North Central State College

| MASTER SYLLABUS | 2024-2025 |
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A. Academic Division: Health Sciences

B. Discipline: Radiological Science

C. Course Number and Title: RADS2520 Clinical Practicum 5

D. Assistant Dean: Heidi Kreglow, PT

E. Credit Hours: 3
Practicum: 21 hours

F. Prerequisites: RADS2460
Co-requisites: RADS2560 (m)

G. Last Course/Curriculum Revision Date: Fall 2023 Origin date: 02/11/2015

H. Textbook(s) Title: None

I. Workbook(s) and/or Lab Manual:

Radiologic Sciences Policy and Procedure Manual (provided to the student in the first semester of the program)

J. Course Description: Clinical Practicum is designed to provide students with practical application of material learned in didactic courses. In this course students will continue to perform radiographic procedures under the appropriate level of supervision of qualified radiographers. Students will be completing all required mandatory and elective competencies and objectives prior to completion of the program. In addition, students will be gathering medical images and reports (following HIPAA requirements) to complete their capstone case study. Introductory clinical rotations will be scheduled in the modalities of angiography, cardiac catheterization lab, echocardiography, EKG, ultrasound and radiation therapy to help students gain an understanding of the role these special imaging modalities play in the diagnosis of diseases.

K. College-Wide Learning Outcomes:

| College-Wide Learning Outcome | Assessments - - How it is met & When it is met |
|---|---|
| Communication – Written | |
| Communication – Speech | |
| Intercultural Knowledge and Competence | |
| Critical Thinking | |
| Information Literacy | |
| Quantitative Literacy | |

L. Course Outcomes and Assessment Methods:

Upon successful completion of this course, the student shall:

| Outcomes | Assessments – How it is met & When it is met |
|---|---|
| 1. Use appropriate and effective written, oral and nonverbal communication with patients, the public and members of the health care team in the clinical setting. | Observation and evaluation of students obtaining a patient history, providing instruction and oral feedback to patients during examinations, presenting cases to physicians, and by interacting with other medical staff each clinical day weeks1-3, 4-6,7-9,10-12,13-15. Clinical instructor evaluation weeks 8 and 15. Clinical notebook check weeks 8 and 15. |
| 2. Perform medical imaging procedures under the appropriate level of supervision. | Radiographer evaluations weeks 5-7, 8-10,11-13, 14 and 15, clinical instructor evaluations weeks 8 and 15, clinical competencies 5-7, 8-10,11-13, 14 and 15. Tally sheet week 15 |
| 3. Provide patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity or culture. | Radiographer evaluations weeks 5-7, 8-10,11-13, 14 and 15, clinical instructor evaluations weeks 8 and 15, clinical competencies 5-7, 8-10,11-13, 14 and 15. |
| 4. Demonstrate competency in the principles of radiation protection standards. | Radiographer evaluations weeks 5-7, 8-10,11-13, 14 and 15, clinical instructor evaluations weeks 8 and 15, clinical competencies 5-7, 8-10,11-13, 14 and 15. Clinical exam week 16 |
| 5. Demonstrate knowledge of correct positioning skills on patients. | Radiographer evaluations weeks 5-7, 8-10,11-13, 14 and 15, clinical instructor evaluations weeks 8 and 15, clinical competencies 5-7, 8-10,11-13, 14 and 15. Trauma radiology objectives week 15. Clinical exam week 16 |
| 6. Operate medical imaging equipment correctly. | Radiographer evaluations weeks 5-7, 8-10,11-13, 14 and 15, clinical instructor evaluations weeks 8 and 15, clinical competencies 5-7, 8-10,11-13, 14 and 15. |
| 7. Provide patient safety. | Radiographer evaluations weeks 5-7, 8-10,11-13, 14 and 15, clinical instructor evaluations weeks 8 and 15, clinical competencies 5-7, 8-10,11-13, 14 and 15. |
| 8. Enter data correctly into the clinical facility's HIS/RIS system. | Radiographer evaluations weeks 5-7, 8-10,11-13, 14 and 15, clinical instructor evaluations weeks 8 and 15, clinical competencies 5-7, 8-10,11-13, 14 and 15 |
| 9. Select technical factors to produce quality diagnostic images with the lowest radiation exposure possible. | Radiographer evaluations weeks 5-7, 8-10,11-13, 14 and 15, clinical instructor evaluations weeks 8 and 15, clinical competencies 5-7, 8-10,11-13, 14 and 15. Clinical exam week 16 |
| 10. Evaluate images for appropriate anatomy, image quality and patient identification. | Radiographer evaluations weeks 5-7, 8-10,11-13, 14 and 15, clinical instructor evaluations weeks 8 and 15, clinical competencies 5-7, 8-10,11-13, 14 and 15. Clinical exam week 16 |
| 11. Integrate the appropriate personal and professional values into clinical practice. | Clinical instructor evaluations weeks 8 and 15 (Section 1). |

