



Is what you say you teach, what
your students learn?

Using strategic design in learning and assessment

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Is what you say you teach, what your students learn?

Target Course Competencies

1. Explore how a strategic performance-based approach to course design has enabled one college to meet QM Standards.

Learning Objectives

- 1.a. Explore the impact of strategic performance-based course design on meeting QM standards
- 1.b. Analyze course documentation for evidence of assessment of student learning
- 1.c. Summarize how assessment of student learning drives continuous improvement

Learning Activities

1. What do you use as a guide for student learning?
2. Learn about the tool and process Central Community College - Nebraska uses to design student-centered learning and assessment experiences **and** address Quality Matters standards.
3. Name some of those 'annoying' questions your students consistently ask you. Compare it to the *Ten Things Teachers Hate to Hear* handout in your packet.
4. Examine the *Essential Features of Performance-Based Learning* handout.
5. Examine where the WHAT and WHEN features of performance-based learning and assessment **and** Quality Matters standard criteria are addressed in the *CCC Sample Syllabus* in your packet.
6. With a partner or small group, complete the *Sample Learning Plan Practice – Questions to Consider* handout in your packet. Compare responses with others in this session.
7. Observe the *CCC Sample Learning Plan* in your packet. Examine how the learning activities support at least one course competency and objectives and explains to students HOW they will learn them. Recognize where Quality Matters criteria are addressed in a student learning plan,
8. How do you know that what you say you teach, is what your student learns? Observe the *Sample Performance Assessment Task* in your packet. Identify the re-purposed course information and the Quality Matter Standards addressed in this essential document for student learning and assessment.
9. Identify one new feature that you can address in your student's learning and assessment experience to (a) help student learning success and (b) meet additional standards on the Quality Matters Rubric.

Ten Questions Teachers Hate to Hear



Essential Features of Performance-Based Learning



Performance-based learning has four essential features.

Competencies



Feature 1: Competencies are identified, verified, and made public in advance of the instruction. They are clearly stated in performance terms. Competencies answer the question, “**What** will the learner be able to do?”

Performance is Required



Feature 2: Performance-based learning requires the learner to perform the competency. Assessment of the competency takes the learner’s knowledge into account, but the performance is the primary evidence that the learner has mastered the competency.

In other words, the final measure of competence is whether the learner can perform each competency.

Performance is Spelled Out



Feature 3: Performance standards are explicitly stated and made public in advance of assessing the performance. In other words, learners should never have to wonder what is expected.

In addition, performance standards provide the criteria for assessment so learners can be assessed against a pre-set standard, not against other learners.

Learning Activities



Feature 4: The learning activities and teaching strategies provide opportunities for learners to develop the competencies.

- A variety of learning strategies are used
- Activities provide an opportunity to practice knowledge and skills
- Learners are given periodic feedback

Central Community College

RAD1001 Intro to Radiography Syllabus

Instructor and Class Information

Instructor Name	Kim Vosicky
Email	vosickyk@wids.org
Phone	800-677-5437
Mobile	251-555-1212
Office Location	Campus Building C - Room 200
Office Hours	M-W-F from 12:00 - 3:00 pm.
Additional Instructor Information	Please leave an email or voice mail at any time, I will do my best to respond in less than 24 hours.
Start Date	9/4/2017
End Date	5/7/2018

Syllabi can be customized to include classroom and instructor information.

Course Information

Course Description

This course introduces learners to Radiography. Explores clinical applications of radiography, safety, and the role of a technologist in a healthcare facility.

1.2

Homework Expectations:

For each hour of classroom time, typically you can expect two hours of homework per week.

Total Credits 3.00

Target Population

This course is designed for those students enrolled in the Radiography Technician program.

