

Linguistics Program 2022 Assessment Report

MISSION STATEMENT

Linguistic literacy is an essential attribute in the education of students who will be citizens and leaders of multiple global communities: economic, technological, scientific, social, political, and cultural. An understanding of the extent, range, and limits of linguistic diversity fosters a non-normative appreciation of differences within and across speech communities. Through training in core areas of linguistic analysis (phonetics, phonology, morphology, syntax, and semantics) and related subfields (including language development, language endangerment and revitalization, and historical linguistics), and exposure to languages spoken in Montana, the nation and throughout the globe, the Linguistics Program provides students with critical thinking skills about a broad range of issues in language use, development, variation, and change.

DEPARTMENT ALIGNMENT WITH PRIORITIES FOR ACTION

After listing each departmental objective, indicate which of the five <u>Priorities for Action</u> the objective supports. In this section, you may also briefly describe any innovative or noteworthy programs/initiatives that support the Priorities for Action.

- Produce students who have a comprehensive understanding of core concepts and principles of linguistic analysis. (PFA
 1: Place students at the center of all we do; PFA 2: Drive excellence in teaching, learning and research)
 Innovative/Noteworthy: Courses such as LING 270S Introduction to Linguistics, LING 477 Bilingualism, and LING
 473/573 Language and Culture utilize real-life examples and focus on topics central to student's lives which maintains student engagement.
- 2. Produce students proficient in analyzing the linguistic structure of diverse languages. (PFA 1: Place students at the center of all we do; PFA 2: Drive excellence in teaching, learning and research; PFA 4: Partner with place) Innovative/Noteworthy: Courses such as LING 470 *Linguistics Analysis*, LING 471/571 *Phonetics & Phonology*, LING 474/574 *Historical Linguistics*, LING 475/575 *Linguistic Field Methods*, LING 484/584 *North American Indigenous Languages and Linguistics*, and LING 489/589 *Morphology* offer hands-on, practical experience with real-world applications, examining languages spoken right here in Montana and those spoken across the globe.
- 3. Develop students' understanding and appreciation of the embedding of language in social contexts. (PFA 3: Embody the principle of "mission first, people always"; PFA 4: Partner with place) Innovative/Noteworthy: Courses such as LING 375X Linguistic Ecology and Language Endangerment and LING 484/584 North American Indigenous Languages and Linguistics provide students with an opportunity to build a "sense of place" by focusing on Indigenous languages spoken in Montana.
- 4. Promote the value of linguistic diversity within and across global speech communities. (PFA 2: Drive excellence in teaching, learning and research; PFA 4: Partner with place) Innovative/Noteworthy: Courses such as LING 375X Linguistic Ecology and Language Endangerment, LING 473/573 Language and Culture, LING 477 Bilingualism, and LING 478 Learner Language help students understand the importance of celebrating linguistic diversity locally and globally.
- 5. Prepare students to thrive in demanding graduate programs and careers. (PFA 1: Place students at the center of all we do; PFA 2: Drive excellence in teaching, learning and research) Innovative/Noteworthy: Upper-division courses include rigorous research components. Students acquire research skills and have opportunities to disseminate the results of their research.

