

2017-18
Program Assessment Report Guide
Submission Deadline: October 31, 2018
to Office of Academic Excellence

This guide will show assessment coordinators the process of program assessment for 2017-18, including descriptions, examples and rubric measures for the annual program assessment report. Follow the guide descriptions in black while referencing the example text in blue and the rubric text in gray.

Section 1 –

The mission of the Bachelor of Science in Nuclear Medicine and Molecular Imaging Technology (NMMIT) program at Oregon Institute of Technology is to prepare students to be successful in the field of Nuclear Medicine and Molecular Imaging. To be successful graduates must demonstrate knowledge and skills that will allow them to be competitive in the

1. Perform as competent, compassionate and caring health care professionals.
2. Successfully pass the ARRT registry board exam in Nuclear Medicine & PET/CT, Computed Tomography, and/or Magnetic Resonance Imaging
3. Pursue continuing education opportunities through online learning and/or local, regional, national conferences to satisfy registry and state licensure requirements.
4. Think critically, communicate effectively, and demonstrate professional ethics
5. Apply radiation safety procedures for themselves, staff, patients and the general public

Section 3 –Program Description and History:

This content will stay fairly static from year to year, and can be included in any reasonable order, but program enrollment, graduate, and employment, and (if applicable) board pass rates should be updated each year based on updated data.

- Program History
- Program Locations
- Program Enrollment
- Program Graduates
- Employment Rates and Salaries
- Board and Licensure Exam Results (if applicable)
- Industry Relationships
- Showcase Learning Experiences
- Success Stories/Descriptions of Successful Graduates (potentially including quotes from students highlight the programs' effective preparation)

The Nuclear Medicine and Molecular Imaging Technology program officially began in 1999 and is the only Nuclear Medicine and Molecular Imaging program in the state of Oregon. Enrollment trends from 2000 to 2018 have varied from 12 to 20 students per year in the program. By the year of 2018, there were 56 students enrolled in the program. For the class of 2018, retention was 83.3% and attrition was 16.7%. Attrition was the result of (2) students failing to pass a course or courses, and (1) student dropping out and reconsidering Nuclear Medicine as a career path.

Program Location: Klamath Falls Campus only for the didactic and laboratory education and training. Across the United States for the fourth year Clinical Externship education and training.

<p>No mission statement or educational objectives are included.</p>	<p>Mission statement and objective are vague, unclear, or lack coherence. They are too general to distinguish it from other programs or are focused on the department rather than the program.</p>	<p>Mission statements and objective identifies the programs purpose, but needs some development. The statement <u>might not be focused on learners</u> as the primary stakeholders.</p>	<p>Mission statements and objective outline the programs purpose. (i.e., why the program exists and what the program does that distinguishes it from other units or programs). All points are included or well developed. The wording of the statement is focused on learners as the primary stakeholders and is clear to a general audience.</p>
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- e) an ability to identify, formulate, and solve engineering problems
- f) an understanding of professional and ethical responsibility as well as the importance of professional licensure
- g) an ability to communicate effectively
- h) the broad education necessary to understand the impact of engineering solutions in a global and societal context
- i) a recognition of the need for, and an ability to engage in lifelong learning
- j) a knowledge of contemporary issues
- k) an ability to use the techniques, skill, and modern engineering tools necessary for engineering practice
- l) an ability to explain basic concepts in management, business, public policy, and leadership
- m) an ability to evaluate concepts and ideas from alternative perspectives

PSLO 1. The student will demonstrate knowledge and application of radiation safety precautions and ALARA concepts by didactic examination and laboratory practical assessment

PSLO 2. The student will demonstrate ethical reasoning through a variety of scenarios in lecture and lab, and adherence to professional responsibilities identified on their Professional Evaluation performed at the end of each term.

PSLO 3. The student will demonstrate knowledge and use of instrumentation in Nuclear Medicine by didactic examination and laboratory practical assessment.

PSLO 4. The student will perform nuclear medicine procedures in inquiry and analysis demonstrated on lab practical assessment.

