### NDSU NORTH DAKOTA STATE UNIVERSITY

**Good Assignments Make Good Assessment** 



#### Dr. Jeff Boyer

Director of Assessment and Accreditation Old Main 203



#### Dr. Shannon David

2021 Faculty Assessment Fellow College of Human Sciences & Education



#### Dr. Christina Hargiss

2021 Faculty Assessment Fellow College of Agriculture, Food Systems & Natural Resources **GOAL: EDUCATION, EXTENSION AND OUTREACH** Provide innovative, student-centered education and conduct transformative research that impacts the state through meaningful outreach.

**SUB-GOAL:** Increase educational achievement and improvement through ongoing assessment of student learning outcomes across the University.

#### **HIGHER LEARNING COMMISSION**

#### **Criteria for Accreditation**

**4. Teaching and Learning: Evaluation and Improvement** *The institution demonstrates responsibility for the quality of its educational programs, learning environments, and support services, and it evaluates their effectiveness for student learning through processes designed to promote continuous improvement.* 

**4.B.** The institution engages in ongoing assessment of student learning as part of its commitment to the educational outcomes of its students.

#### Mission

Advance a culture of <u>learning improvement</u>

Implement an <u>outcomes-based</u> and <u>equity-minded</u> approach to assessment

#### Defining *assessment*

Process of revealing what students know or are able to do

#### Assessment matters!

- Yields information about student learning
- Use to improve future student learning
- Support program improvements

#### Assumptions

- 1. Course learning outcomes (CLOs) exist for your course(s)
- CLOs are aligned with program learning outcomes (PLOs)

NDSU NC	ORTH DAKOTA ATE UNIVERSIT	Ϋ́	About	Academics	Admission	Athletics	Search NDSU
Assess	ment						
Learning Outcomes	Curriculum Maps	Assessment Plans	Assessme	nt Reports/SPOL	FAQs	Resources	Contact

"Assessment is an ongoing process aimed at understanding and improving student learning. It involves making our expectations explicit and public; setting appropriate and high standards for learning quality; systematically gathering, analyzing, and interpreting evidence to determine how well performance matches those expectations and standards; and using the resulting information to document, explain, and improve performance."

Angelo, T.A. (1995). Reassessing and defining assessment. AAHE Bulletin, 48(3): 149.

#### Mission

The mission of the Office of Assessment is to advance a culture of learning improvement at NDSU.

How can we help?

- I need help with developing program learning outcomes
- I need help with constructing a curriculum map

#### What counts as an assignment?

- 1. Nearly all student tasks
- 2. Formative and summative
  - Formative: during learning
  - Summative: after learning

#### Why assignments?

- 1. More authentic than exams: emulate tasks commonly undertaken within a discipline
- 2. Provide evidence for achievement of LOs
- 3. Used in all learning environments

#### **Good** assignments:

- 1. Elicit evidence of student learning
- 2. Align with learning outcomes at the course and program levels

"We all have these things that we're subconsciously looking for when we grade assignments...that we're regularly disappointed with. And then you get to poking around in your assignments and realize that nowhere in there do you ever really ask them to demonstrate those things."

#### Patient Education Note

Due date: 11/19

**Purpose**: For this assignment you are being asked to write a letter (email or paper) to a patient to describe what they need to know about their medication. Please use an electronic drug resource (e.g.,pdr.net, online.epocrates.com/drugs) to practice using these online databases. Taking new medications for a patient can be confusing and therefore require strong knowledge of the medication and clear communication to effectively education the patient. This assignment corresponds to CAATE competences TI-23 through TI-31 (listed on the next page).

Skills: The purpose of this assignment is to help you practice the following skills that are essential to your success in athletic training.

- 1. Apply the medicinal knowledge taken from class regarding pharmacological agents.
- 2. Apply the pharmacological terms.
- 3. Use one electronica drug resource.
- Develop a letter to a patient to clearly communicate your knowledge in terms they understand.

Knowledge: This assignment will help you to become familiar with the following important content knowledge:

- 1. A pharmacological agent of your choice.
- 2. Using an electronic drug resource.
- 3. Professional writing to a patient.

#### Task:

Students will choose a medication and write a note to a mock patient explaining why they are being prescribed the medication by a physician, the dosing, and the side effects. This note should be in letter format.