Pre/Corequisites

Acceptance into the Radiography Technician program

1.6

Textbooks

Textbook information may be found in **Web Central** through My Services, Services for Students, Academic Planning, Student Planning, Go to Plan & Schedule, Timeline tab or use this quick link:

[Student Planning Timeline Tab](#) > Sign In, if applicable > Navigate to Term > Click on Course Name > Scroll to the bottom of the **Section Details** popup window > Click the link to **Bookstore Information**

Learner Supplies

Radiography Technologies by Stanley Livingston, 2007

Course Grading Information

The college uses a standard grading scale. Generally accepted percentage ranges to determine each grade are as follows:

Percentage	Grade
93-100%	A
90-92%	A-
87-89%	B+
83-86%	B
80-82%	B-
77-79%	C+

3.2

Provide your classroom guidelines and policies too.

Instructor Grading Information

Discussion Threads, Quizzes, and Performance Assessment Tasks are graded in this course. You will find that there are eight (8) learning plans in this course, each targets at least one competency. The Learning Plans and graded assignments worth 400 points. The breakdown is as follows:

3.3

LP 1: The Role of the Rad Tech

Syllabus Discussion = 12 points

LP 1: Why a Career in Radiography? Discussion (see discussion thread rubric)= 12 points

LP 1: Certification and Registration Requirements Discussion (see discussion thread rubric)= 12 points

Career Opportunities in Radiography PPT Assignment = (see PPT checklist) 25 points

Role of the Rad Tech Job Description PAT (with Rubric) = 30 points

LP 2: Layout of Radiography Suite

WWW.WIDS.ORG

6602 Normandy Ln
Madison, WI 53719-1081
Phone: (800) 677-9437
Email: info@wids.org

LP 3: Clinical Applications of Radiography

LP 4: Imaging Modalities in Healthcare

LP 5: Radiation Safety Practices

LP 6: Legal and Ethical Issues in Healthcare

LP 7: Infection Control Procedures

LP 8: Emergencies in Scanning Area

Academic Honesty

Students are expected to do their own work unless advised that collaboration is acceptable. This means that you may use facts from other sources if you re-write them in your own words. Anytime you quote directly from another source or paraphrase substantially, you must cite the source you used. When you take a test, you are expected to keep your eyes on your own paper and protect your test paper from being copied by a classmate.

Failure to use proper citation procedure is considered plagiarism. Plagiarism will result in a grade of "0" if it is flagrant and/or deliberate. Copying from another person's paper or test is academic dishonesty and will result in a grade of "0" for that assignment. In addition, you will be referred to student services for discipline based on college policy.

1.4

Netiquette

1.3

Each member of our cyber community should expect courtesy and respect from all other members. Because it's a new and different kind of class for some of us, we may not realize it when we are rude or inconsiderate on line. There are some dos and don'ts of courteous behavior on line, called "netiquette."

Please visit the Albion Netiquette Web Site at <http://www.albion.com/netiquette/corerules.html>. Read details about "The Core Rules of Netiquette:"

- 1 Remember the human.
- 2 Adhere to the same standards of behavior online that you follow in real life.
- 3 Know where you are in cyberspace. (Adjust your behavior to fit the site or "lurk before you leap.")
- 4 Respect other people's time and bandwidth.
- 5 Make yourself look good online.
- 6 Share expert knowledge.
- 7 Help keep flame wars under control.
- 8 Respect other people's privacy.
- 9 Don't abuse your power.
- 10 Be forgiving of other people's mistakes.

CCC - OTA Performance-Based Learning

This is a performance-based course. It is designed around ten (10) competencies. Your grade will be based on your performance of those competencies according to the criteria outlined in your learning plans.

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WHAT will students DO in this course?

7

Course Competencies

1. Examine the role and responsibilities of the radiography technician

2.1

Learning Objectives

2.3

- 1.a. Outline the technologist's scope of practice
- 1.b. Differentiate the role of the technologist
- 1.c. Detail the importance of accreditation, registry, and professional organizations related to radiography

WHAT will students LEARN in this course?