M. Recommended Grading Scale:

| NUMERIC | GRADE | POINTS | DEFINITION |
|---|---|---|---|
| 93–100 | A | 4.00 | Superior |
| 90–92 | A- | 3.67 | Superior |
| 87–89 | B+ | 3.33 | Above Average |
| 83–86 | B | 3.00 | Above Average |
| 80–82 | B- | 2.67 | Above Average |
| 77–79 | C+ | 2.33 | Average |
| 73–76 | C | 2.00 | Average |
| 70-72 | C- | 1.67 | Below Average |
| 67–69 | D+ | 1.33 | Below Average |
| 63-66 | D | 1.00 | Below Average |
| 60-62 | D- | 0.67 | Poor |
| 00-59 | F | 0.00 | Failure |

N. College Procedures/Policies:

North Central State College believes that every student is a valued and equal member of the community.* Every student brings different experiences to the College, and all are important in enriching academic life and developing greater understanding and appreciation of one another. Therefore, NC State College creates an inclusive culture in which students feel comfortable sharing their experiences. Discrimination and prejudice have no place on the campus, and the College takes any complaint in this regard seriously. Students encountering aspects of the instruction that result in barriers to their sense of being included and respected should contact the instructor, assistant dean, or dean without fear of reprisal.

* *Inclusive of race, color, religion, gender, gender identity or expression, national origin (ancestry), military status (past, present or future), disability, age (40 years or older), status as a parent during pregnancy and immediately after the birth of a child, status as a parent of a young child, status as a foster parent, genetic information, or sexual orientation*

**Important information regarding College Procedures and Policies can be found on the syllabus supplement located at**

https://ncstatecollege.edu/documents/President/PoliciesProcedures/PolicyManual/Final%20PDFs/14-081b.pdf

North Central State College

**SYLLABUS ADDENDUM**

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|---|---|---|---|
| **Academic Division:** | Health Science | **Discipline:** | Radiological Sciences |
| **Course Coordinator:** | Heidi Chambers | | |
| **Course Number:** | RADS 2520 | **Course Title:** | Clinical Practicum 5 |
| **Semester / Session:** | Spring 2026 / 16-Week Session | **Start / End Date:** | 1/12/2026 thru 5/9/2026 |

**Instructor Information**

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|---|---|---|---|
| **Name:** | Heidi Chambers | **Credentials:** | BRST, R.T. (R) |
| **Phone Number:** | 419-755-4809 | **E-Mail Address:** | hchambers@ncstatecollege.edu |
| **Office Location:** | 152 Health Sciences Building | **Office Hours:** | |

## I. Topical Timeline / Course Calendar (Subject to Change):

| Weeks | Topics | Assignment | Date |
|---|---|---|---|
| 1 | Urinary Introduction | Clinical Practice | |
| 2 | Intravenous Urogram / Retrograde Urogram | Clinical Practice and Competency | |
| 3 | Intravenous Urogram / Retrograde Urogram | Clinical Practice and Competency | |
| 4 | Reproductive Introduction | Clinical Practice | |
| 5 | Hysterosalpingogram | Clinical Practice and Competency | |
| 6 | General Diagnostic Radiology / Radiation Biology | Clinical Practice, Competency, Special Rotation | |
| 7 | General Diagnostic Radiology / Radiation Biology | Clinical Practice, Competency, Special Rotation | |
| 8 | General Diagnostic Radiology / Radiation Biology | Clinical Practice, Competency, Special Rotation | |
| 9 | Surgical/ Mobile/Trauma | Clinical Practice, Objectives and Competency | |
| 10 | Surgical/ Mobile/Trauma | Clinical Practice, Objectives and Competency | |
| 11 | General Patient Care Objectives | Clinical Practice, Objectives and Competency | |
| 12 | General Patient Care Objectives<br>Registry Content Specifications | Clinical Practice, Objectives, and Competency<br>OSRT Student Symposium – Mock Registry | |
| 13 | General Patient Care Objectives<br>Completion of Program Competencies | Clinical Practice, Objectives and Competency | |
| 14 | General Patient Care Objectives<br>Completion of Program Competencies | Clinical Practice, Objectives and Competency | |
| 15 | General Patient Care Objectives<br>Completion of Program Competencies | Clinical Practice, Objectives and Competency | |
| 16 | Final Evaluation | Comprehensive Mock Registry<br>All RADS Courses (1150, 1160, 1250, 1260, 2350, 2360, 2450, 2460, 2550, 2560) | |

## II. Grading and Testing Guidelines: Final Grade Calculation

| Activity | Qty | Total Points Possible for Semester | Percentage |
|---|---|---|---|
| 1. Clinical Competencies | 15 | 1500 | 25% |
| 2. Daily Technologist Evaluations | 35 | 1260 | 10% |
| Special Rotation Evaluations | 8 | 120 | |
| 3. Clinical Instructor Evaluations | 2 | 200 | 35% |
| 4. Clinical Final | 1 | 200 | 25% |
| | Total | 3280 | 100% |

1. The students designated clinical preceptors and technologists will complete an evaluation of Activities 1-3 of the final grade calculation.

