faculty must be notified in advance of consecutive days. Tardiness in the clinical, didactic, or lab is considered an incident of absence and is unacceptable. Leaving early from class, clinical or lab will also count as an incident of absence.

Progressive corrective action occurs as follows, when a student accumulates a number of incidents that reflect an unacceptable pattern:

- **one** incident of absence/semester = loss of perfect attendance award of 2 points
- **two** incidents of absence/semester = verbal reprimand, overall grade reduction of 2 points, students must submit a typed 5 page formal paper using APA format. Topic will be based on appropriate lecture material as determined by faculty.
- **three** incidents of absence/semester = written reprimand, an additional 4 point overall grade reduction, and the student must submit a typed 8 page formal paper using APA format. Topic will be based on appropriate lecture material as determined by faculty.
- **four** incidents of absence/semester = written reprimand, and additional course grade reduction of 1 letter grade. Student must submit a typed 12 page formal paper using APA format. Topic will be based on appropriate lecture material as determined by faculty.
- **five** incidents of absence/semester = dismissal from program

*All papers are due in appropriate faculty office no later than 10 days from the first day of incident of absence.*
*Any submitted paper must be completed at a satisfactory level as evaluated by faculty or an additional 4 points reduction will be assigned.
*Any student with perfect attendance will receive an additional 2 points on their final course grade (student must first pass the course to receive these points).

The PROGRAM COORDINATOR has the authority to take corrective action by waiving the above actions if the unacceptable pattern is consistent in nature from one semester to the next.

Excused absence consist of documentation of; bereavement (immediate family only), jury duty, military duty, medical emergencies and extended illness.
Excessive absenteeism and/or tardiness will lead to dismissal from the program.

Withdrawal Class Policy/Procedure
A student may officially withdraw from any class up to and including the date of mid-term with a W grade assigned to the student’s record.
A student may withdraw at any time after midterm and prior to final exam week and receive a grade of W, if the student has made a legitimate effort to complete the required assignments. This policy will not apply to any student guilty of any form of academic dishonesty. The last day to withdraw 7/28/19.

Accommodations Procedure
Learners needing specific accommodations should contact the local disabilities service representative to complete an Accommodations Plan which will ensure that the Learner receive full benefits and that the instructor is aware and can make the proper adjustments in his/her courses.
The HCTC Disabilities Services Representative is Julie Caudill, phone (606)-487-3486, email jcaudill0129@kctcs.edu
The SKCTC representative is Ron Brunty, phone (606)-589-3320, email Ron.Brunty@kctcs.edu

Academic Honesty
KCTCS faculty and students are bound by principles of truth and honesty that are recognized as fundamental for a community of teachers and scholars. The college expects students and faculty to honor, and faculty to enforce, these academic principles. The college affirms that it will not tolerate academic dishonesty including, but not limited to, violation of the academic rights of students (section 2.0) and student offenses (section 3.0).
Any violation may result in dismissal from the program

Appeals Process
Always begin the informal process by talking to your instructor. If issues cannot be resolved, then talk with the Division Chair (see below for contact information). For information about academic rights, academic offenses and the Learner’s formal right to appeal, Learners should review the KCTCS Code of Student Conduct found on-line http://kctcs.edu/Current_Students/Code_of_Student_Conduct
*You will need Adobe Reader to open the link and you may need to copy and paste the link to your web browser.
Division Chair/Academic Dean Contact Information:

Supervisor/Academic Dean: Paul Currie  
HCTC  
Phone Number: 606-487-3246  
Email Address: Paul.Currie@kctcs.edu

Campus/Office Location/Number: Hazard, Bailey-Stumbo

Supervisor/Division Chair: Mike Good  
SKCTC  
Phone Number: 606-248-2122  
Email Address: Mike.Good@kctcs.edu

Campus/Office Location/Number: Whitesburg, Belinda-Mason, 103

General Requirements: It is the student’s responsibility to follow all Radiography policies and regulations, all clinical department policies and procedures, the Radiography program dress code, and the IMG 201 syllabus. Any deviations from these policies, regulations, or procedures will result in a conference with the Program Coordinator and may lead to dismissal from the program.