STUDENT LEARNING OUTCOMES and MEASUREMENT TOOLS

	Student Learning Outcomes	LING 270	LING 470	Advanced courses	Senior exit exam
1.	Ability to identify classes of speech sounds according to their acoustic and articulatory properties, as well as their functional role in particular languages.	 Exam 1: Transcribe English words in IPA; solve a problem on allophony in a given language. Pre-test/Post-test (Appendix 2) Achievement target: 75% of students provide correct answers for Q1 & Q2 of post-test. 	Transcribe English words in IPA: HW1, HW2, A1, final exam; achievement target: 75% of students achieve at least 80% for QA1 of final exam. Identify natural classes in English and other languages: HW3, A1, final exam; achievement target: 75% of students achieve at least 80% for QA3 of final exam. Analyze allophones in different languages: HW4, HW6, A2, final exam; achievement target: 75% of students achieve at least 80% for QB2 of final exam.	• Assignments: acoustic measurements, sound organization, analysis of phonological data sets	Q13: IPA vowels Q14: minimal pairs Q15: syllable structure Q16: acoustic properties Q17: allophony Q18: assimilation Achievement target: 75% of students select correct answers for 4 out of the 6 questions
2.	Ability to identify and distinguish morphemes according to their form (free, bound, affix) and function (inflection vs. derivation) in familiar and unfamiliar languages.	 Exam 2: Divide English words into morphemes and label them as free or bound; inflectional or derivational. Pre-test/Post-test (Appendix 2). Achievement target: 75% of students provide correct answers for Q3 & Q4 of post-test. 	 Identify morphemes and their order in unfamiliar languages: HW9, HW10, A3, final exam; achievement target: 75% of students achieve at least 80% for QC1 of final exam. Identify morphological processes in unfamiliar languages: HW10, HW11, A3, final exam; achievement target: 75% of students achieve at least 80% for QC3 of final exam. 	Assignments: morphological analysis of unfamiliar languages. Morphological sketches.	Q1: affix and derivation Q3: Word coinage Q4: classifying bound morphemes Q5: identifying roots Q6: morpheme identification Q7: word coinage Q20: polysemy Achievement target: 75% of students select correct answers for 4 out of the 7 questions

3.	Ability to identify the constituent structure of simple and complex sentences.	Exam 2: Draw syntactic trees of simple phrases and sentences in English. Pre-test/Post-test (Appendix 2). Achievement target: 75% of students provide correct answers for Q5 of post-test.	Identify constituency and draw phrase structure trees of English sentences, including coordination and embedding: HW13, HW14, HW15, A4, final exam; achievement target: 75% of students achieve at least 80% for QD1 of final exam. Draw phrase structure trees and identify word order properties of unfamiliar languages: HW16, A4, final exam; achievement target: 75% of students achieve at least 80% for QD2 of final exam	LING 472/572: Due to a change in instructor, measurement tools for this course will be revised.	Q2: phrase structure rule Q8: adjunct Q9: nominative-accusative Q10: ambiguity Q11: syntactic structure Q12: complement clause Q19: thematic role Achievement target: 75% of students select correct answers for 4 out of the 7 questions
4.	Ability to identify a variety of contextual influences on language, including: context of utterance, geography, social status, gender, ethnicity, & age.	 Exam 3: Discuss factors contributing to language variation. Pre-test/Post-test (Appendix 2). Achievement target: 75% of students provide correct answers for Q6 of post-test. 		LING 473/573: Due to a change in instructor, measurement tools for this course will be revised.	
5.	Ability to identify and distinguish the basic stages of first- and second-language acquisition.	 Exam 3: Identify milestones in first language acquisition. Pre-test/Post-test (Appendix 2). Achievement target: 75% of students provide correct answers for Q9 of post-test. 		LING 477: • Exam: examine bilingual types of multi-language users based on given data; describe differences by developmental stage.	
6.	Ability to identify factors leading to language endangerment.	 Exam 3: Identify levels of language endangerment. Pre-test/Post-test (Appendix 2). Achievement target: 75% of students provide correct answers for Q10 of post-test. 		LING 477: • Exam: Describe a given language's status in terms of EGIDS	

RESULTS and MODIFICATIONS

Student Learning Outcomes results

Learning Outcome 1:

- LING 270 pre/post-test (in 2020 and 2021) Q1 and Q2: students continue to score low for these questions on the pre-test (0-10%). Students fell short of the achievement target (75% of students select a correct answer) on post-test Q1 in 2020 (57%) but exceeded the achievement target for Q1 in 2021 (79%). Students fell short of the achievement target for Q2 in both years (14% and 21%). See Appendix 2.
- LING 470 final exam (in 2021) QA1, QA3, QB1: students fell short of the achievement target (75% of students achieve a grade of at least 80% on the question): the percent of students who achieved a grade of 80% on these questions ranged from 59%-74%. See Appendix 3.
- Senior exit exam results (2020-2022) are limited (our major is still new and only 7 students have taken the exam). Students fell short of the achievement target (75% of students select a correct answer for 4 of 6 questions: Q13-18). 66% of students selected correct answers for 4 questions. However, for 3 of these 6 questions, 100% of students selected correct answers. See Appendix 4.