2. Program faculty will proctor Activities 4 of the final grade calculations.
3. **NOTE:** The overall clinical course grade is weighted. If a student does not pass clinical course with an 85% or higher, they will receive a no pass. The student will not be permitted to continue clinical courses and therefore cannot continue in the radiology program.

## III. Clinical Competency Policy:

1. Students will be expected to perform clinical competencies throughout the semester
   a. The student must pass a clinical simulation at NCSC before attempting any competency exam.
   b. The student must receive a score of two in all applicable starred areas of the competency AND
   c. The student must receive an 85% or higher to pass.

2. A student who does not receive a score of two in all applicable starred areas and/or receives less than 85% total will be required to retake the competency.
   a. All repeat competencies must be completed with the designated clinical preceptor.
   b. On repeat, 10% will automatically be deducted from the final score.
   c. A student must receive an 85% or higher to pass repeat competency.

3. Fifteen clinical competencies are required for this semester.
   a. Competencies can be from:
      - The current semester's topical timeline listed with clinical practice and competency OR
      - The any previous semester's clinical topical timeline listed with clinical practice and competency that has not been previously been performed for a competency.
   b. All competencies should be completed with the designated clinical preceptor. If the designated clinical preceptor is not available, the clinical preceptor may assign an approved staff technologist to evaluate your performance for competency.

## IV. Clinical Attendance and Make-Up Policy:

1. Clinical attendance is necessary in obtaining a high level of competency.

2. Students are responsible for attending all clinical rotation days.
   a. The student will clock 42 clinical days (294 hours)
   b. The student will clock time (in and out) through Trajecsys.
   c. The student will be on time and not clock out before the end of the clinical day.

3. Clinical absences, unverified clock times, early clock outs are documented as an occurrence.
   a. The student will refer to the NCSC Radiological Sciences Policy and Procedure Manual for Clinical Education for a complete list of occurrences.
   b. All missed time from occurrences require make up time.

4. If a student misses clinical time for any reason, a Clinical Make-Up plan will be coordinated and approved with the designated clinical preceptor.
   a. The make up plan must reflect the same or similar hours missed and be the same or similar clinical rotation missed.
   b. All make up time must be completed before the end of semester date to avoid a No Pass for a clinical grade.
   c. Make up time cannot occur during weekend (unless missed weekend) or holiday hours.
   d. Program faculty and clinical preceptors reserve the right to schedule or deny make-up plan requests.

## V. Clinical Expectations:

**1. The NCSC Student Radiographer is expected to:**

a. Complete:
   - 15 clinical competencies
   - All clinical days in their assigned clinical rotation areas
   - Afternoon and weekend rotations
   - All outstanding objectives
   - Special area rotation papers
   - Daily technologist and special area rotation evaluations by an approved staff technologist
   - Clinical assessments with their designated clinical preceptor

b. Be engaged in all clinical activities throughout the day

c. Adhere to all policies and procedures written in the student policy and procedure manual for clinical education.

d. Adhere to all policies of NCSC in the student handbook

e. Adhere to all policies and procedures required by the sponsoring clinical facility.

f. Demonstrate professionalism required in the hospital setting and in the health care field:
   - Dress professionally
   - Act professionally
   - Speak and write in a professional manner using terminology essential to the profession
   - Treat patients with dignity and respect according to the Patient's Bill of Rights
   - Display excellent attendance
   - File and/or complete all required clinical documentation in a timely manner

**g.** Practice radiation protection according to the **ALARA (as low as reasonably achievable)** principle

**For Patients:**
- Minimal repeat exposures
- Provide shielding for all patients and staff
- Use smallest collimation size without interfering with the completed image
- Chose correct technical factors appropriate for the patient's size and age

**For Worker/Students:**
- Employ Cardinal Principles: Minimize time, maximize distance and shielding
- Limit amount of time near radiation source
- Maintain minimum of 6ft distance from radiation source
- Wear lead aprons and thyroid shields when standing close to radiation source, during fluoroscopy, surgical c-arm procedures and portable exams
- Record exposure values from radiation monitoring reports promptly

h. Use lead markers (right and left) correctly and place them on the image **prior** to exposure.

i. Minimize annotations of laterality (right and left) on all images after the image has been exposed.

j. Perform exams following the guidelines of the Joint Review Committee on Education in Radiologic Technology (JRCERT):
   - Perform repeat exposures under direct supervision with the technologist in the room checking the image prior to exposure
   - Record repeat exposures on the student tally sheet and have the R.T. initial the exposure indicating direct supervision

k. Have all images approved by a technologist before releasing the patient from the department and submitting images to the Radiologist for a reading

l. Maintain patient safety in accordance with the patient safety policy in the (PPM)

m. Maintain patient confidentiality standards and meet HIPAA requirements