Cell Phone Use: Cell phones and pagers are prohibited in the classroom and clinical sites. It should never be on the desk or visible to anyone in the classroom. A student answering a cell phone during class will be required to leave class and meet with the instructor prior to attending class again.

Approved Course Outline:

Orientation to Clinical Setting
A. Clinical requirements to include:  
B. Role of the radiographer  
C. Equipment operations  
D. Adopt to varying clinical situations  
E. Emergency response  
F. Continuous Quality Management

II. Procedural Performance
A. Scheduling and sequencing of exams  
B. Order/requisition evaluation and corrective measures  
C. Facilities standards  
D. Patient assessment, clinical history, education and care  
E. Imaging

III. Clinical Competency
A. Upper and lower extremities  
B. Bony and visceral thorax  
C. Abdomen  
D. Vertebral column
E. Contrast media studies  
F. Skulls  
G. Pediatric examinations  
H. Mobile procedures  
I. Surgical examinations  

IV. Image Analysis  
A. Evaluation Criteria  
B. Radiographic Critique  

Experiments/Activities:  

1. Clinical activities that include radiographic exposures of patients and patient care under direct/indirect supervision. Including Radiographic Exams including:  
   
   A. Demonstrate patient care, procedural and technical skills in the performance of radiographic procedures  
   B. Radiographic competencies evaluations for:  
      b. Contrast Studies - Esophagus, Upper GI, Small Bowel, Barium Enema, Gallbladder, IVP, Surgical Procedures  
      c. Cranium - Skull, Facial Bones, Paranasal Sinuses, Optic Foramen, Temporomandibular Joints, Mandible, Nasal, Zygomatic Arches, Sella Turcica  
   2. Equipment checkoff  
   3. Surgical checkoff  
   4. Critique Image Analysis.  
   5. Accessory Equipment  
   6. Factors affecting image quality  
   7. Manipulation of factors affecting image quality  
   8. Image acquisition  
      A. Digital, and/or computed radiography  
      B. Evaluate images created using digital, and/or computed radiography  

CLINICAL ROTATIONS  

1. Attendance and participation is mandatory. Dosimeters must be worn during all clinical activities. Failure to comply may lead to dismissal from the program.  

2. All students are required to keep tally sheets of exams and procedures completed on patients. Current and accurate tally sheets/current and complete procedure log sheets/current and accurate time sheets must be presented to faculty upon clinical visitation. Final tally sheet must be completed and turned into the Clinical Coordinator by the last day of class. Failure to follow this policy will result in a one letter grade reduction. Continued failure to comply (within 10 days) will result in further reduction of grade by 5
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additional points and a mandatory meeting with program faculty. Persistent failure to follow this policy will result in dismissal from the program.

3. Failure to obtain a final clinical grade of “C” or better will result in failure of IMG 201 and dismissal from the program.

4. Proper radiation protection and collimation is vital and mandatory for all HCTC/SKCTC Radiography Students. Basic radiation protection and collimation must be employed at all times. Students who obviously and/or consistently ignore the above will be asked to do the following:

A. Correct these deficiencies immediately.

B. Upon failure to correct these deficiencies the student will be requested by the Clinical Coordinator or designated faculty to complete a research paper, 2-4 pages in length, labeled – “The Importance of Proper Collimation and Radiation Protection”. This paper will be due no later than 10 days following the Clinical Coordinator’s request.

C. Continued failure to collimate and utilize proper radiation protection will result in that student presenting to the radiography class a 15 minute lecture entitled “The Harmful and Biological Effects Associated with Inadequate Radiation Protection”. This lecture will be required within 10 days.

D. Continued failure to utilize proper collimation and radiation protection could lead to dismissal from the program.

E. Used dosimeters are due at the 1st of each month. Failure to comply (within 10 days) will result in a reduction of grade by 5 points and a mandatory meeting with program faculty. Persistent failure to follow this policy will result in dismissal from the program.