Criteria

- 1.1. job description includes a list of tasks performed by the technologist
- 1.2. job description includes registry requirements for a technologist
- 1.3. job description includes professional organization
- 1.4. job description includes the relationship of the medical physicist
- 1.5. job description includes proper spelling, grammar and punctuation
- 1.6. job description is presented neatly in appearance

Assessment strategies and criteria describe WHEN students are proficient in the skill or ability stated in the competency.

Assessment Strategies

3.1

3.4

- 1.1. Written Job Description

2. Examine the clinical applications of radiography

2.5

Learning Objectives

- 2.a. Trace the history and development of radiography
- 2.b. Identify the purpose of radiography
- 2.c. Differentiate between types of radiography
- 2.d. Determine how data is collected in by radiography
- 2.e. Distinguish among types of radiography equipment

Criteria

- 2.1. summary includes the general overview of radiography (purpose and rationale)
- 2.2. summary includes the history and development of radiography
- 2.3. summary includes imaging options that are available (types and purpose)
- 2.4. summary includes the equipment used
- 2.5. summary includes how data is collected
- 2.6. summary includes rewards/challenges encountered in radiography

- 2.7. work evidences correct spelling, grammar and punctuation

Assessment Strategies

3.4

- 2.1. Summary paper

3. Differentiate among the various imaging modalities in healthcare

Learning Objectives

- 3.a. Identify the various imaging modalities in health care
- 3.b. Explain the applications of various modalities
- 3.c. Describe the advantages of one modality over another

Criteria

- 3.1. chart includes the applications and uses of each modality
- 3.2. chart includes the abnormalities detected for each modality
- 3.3. chart includes the advantages of each modality
- 3.4. chart information includes significant information
- 3.5. information shows differences between the modalities
- 3.6. chart is neat and well organized

Assessment Strategies

3.4

- 3.1. Chart

4. Apply basic radiation safety and protection principles

Learning Objectives

- 4.a. Identify specific objects of concern for radiation scanning (pacemakers, monitors, implants, etc.)
- 4.b. Outline general safety guidelines for patients, technologists, and other personnel
- 4.c. Identifies specific objects of danger for use in an MR scanning room (O2 tanks, carts, wheelchairs, scissors, pens, etc.)
- 4.d. Outlines specific absorption rate requirements (SAR)
- 4.e. Describe the use of monitoring equipment and sedation procedures

Criteria

- 4.1. you recognize safe radiation practices of the radiographer
- 4.2. you determine safe radiation protection practices on behalf of the patient
- 4.3. you distinguish between radiation units of measurement

- 4.4. you illustrate the effect of time on radiographer exposure
- 4.5. you illustrate the effect of distance on radiographer exposure
- 4.6. you illustrate the effect of shielding on radiographer and patient exposure
- 4.7. you summarize the ALARA principle
- 4.8. you summarize the risks vs. benefits concept of radiographic procedures

Assessment Strategies

- 4.1. Simulation

5. Analyze legal and ethical issues in healthcare

Learning Objectives

- 5.a. Define moral and professional ethics
- 5.b. Describe accepted (ethical) standards of conduct for the radiographer when interacting with the following patients, peers and attending radiologists
- 5.c. Differentiate between confidential and nonconfidential information relative to a patient's medical care.
- 5.d. Discuss the American Society of Radiologic Technologists Scope of Practice for the Radiographer
- 5.e. Discuss how ASRT Code of ethics relates to professional ethical values and principles/standards
- 5.f. Examine how the Patient Bill of Rights relates to proper ethical conduct on the part of the medical institution
- 5.g. Explain institutional and professional liability protection available to the radiographer

Criteria

- 5.1. you explore, social, and cultural basis of ethics
- 5.2. you apply concepts of personal honesty, integrity, accountability, competence, and compassion, as ethical imperatives in health care
- 5.3. you evaluate specific situations and conditions that give rise to ethical dilemmas in health care
- 5.4. you practice correct methods of documentation with respect to legal and ethical imperatives
- 5.5. you interpret the implications of legal liability, malpractice, and negligence
- 5.6. you comply with the principles of patient rights including the doctrine of informed patient consent