PSLO 5. The student will demonstrate knowledge and uses of radiopharmaceuticals used in Nuclear Medicine by didactic examination and lab practical assessment

OREGON TECH PROGRAM ASSESSMENT REPORT (Section B)

1 – Beginning	2 – Developing	3 – Good	4 – Exemplary
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Outcomes Clarity

No outcomes stated. Outcomes present, but

		<p>partners) about the currency of program learning outcomes.</p>	<p>applied mission and reflect application of theory to practice.</p> <p>Evidence of recent program and external discussions about the continued relevance of learning outcomes.</p>
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Section 5 –Curriculum Map

F – Foundation
P – Practice
C – Capstone

COURSE	PSLO 1	PSLO 2	PSLO 3	PSLO 4	PSLO 5	ESLO 1 Comm	ESLO 2 In & Acq	ESLO 3 Ethical Reason	ESLO 4 Teamwork	ESLO 5 Quant Lit	ESLO 6 Divers Persp
Wri 121,122 Sp 111						F					
Hum or Soc Scien							F				
SPE 221 (321)									F		
Chem 350											
Physics 217 NMT 217 Patient Care		F						F			

NMT 410 Extern	C	C	C	C	C	C	C	C	C	C	C
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OREGON TECH PROGRAM ASSESSMENT REPORT R (Section 5)			
Outcomes are mapped to course/learning experiences and assessment plan			
1 – Beginning	2 – Developing	3 – Good	4 – Exemplary

Section 6 –Assessment Cycle

Please complete a table to show PSLO and ESLO

No activities/ courses listed for outcomes assessed during the current year	Activities/courses listed but link to outcomes is absent.	Most outcomes have classes and/or activities linked to them.	All outcomes assessed during the report year have classes and/or activities linked to them.
Multi-year cycle plan			
No formal assessment plan beyond current year.	Report contains a multi-year cycle outlining when assessment of all program student learning outcomes will occur.	Report contains a multi year plan for assessment of learning outcomes, with courses identified for all assessment activities.	Clear, multiyear plan with several years of implementation (both past and future) outlined and clearly connected, with identification of courses and activities where assessment will occur. Plan extends out at least far as the next assessment of any outcomes assessed during report year.

Section 7 –Methods for Assessment

Each PSLO should be assessed with 2 direct measures and 1 indirect measure. Please provide the methods for assessment for this academic year. In many cases, it may make sense to organize this section by outcome and/or assessment activity, and to integrate description of methods, results, interpretation, and action plans. Description of methods can be completed as soon as assessment activities are identified (ideally in fall term of each academic year); Results, Analysis, and Action Plans should be completed after assessment data are collected.

Narrative for each assessment activity should ideally include:

- Description of the activity (assignment and its course context) and assessment method at a level that makes it clear that the activity is a reasonable measure of the outcome. Assignments can be attached as an appendix.
- Description of the rubric or scoring method, again at the level of detail that makes it clear the rubric is a reasonable tool to assess the outcome. Rubrics can be attached as an appendix.
- If relevant, discussion of parallels in assessment processes across sites. Although assessment processes do not need to be identical between different sites, the same measures should be assessed in all ways.
- Identification of target performance criteria (and, ideally, a justification for why the targets were set at a certain level).
- Description of scoring process (Faculty raters? External raters? Multiple raters for reliability?)
- Clear presentation of results (and, where possible, comparison with past performance on the same outcome).
- Description of how results were presented to and discussed by program faculty.
- Interpretation of results, including discussion of factors such as assignment design, context, instructor, etc., that may have impacted student performance.

Students in both the NMT 215 and NMT 312 courses offered during Winter term in our curriculum map will receive a Radiation Safety Assignment that will ask students to identify actions steps that can be taken to reduce radiation exposure to themselves and to patients within a Nuclear Medicine department. Students will also be asked to identify various radiation transport indexes and actions steps to reduce radiation exposure to patients. Finally, students will identify at least five action steps to identify and measure radioactive contamination.