F. See the Regional Radiography Program Handbook (pg. 10) for details concerning ionizing radiation and dosimeters.

5. It is the student’s responsibility to remain competent in all skills areas that have been covered in class and lab. If it becomes obvious to the clinical instructor or the radiography faculty that a student needs additional help in a particular area, the following will occur:

A. The student will be contacted and asked to seek additional help from the radiography faculty in the particular area.

B. At the convenience of the radiography faculty additional skills practice will be employed as soon as possible.
C. Film critique will also be handled in the same manner as positioning skills.

D. If the radiography faculty determines that the student has a clinical weakness, the student may be assigned a written assignment due within ten days.

6. It is the student’s responsibility to follow and abide by the policies and procedures of the assigned clinical site. – Students may be required by health care facilities to have criminal background checks and/or drug screening done in order to enter the health care facilities for clinical. Students are responsible for any cost. Based on the results, the facility has the right to deny students admission to the site for clinical. This may jeopardize your academic success because you may not be able to complete the required clinical experience of the program. These are required to be completed by the designated date prior to the start of clinical. If these are not completed as required by the clinical facility then a student will not be allowed to attend clinical and will earn an un-excused absence for each clinical day missed until these are completed.

7. Current liability insurance, current immunizations, and current CPR certification are required prior to the start date of the clinical rotation and must be maintained throughout the program.

Additional Syllabus Information on the HCTC Website:
http://hazard.kctcs.edu/Academics/Syllabus_Information.aspx
(From HCTC Website Click Academics > Syllabus Information)

OUTLINE FOR IMAGE CRITIQUE

Image Critique: Two verbal presentations are required on image critique using the following outline.

Outline with Objectives

I. Patient’s Clinical Data

   A. Profile
      The student will:
      1. On a radiograph, identify the patient as to an approximate age or category and sex.
      2. Classify the patient as to body habitus.

   B. Reasons for Radiographic Examination (Pathology)
      The student will:
      1. Explain the patient’s disease process which led to the necessity of the radiographic exam.
      2. Describe the patient’s physical appearance or handicaps which have resulted from the disease process.
C. Condition During Radiographic Examination (Cooperative Vs. Uncooperative)
The student will:
1. Describe the degree of difficulty, if any, experienced while performing the exam.
2. Describe the procedure implemented in obtaining the necessary views if difficulty was encountered.

II. Anatomy

A. Radiographic Anatomy
The student will:
1. Identify the gross anatomy demonstrated.
2. Outline all radiographic anatomy on the radiograph presented.

B. Anatomical Anomalies
The student will:
1. Identify any anatomical anomalies that appear on the radiograph.
2. List the pathologic processes that appear on the radiograph.

III. Positioning

A. Basic
The student will:
1. Outline the routine views for the part being examined.
2. List the basic positioning procedure for each radiograph being presented.
3. Identify the positioning landmarks used for centering the parts to the film.
4. Identify checkpoints used to verify correct positioning.
5. Outline any strategy to improve the positioning or centering on the radiographs.

B. Involving other body types (asthenic, hyposthenic, hypersthenic or brachycephalic and dolichocephalic)
The student will:
1. List any variations or compensations which must be made for any of the above.

C. Devices
The student will:
1. Discuss any positioning devices used to obtain the radiograph.
2. Discuss the types of immobilization devices which would assist positioning for this exam.

Technique

A. Factors

1. Conventional
The student will:
   a. State the exposure factors used to obtain selected radiographs.
   b. Was the mA/time combination adequate for this procedure?
   c. Explain how the exposure factors utilized were arrived at, based on several of the following:
      1) Age
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2) Disease Process - Additive or Subtractive
3) Contrast Media
4) Casts
5) Prothesis
d. Describe any variations from the norm as they relate to kVp, mAs or FFD.

2. Automatic Exposure Control (AEC)
The student will:
a. State the exposure factors used to obtain the radiograph including field settings, ionization chambers and density settings.
b. Relate the importance of positioning to ionization chambers.

3. Digital Imaging
a. Brightness.
b. Windowing.
c. Post processing enhancement.

B. Source Image Distance (SID)
The student will:
1. Discuss the SID used and/or the variations.
2. State the advantages of using variable distances for specific parts of the body.

Radiation Protection and image Identification.