Assessment Strategies

- 5.1. Case Study

6. Apply standard procedures for infection control

Learning Objectives

- 6.a. Identify links in the chain of infection
- 6.b. Explain specific ways a radiographer while providing patient care, can decrease the incidence of contamination by an infectious agent
- 6.c. Describe aseptic techniques a radiographer practices
- 6.d. Describe how the components of standard precautions must be incorporated while providing patient care

Criteria

- 6.1. you perform handwashing technique
- 6.2. you use gown, gloves, masks, etc. as needed
- 6.3. you apply isolation precautions
- 6.4. you follow the recommendations from the Center for Disease Control and Prevention and OSHA
- 6.5. you dispose of sharps
- 6.6. you follow mechanical and electrical safety procedures
- 6.7. you interpret Material Safety Data Sheets
- 6.8. you dispose of medical wastes appropriately

Assessment Strategies

- 6.1. Role Play

7. Respond to emergencies in the scanning area

Learning Objectives

- 7.a. Identify emergencies specific to the scanning area (metallic, cryogen leak, quench, and medical emergency)
- 7.b. Recognize patient related emergencies (breathing, cardiac, adverse reactions to contrast, equipment failure, etc.)
- 7.c. Determine standard protocols for dealing with the emergencies
- 7.d. Explain how to call for a fire and the special considerations in the radiography department
- 7.e. Explain how to call for a code and the special considerations in the radiography department

Criteria

- 7.1. checklist identifies emergencies specific to the scanning area (metallic, cryogen leak, quench, and medical emergency)

- 7.2. checklist lists patient related emergencies (breathing, cardiac, adverse reactions to contrast, equipment failure, etc.)
- 7.3. checklist details standard protocols for dealing with the emergencies
- 7.4. checklist explains how to call for a fire and the special considerations in the radiography department
- 7.5. checklist explains how to call for a code and the special considerations in the radiography department

Assessment Strategies

- 7.1. Written Product: Emergency Response Checklist

Class Schedule

Date/Session	Competencies	PATs
Week 1	Examine the role and responsibilities of the radiography technician	Discussion Thread
Week 2	Examine the role and responsibilities of the radiography technician	Career Opportunities for the Rad Tech PPT Role of a Rad Tech Job Description PAT
Week 3	Illustrate the layout of a radiography suite	Discussion Thread
Week 4	Illustrate the layout of a radiography suite	Discussion Thread
Week 5	Differentiate among the various imaging modalities in healthcare	Discussion Thread
Week 6	Differentiate among the various imaging modalities in healthcare	Discussion Thread
Week 7	Examine the clinical applications of radiography	Discussion Thread

Sample Learning Plan Practice: Questions to Consider



On the following page is a *PowerPoint Presentation Learning Plan*. Review the learning plan and answer the following questions.

1. Is there a motivational activity?
2. Are there both comprehension and practice activities?
3. Does the assessment activity match the competency assessment strategy?
4. Do the activities relate to the learning objectives?
5. Are the learning activities clear?

Sample Learning Plan Practice



Information Sheet

Overview

PowerPoint is the tool of trade for most business managers. In this learning plan you will discover how to create interesting, focuses PowerPoint shows that enhance your presentation message.