Modifications made to enhance learning

Results are shared among the Linguistics Program faculty and strategies moving forward are discussed.

While the ability to identify classes of speech sounds according to their acoustic and articulatory properties, as well as their functional role in particular languages seems to remain difficult for students at the introductory level, their abilities develop at the upper level. We plan to provide more review activities and transcription practice in LING 270, increase hands-on practice with natural classes in English and other languages in LING 470, as well as revising units on allophony and changing unit practice exercises to required components. We expect these modifications will lead to results closer to our senior exit exam achievement targets.

Learning Outcome 2:

- LING 270 pre/post-test (in 2020 and 2021) Q3 and Q4: students fell short of the achievement target (75% of students select a correct answer) for both questions in both years (24%-60%) and performed only slightly better than the pretest. See Appendix 2.
- LING 470 final exam (in 2021) QC1: students fell short of the achievement target (75% of students achieve a grade of at least 80% on the question): the percent of students who achieved a grade of 80% on this question was 56%. See Appendix 3.
- Senior exit exam results (2020-2022) are limited (our major is still new and only 7 students have taken the exam). Students fell short of the achievement target (75% of students select a correct answer for 4 of 7 questions: Q1, Q3-7, Q20). 57% of students selected correct answers for 4 questions. However, for 3/7 questions, 100% of students selected correct answers. See Appendix 4.

Results are shared among the Linguistics Program faculty and strategies moving forward are discussed.

Students' ability to identify and distinguish morphemes according to their form (free, bound, affix) and function (inflection vs. derivation) in familiar and unfamiliar languages is not yet fully developed at the introductory level, but is increasing at the upper level. In 270 we plan to increase the number of exercises focused on affixation in both English and unfamiliar languages and to spend more time targeting derivation vs. inflection, a concept that students traditionally struggle with, particularly examining languages such as English. In 470 we plan to increase the number of complex data sets in unfamiliar languages to give students more practice examining polymorphemic data from unfamiliar languages. We expect these modifications will lead to results closer to our senior exit exam achievement targets.

Learning Outcome 3:

- LING 270 pre/post-test (in 2020 and 2021) Q5: students met the achievement target (75% of students select a correct answer) in 2020 (76%) but fell short of the achievement target in 2021 (67%). See Appendix 2.
- LING 470 final exam QD1 and QD2: students fell short of the achievement target (75% of students achieve a grade of at least 80% on the question): the percent of students who achieved a grade of 80% on QD1 was 56% and on QD2 was 26%. See Appendix 3.
- Senior exit exam results (2020-2022) are limited (our major is still new and only 7 students have taken the exam). Students fell short of the achievement target (75% of students select a correct answer for 4 of 7 questions: Q1, Q3-7, Q20). 43% of students selected correct answers for 4 questions. See Appendix 4.

Results are shared among the Linguistics Program faculty and strategies moving forward are discussed.

Students' ability to identify the constituent structure of simple and complex sentences are developing even at the introductory level. At the upper level, where the focus expands to examining syntactic structures in languages other than English, students are still struggling. In LING 270 we plan to increase hands-on practice identifying structural ambiguity in English. For LING 470 we plan to separate the unit on phrase structure into different units in order to better tackle each concept. We also plan to increase time examining syntactic structures in unfamiliar languages. We expect these modifications will lead to results closer to our senior exit exam achievement targets.