#### Tips for Success:

This assignment will be graded using the "pharmacology note rubric" found on Blackboard. A strong letter will have the following key components:

- 1. Description of the medication and why it is being prescribed or suggested.
- 2. Identify the correct dosing of the medication.
- 3. Explain potential side effects or adverse reactions.
- 4. Discuss any maintenance required with application of this medication (if applicable).
- 5. Uses terms the patient can understand.

TI-23	Use an electronic drug resource to locate and identify indications, contraindications, precautions, and adverse reactions for common prescription and nonprescription
	medications.
TI-24	Explain the major concepts of pharmacokinetics and the influence that exercise might have on these processes.
	Explain the concepts related to bioavailability, half-life, and bioequivalence (including the relationship between generic and brand name drugs) and their relevance to the patient, the choice of medication, and the dosing schedule.
TI-26	Explain the pharmacodynamic principles of receptor theory, dose-response relationship, placebo effect, potency, and drug interactions as they relate to the mechanism of drug action and therapeutic effectiveness.
TI-27	Describe the common routes used to administer medications and their advantages and disadvantages.
TI-28	Properly assist and/or instruct the patient in the proper use, cleaning, and storage of drugs commonly delivered by metered dose inhalers, nebulizers, insulin pumps, or other parenteral routes as prescribed by the physician.
TI-29	Describe how common pharmacological agents influence pain and healing and their influence on various therapeutic interventions.
TI-30	Explain the general therapeutic strategy, including drug categories used for treatment, desired treatment outcomes, and typical duration of treatment, for the following common diseases and conditions: asthma, diabetes, hypertension, infections, depression, GERD, allergies, pain, inflammation, and the common cold.
TI-31	Optimize therapeutic outcomes by communicating with patients and/or appropriate healthcare professionals regarding compliance issues, drug interactions, adverse drug reactions, and sub-optimal therapy.

#### **Activity Breakdown: Purpose**

Patient Education Note

Due date: 11/19

**Purpose**: For this assignment you are being asked to write a letter (email or paper) to a patient to describe what they need to know about their medication. Please use an electronic drug resource (e.g. ,pdr.net, online.epocrates.com/drugs) to practice using these online databases. Taking new medications for a patient can be confusing and therefore require strong knowledge of the medication and clear communication to effectively education the patient. This assignment corresponds to CAATE competences TI-23 through TI-31 (listed on the next page).

# **Activity Breakdown: Skills and Knowledge**

**Skills**: The purpose of this assignment is to help you practice the following skills that are essential to your success in athletic training.

- 1. Apply the medicinal knowledge taken from class regarding pharmacological agents.
- 2. Apply the pharmacological terms.
- 3. Use one electronica drug resource.
- Develop a letter to a patient to clearly communicate your knowledge in terms they understand.

**Knowledge**: This assignment will help you to become familiar with the following important content knowledge:

- 1. A pharmacological agent of your choice.
- 2. Using an electronic drug resource.
- 3. Professional writing to a patient.

# **Activity Breakdown: Tasks**

#### Task:

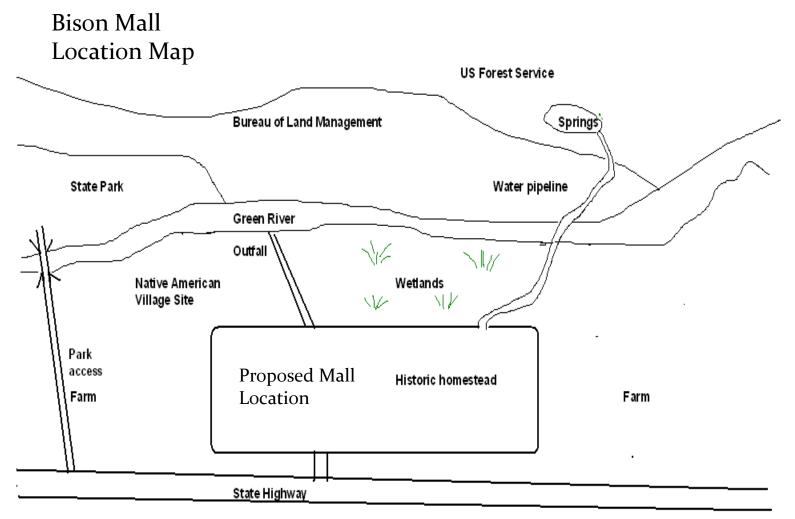
Students will choose a medication and write a note to a mock patient explaining why they are being prescribed the medication by a physician, the dosing, and the side effects. This note should be in letter format.