Target Competency

1. Create a PowerPoint slide show

Performance Standards

Assessment Strategy

- Product Development: PowerPoint Show

Criteria

- Presentation includes a minimum of 20 slides
- Presentation has a professional look with an overall graphic theme
- Presentation slides are visually neat and incorporate a variety of layouts
- Presentation uses text, graphics, sounds and transitions that compliment the information being shared
- Presentation fonts and transitions are consistent from slide to slide
- Graphics and photos are visually appealing; not overdone
- Presentation includes a clear introduction, body, and conclusion

Learning Objectives

- a. Describe the uses of PowerPoint software
- b. Identify the features of PowerPoint software
- c. Evaluate the constraints and benefits of using PowerPoint for a presentation
- d. Examine templates
- e. Use standard slide layouts
- f. Incorporate graphics and sound
- g. Examine copyright constraints when using PowerPoint

Learning Activities

- ___ 1. READ the chapter PowerPoint in your text.
- ___ 2. ASK/ANSWER questions.
- ___ 3. DISCUSS the uses of PowerPoint.
- ___ 4. RUN the PowerPoint Tutorial on the computer at your workstation.
- ___ 5. CREATE text slides.
- ___ 6. ADD graphics.
- ___ 7. ADD sound.
- ___ 8. PRESENT your slide show.

Assessment Activities

- 1. PARTICIPATE in class discussions and activities

Central Community College

RAD1001 Intro to Radiography

Learning Plans

LP 1: The Role of the Rad Tech - SAMPLE

Overview/Purpose

In this learning plan, you will be introduced to the role and responsibilities of the radiography technician.

Target Course Competencies

1. Examine the role and responsibilities of the radiography technician

Assessment Strategies

- 1.1. Written Job Description

Criteria

- 1.1. job description includes a list of tasks performed by the technologist
- 1.2. job description includes registry requirements for a technologist
- 1.3. job description includes professional organizations related to radiography
- 1.4. job description includes the relationship of the technologist to the interpreting physician and medical physicist
- 1.5. job description includes proper spelling, grammar and punctuation
- 1.6. job description is presented neatly in appearance

Learning Objectives

- 1.a. Outline the technologist's scope of practice
- 1.b. Differentiate the role of the technologist with other members of the healthcare team
- 1.c. Detail the importance of accreditation, registry, and professional organizations

A learning plan will target one or more competencies. This info comes directly from the approved course information in WIDS.

Learning objectives tell learners **WHAT** they will learn about. Learning Activities show them **HOW** they will learn them!

Learning Activities

1. READ through the [course syllabus](#). CONTRIBUTE to the LP 1: Syllabus Discussion post by introducing yourself including a short description about yourself. Provide a short introduction and include your professional goals. Use the [Discussion Thread Rubric](#) as a guide for contributing to all discussions. Additionally, INCLUDE a short sentence confirming that you understand the competencies, performance standards, and guidelines for this course. CONTRIBUTE any questions about the course syllabus to this thread. RESPOND to other posts as you feel would be helpful.
2. There is a learning plan that targets every competency in this course. PRINT the learning plan page. USE it as a guide to learning, and PLAN to check off each activity as you complete it. PREVIEW the Competency, Performance Standards and Learning Activities for this learning plan page.
3. Read Chapter 1: Introduction to the Role of the Rad Technician in the required text.

4. COMPLETE the textbook's online Chapter 1: Quiz and Critical Thinking Question to check your comprehension of the chapter material. Your automated assessment results will provide you feedback about any content you may need to review in the text.
5. BROWSE the [ASRT Practice Standards for Medical Imaging And Radiation Therapy](#). The Practice Standards may be used to define what radiography technologists do and how they do it.
6. Investigate the future for radiography technicians and similar careers on [O*NET Online](#). Collect data for your personal use and career interest, the PPT presentation assignment, and your future job description assignment.
7. As you are aware, there are other health-care team member positions similar to the Rad Tech. INVESTIGATE those opportunities and CONSIDER what interests you the most. EXPLAIN why you have desired to add this credential to your radiography career. POST your explanation to the LP 1: Why a Career in Radiography? discussion thread. Use the [Discussion Thread Rubric](#) as a guide.
8. INQUIRE at your place of employment or the clinical facility you will be assigned to about the certification and registry requirements for the radiography technologist. POST your findings in the LP 1: Certification and Registration Requirements discussion thread. Note your plans for achieving the requirements. Use the [Discussion Thread Rubric](#) as a guide for contributing thoughts and comments.
9. Develop a PPT that highlight one career opportunity in radiography that interested you. Include up to five slides with information that helped you learn more about the career and can be helpful to others in your class too. Use the [Role of Rad Tech PPT Checklist](#) as a guide for criteria you will be required to provide. Upload the PPT to the LP 1: Rad Tech PPT area in this online platform.
10. OBTAIN the [Role of the Rad Tech Job Description Performance Assessment Task \(PAT\)](#)