FUTURE PLANS FOR CONTINUED ASSESSMENT

- 1. We plan to continue using the LING 270 (Introduction to Linguistics) pre- and post-test measurement tool to monitor the effect of modifications outlined above. In addition to this pre- and post-test assessment tool, we encourage students to self-identify milestones in their understanding of basic concepts in linguistics.
- 2. We began examining data collected using the measurement tool for LING 470 (Linguistic Analysis) in Autumn 2021. We plan to continue using this tool so that we can begin comparison across semesters.
- 3. Due to a change in instructor for LING 472/572 (Syntax) and LING 473/573 (Language and Culture), we plan to revise measurement tools for these courses and begin collecting data. Due to changes in curriculum, these courses are not offered every year, so we anticipate it will take a few assessment cycles to analyze collected data.
- 4. We plan to develop achievement targets for measurement tools in other advanced courses.
- 5. We are exploring types of external assessment to implement. Per the 2020 assessment scoring sheet, this will provide validity to the internal assessment that we have implemented.
- 6. Our major is still in its early stages: launched in 2019, currently 29 majors. Thus far, data collected from the senior exit exam is limited (7 students), but as we graduate more majors, we will continue to collect and analyze this data.
- 7. Following a suggestion from the 2020 assessment scoring sheet to include assessment that determines student perception of our program, we plan to add questions on student satisfaction to the Senior Exit Exam, such as:
 - What do you think are the strengths of the Linguistics Major at UM?
 - What do you think are areas for improvement?
 - How well do you think your Linguistics Major prepared you for your future endeavors?
 - Would you recommend the Linguistics Major at UM to other students?
 - Overall, how satisfied are you with your experience as a Linguistics Major at UM?

APPENDICIES

- Appendix 1: Curriculum map
- Appendix 2: Pre/post-test results for LING 270: Introduction to Linguistics (2020 & 2021)
- Appendix 3: Selected exam question results for LING 470: Linguistic Analysis (2021)
- Appendix 4: Senior Exit Exam results (2020-2022)

Appendix 1: Curriculum map

Appendix I Curriculum Mapping LINGUISTICS MAJOR									
Danwing Course (Name and Number)	S								
Required Course (Name and Number)	1:	2:	3:	4:	5:	6:			
LING 270 Introduction to Linguistics	I/A	I/A	I/A	I/A	I/A	I/A			
LING 375X Ling. Ecology & Lg. Endangerment	1					D			
LING 470 Linguistic Analysis	D/A	D/A	D/A						
LING 471 Phonetics & Phonology	М								
LING 472 Syntax			М						
LING 473 Language & Culture*				М		М			
LING 474 Historical Linguistics*	М	М	М						
LING 475 Linguistic Field Methods*	М	М	М			М			
LING 477 Bilingualism*				D	D				
LING 478 Learner Language*	1				М				
LING 484 NA Indigenous Lgs & Ling*	М	М	М			М			
LING 489 Morphology		М							
LING 494 Seminar	М	М	М	М	М	М			

KEY

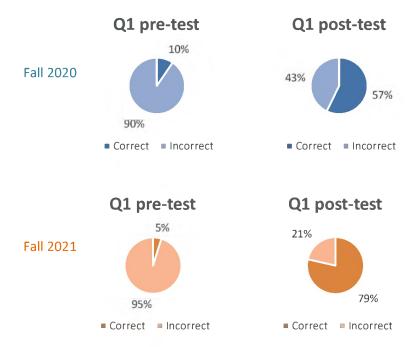
- * = Electives
- I = Introduced
- D = Developed/reinforced, with opportunities to practice
- M = Mastery
- A = Assessment evidence collected

Appendix 2: Pre/post-test results for LING 270: Introduction to Linguistics (2020 & 2021)

Achievement Targets: Level - select correct answers; Percentage of students – 75%

Q1. How many vowels does English possess?

- a 5
- b. 5 or 6
- c. 15
- d. 21

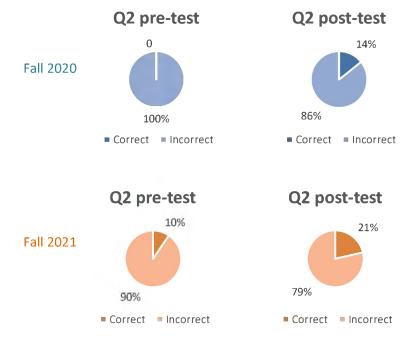


57% and 79% of the students in 2020 and 2021 respectively selected the correct answer. The achievement target was not met in 2020, but it was met in 2021.

MODIFICATION: Continue to provide review opportunities.

Q2. The English word exam consists of how many speech sounds?