A. Collimation and IR Size
1. Identify the radiograph which has sufficient coning.
2. State how a decrease in field size affects the image and technique.
3. Discuss the size of film used as it relates to the part being radiographed.

B. Shielding
The student will:
1. Identify if gonadal shielding was used correctly.
2. Outline the importance of proper shielding.

C. Image Identification
The student will:
1. Discuss the importance of proper ID of the radiograph.
2. Explain the importance of choosing the proper location for placement of lead markers on the film.
3. Identify which images are correctly marked.

Radiographic Quality
A. Density/brightness
The student will:
1. State the controlling factors affecting density.
2. Specify which influencing factor had the greatest effect upon density.
3. Determine if density is adequate on the films.
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B. Contrast
The student will:
1. State the controlling factors affecting contrast.
2. Determine if scale of contrast is adequate on the film.
3. Distinguish between the effect caused by the controlling factor and influencing factors of contrast.

C. Detail
The student will:
1. State the influencing factors affecting detail.
2. Identify the geometric factor which affect unsharpness.
3. Determine if detail is adequate on the films.

D. Distortion (size and shape)
The student will:
1. State the influencing factors effecting distortion.
2. Identify which of the influencing factors have the most effect on the appearance of the radiograph being presented.
3. Determine if distortion is minimized on the films.

E. Fog
The student will:
1. State the major cause of fog.
2. Identify excessive fog on film.
3. State the preventive measure used to reduce the production of scattered radiation.

F. Grids
The student will:
1. State the type and grid ratio used for the examination of the film being presented.
2. State the correction factors used when doing from grid to screen technique.
3. Describe how to prevent grid cut off.

G. Screens and Films/Image Receptor
The student will:
1. What is the speed of the Image receptor or film/screen combination?
2. Describe why this system was used and its effectiveness is obtaining a desired radiographic quality.

H. Artifacts
The student will:
1. Identify any artifacts seen on the radiograph being presented.
2. Classify the artifact(s) seen on the radiograph.
3. Specify causes of particular artifacts.
4. State corrective procedures that will eliminate such artifacts.

I. Be prepared to discuss and answer questions presented by the class and instructors.
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Starfish
_We Care About Your Success! Southeast Kentucky Community and Technical College utilizes the Starfish Student Success Network._ It is designed to promote student success through coordination and communication between students, instructors, and support staff. Throughout the term, you may receive e-mails (from your instructor) regarding your attendance, course grades or academic performance. It is to your benefit to check your KCTCS email regularly and take the recommended actions. You may also be contacted directly by a flag manager.

SKCTC

Photo Identification badges are required to be displayed by students, faculty and staff while on Southeast properties. ID badges can be made in the library if you do not have a current one. You must present your driver’s license or other form of ID, along with your student ID number to have your identification badge made. It is mandatory that you display your ID at all times while on campus.

Non-discrimination Statement
The Kentucky Community and Technical College System is an equal educational and employment opportunity institution and does not discriminate on the basis of; race, religion, color, sex, gender identity, gender presentation, national origin, age, disability, family medical history, or genetic information. Further, we vigilantly prevent discrimination based on sexual orientation, parental status, marital status, political affiliation, military service, or any other non-merit based factor.
Statement of Understanding:

I understand the information regarding a patient or former patient is confidential and is to be used only for clinical purposes within an educational setting.

Clinical Supervision:

Radiography students are directly supervised for their clinical education until they have proven competency in radiographic procedures and then function under indirect supervision for those exams in which they have proven competency.

Indirect supervision is defined as "that supervision provided by a qualified radiographer immediately available to assist student regardless of the level of student achievement.

"Immediately Available" is interpreted as the presence of a qualified radiographer adjacent to the room or location where a radiographic procedure is being performed. This applies to all areas where ionizing radiation equipment is in use.

REGARDLESS OF STUDENT STATUS, REPEAT RADIOGRAPHIC EXAMINATIONS WILL BE PERFORMED WHILE A REGISTERED RADIOGRAPHER IS PRESENT.

I ___________________________________________ have read and understand the IMG 201 Syllabus

__________________________________________

Student Signature