Scoring and evaluation will be conducted using the PSLO #1 rubric following this narrative. Four criteria will be evaluated for each student using this rubric and a measurement scale of 1-4. The minimum acceptable performance will be 80% of students scoring 3 or higher.

This assessment will be conducted in all three levels of student education and training. For the fourth year of training, students in their fourth year of externship training in the NMT 410 Externship course will be evaluated by Indirect Student exit surveys performed by a variety of clinical instructors as well as a variety of locations and hospitals. This should allow us to identify trends based on a cross section of evaluators and sites.

Target performance criteria will be 80% of students scoring a 3 or higher. This is consistent with our performance criteria of at least a cumulative score of 80% on our lab practical evaluations administered in each of our programmatic courses at the end of each term.

Performance will be evaluated by the instructor of that course as well as an instructor not teaching that course, but in the MIT department. Results will be compared to the last time this PSLO was evaluated, 2015. Results will be

ethical codes of conduct consistent with our discipline and our registry organizations: American Association of Radiologic Technologists (ARRT) and/or the Nuclear Medicine Technology Certification Board (NMTCB). The assignment will then present a scenario the student may face while on externship. The student will be asked to identify and describe the ethical issue(s) using the code of ethics. The student will describe the party or parties involved and discuss their point of view. The student will also describe possible or alternate approaches to the issue(s). The student will choose and defend one of the approaches they think is most appropriate.

Scoring and evaluation will be conducted using the PSLO#1/ELSO 3 rubric following this narrative. Four criteria will be evaluated for each student using this rubric and a measurement scale. The minimum acceptable performance will be 80% of students scoring 3 or higher.

This assessment will be conducted in all three levels of student education and training in the NMMIT program. In addition to the Direct Assessment approach in the NMT 217 and NMT 312 courses, students in their fourth year of externship training in the NMT 410 Externship course will be evaluated by Indirect Student exit surveys performed by a

Student can make and support plausible ethical decisions.	course instructor using Oregon Tech's Ethics Rubric				
ESLO 3: Klamath Falls Campus, NMT 312, Rick Hoylman					
ESLO 3 Oregon Tech students will make and defend reasonable ethical judgments.					

Criteria

Methods

Scaleds

			reasonable way to assess that outcomes.
	Valid relationship between outcomes and rubric		
Seemingly no relationship between outcomes and rubric. (No indication of rubric being used.)	At a superficial level, it appears that an appropriate rubric is used to assess the outcomes, but no explanation is provided.	Some detail concerning the rubric's appropriateness is provided, but description doesn't fully justify the appropriateness of the rubric to evaluation of the outcome and for the course context.	<p>Rubric is provided and shows clear alignment between outcome and rubric elements.</p> <p>Detail provided regarding outcome to-rubric match.</p> <p>Rubric is 134.28 re W n BMT(p)2.2 (ro)-6</p>

	methodology and/or results.		affected results (Documents who reviewed the data and the comparison results between reviewers).
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8. Evidence of Improvement in Student Learning.

If this is an outcome being assessed on your standard schedule, you have past res 0 Td [(-4 (3n (d)-0.(r.)TJ (t))6.2f (d)42

9. Data-driven Action Plans: Changes Resulting from Assessment

EXAMPLE: (Format is

	recommendations in improving the program assessment practices.	revision improving the program assessment practices.	program (changing methodology, collecting supplementary data, etc.) are outlined, drawing upon insightful and specific analysis of flaws in past assessments and best practices in academic assessment
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Accountability on improvement

No information is there on how the modifications will be re-evaluated, when and by whom.	Incomplete information is included on implementation timelines, responsible parties, and re-assessment plans.	Most information on implementation plan is included (timeline, responsible parties, re assessment schedule) is included.	All modifications include timeline for implementation, names of responsible parties, and identify when reassessment will occur (whether at the next time the outcome comes up in the assessment cycle or sooner).
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Planning/budgeting alignment.

No attempt at aligning improvement plans with planning and budgeting processes.