#### Tips for Success:

This assignment will be graded using the "pharmacology note rubric" found on Blackboard. A strong letter will have the following key components:

- 1. Description of the medication and why it is being prescribed or suggested.
- 2. Identify the correct dosing of the medication.
- 3. Explain potential side effects or adverse reactions.
- 4. Discuss any maintenance required with application of this medication (if applicable).
- 5. Uses terms the patient can understand.

Winkelmes, Mary-Ann. "Transparency in Teaching: Faculty Share Data and Improve Students' Learning." *Liberal Education* 99,2 (Spring 2013). Winkelmes, et al. "A Teaching Intervention that Increases Underserved College Students' Success." *Peer Review* (Winter/Spring 2016).





### Natural Resource Management: PLOs

- I. Communication both verbally and in writing
- II. Problem solving
- III. Content knowledge
- **IV.** Human influence on value and management of natural resources

		Learning Outcomes		
CLASS	1.	II.	III.	IV.
NRM 150	1			
NRM 225	D	D	D	D
RNG 136		- E	D	I
RNG 213	D		D	D
ENT 210			D	D
SOIL 210	D	D	D	1
NRM 421	D	D		D
RNG/NRM 452	D		D	
NRM 462	Μ	Μ	Μ	Μ

1. Core Curriculum Map of Learning Outcomes

## **Capstone: Management Plan**

Work with company/agency/landowners to identify questions/problems

Students write management plan throughout course:

- Bibliography of literature related to topic
- Outline of what they will cover and solutions to explore
- Reach out to professors, professionals, and others to problem solve
- Write 2 drafts, heavily edited at professional level, expected to make changes
- Final presentation to explain their work and obtain feedback
- Final management plan (often about 50 pages/group)

### Natural Resource Management: PLOs

- I. Communication both verbally and in writing
- II. Problem solving
- III. Content knowledge
- **IV.** Human influence on value and management of natural resources

		L	earning Outcomes	
CLASS	1.	II.	III.	IV.
NRM 150	1			
NRM 225	D	D	D	D
RNG 136		I.	D	I
RNG 213	D		D	D
ENT 210			D	D
SOIL 210	D	D	D	I. I.
NRM 421	D	D		D
RNG/NRM	D		D	
452				
NRM 462	М	М	М	Μ

1. Core Curriculum Map of Learning Outcomes

#### **Assessing assignments:**

- 1. To what extent did students achieve an intended learning outcome?
- 2. What patterns (of success and difficulty) emerged from student work?

**Assessment measures** 

**Checklist:** list of required attributes or elements for an acceptable response

**Rubric:** description of performance levels for required attributes or elements

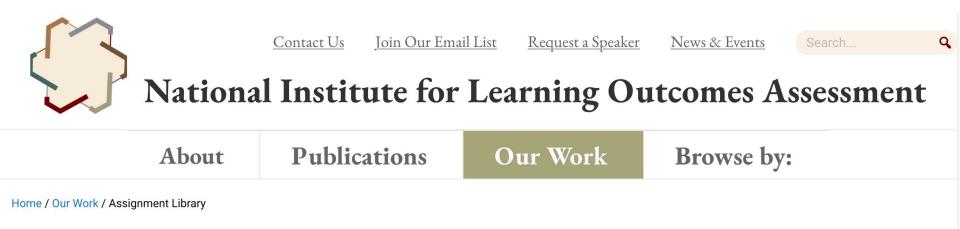
#### **Embedded or signature assignments:**

- Yield information about achievement of CLOs and PLOs
- 2. Inform continuous improvement efforts at course and program level

#### Next steps:

- 1. Review your course assignments
- 2. Talk with an assessment colleague
- 3. Visit the NILOA Assignment Library

#### https://www.learningoutcomesassessment.org/ourwork/assignment-library/



# Assignment Library

The materials in the Assignment Library underwent a three part review process. NILOA team members review the initial submission, then the assignment is peer-reviewed by faculty in an assignment charrette.