5.1 –
5.2

3.4

Circled items are assessment tasks, rubrics and checklists designed in WIDS and stored as documents in the repository area. Each has a unique URL, which can be overwritten as the material is changed/edited. The URL makes the activity active for the learner, who always knows where s/he is at and never has to leave the posted LP in your LMS!

RAD1001 Intro to Radiography

Role of a Rad Tech Job Description PAT

3.4

Directions

For this performance assessment task, you will create a job description for a Rad Tech. 1. Research information related to the role of the rad tech. If possible, obtain a job description from your place of employment or on the web as a starting point. You may wish to investigate other job openings across the country by doing a web search. Compare the requirements posted on any websites (including those cited in your peer PPT presentations) to those identified in the Practice Standards for Medical Imaging and Radiation Therapy you read about in the learning plan. 2. Review the scoring guide for this assessment to see what's required on the assignment. 3. Create your job description in a Word document. Make sure it includes all of the information on the scoring guide. Revise your work if necessary. 4. Email your assignment to your instructor for grading.

3.1

Target Course Competencies

1. Examine the role and responsibilities of the radiography technician

Rating Scale

Value	Description
5	Masterful
4	Skilled
3	Able
2	Developing
1	Novice
0	Unskilled

A Performance Assessment Task in WIDS is typically the final assignment or the assessment activity that measures the learner's proficiency of the targeted competency in a learning experience. This addresses the WHEN feature in PBL. Notice the competency and the criteria in the scoring guide below come directly from the approved course information and are now repurposed in the assessment task.

What you say your students would learn, is what you assessed!!

Scoring Standard

There are 30 points possible for this PAT.

3.3

Scoring Guide

	Criteria	Ratings
2.	job description includes a list of tasks performed by the technologist	5 4 3 2 1
3.	job description includes registry requirements for a technologist	5 4 3 2 1
4.	job description includes professional organizations related to radiography	5 4 3 2 1
5.	job description includes the relationship of the technologist to the interpreting physician and medical physicist	5 4 3 2 1
6.	job description includes proper spelling, grammar and punctuation	5 4 3 2 1
7.	job description is presented neatly in appearance	5 4 3 2 1

Sample Learning Plan Practice: Suggested Answers



Following are suggested answers. Your answers may vary.

1. Is there a motivational activity?

Not really. Most learners would not find reading a chapter in the text very motivational. How about showing a well-designed PowerPoint and set the stage for what learners learn in this learning plan?

2. Are there both comprehension and practice activities?

Yes, there are—but the chunking of the learning isn't very visible. Think about ways these activities could be chunked more effectively.

3. Does the assessment activity match the competency assessment strategy?

No. The assessment activity is to participate in class discussions and activities—but the performance standards indicate the learner will complete a PowerPoint. Make sure there is a match here! (In this case, the performance standards lay out an excellent assessment strategy!)

4. Do the activities relate to the learning objectives?

In some cases, the link is clear. In other cases—we don't know. It's hard to tell, for example, what might be covered in the textbook reading without seeing details, such as the topic of the reading assignment. Always check to make sure you have addressed all of the learning activities in one way or another.

5. Are the learning activities clear?

No. The first learning activity says, "Ask/Answer questions." What does that mean? Learning plans are the most useful when they provide meaningful directions to students. That way a learner can take responsibility for his/her own learning.