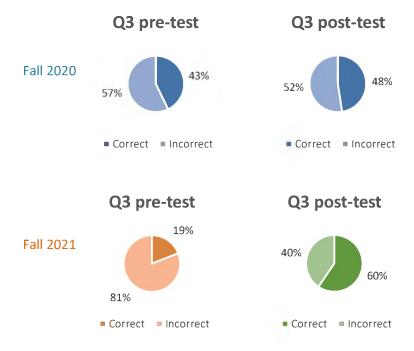
- a. 1
- b. 2
- c. 4
- d. 5



14% and 21% of the responded students in 2020 and 2021 respectively selected the correct answer. The achievement target was not met in both years. Linguistic notion of *sound* is not successfully learned by majority of the students.

MODIFICATION: Increase transcription practice.

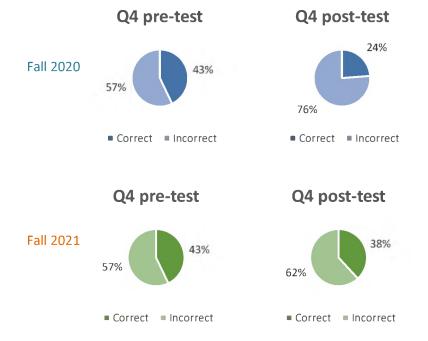
- Q3. Select an example word which contains an affix.
 - a. beautiful
 - b. bookcase
 - c. hippopotamus
 - d. sleep



In 2020, 48% of the students selected the correct answer. The achievement target was not met. In 2021, 60% of the students selected the correct answer. The achievement target was not met.

MODIFICATION: Increase data sets focused on affixation.

- Q4. Select the combination which correctly indicates the types of morphemes underlined in the following sentences:
 - (i) The shadow is moving. (ii) Mary is a good writer.
 - a. i) derivational, ii) derivational
 - b. i) inflectional, ii) derivational
 - c. i) derivational, ii) inflectional
 - d. i) inflectional, ii) inflectional

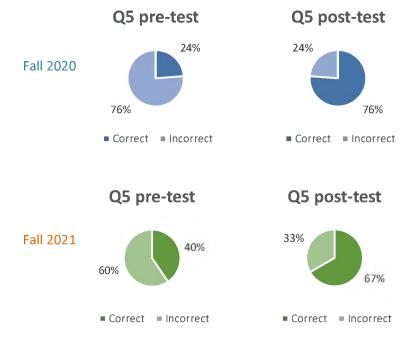


24% of the students selected the correct answer in both years. Unfortunately, the percentage of the currently answered students went down in 2021.

MODIFICATION: Increase opportunities for practice.

Q5. "I saw the man in the park" shows which of the followings?

- a. lexical ambiguity
- b. morphological ambiguity
- c. political ambiguity
- d. structural ambiguity

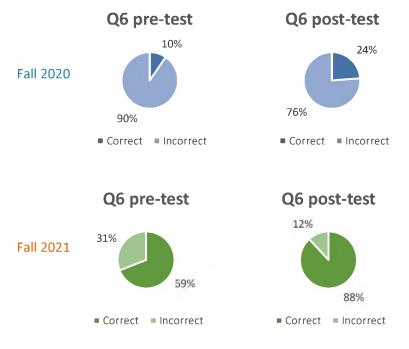


In 2020, 76% of the students selected the correct answer. *Syntactic ambiguity* had not been successfully learned by 42% of the students. In 2021, 67% of the responded students selected the correct answer. The achievement target was met in 2020, but not in 2021.

MODIFICATION: Increase data sets focused on identifying structural ambiguity in English.

Q6. Accents may carry information of a speaker's ____.

- a. race, intelligence, and native tongue
- b. intelligence
- c. native tongue
- d. race

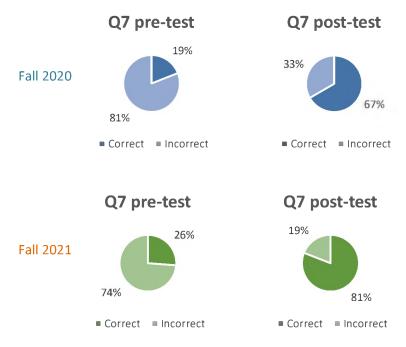


In 2020, 24% of the students selected the correct answer. In 2021, 88% of the students selected the correct answer. The achievement target was not met in 2020, but it was met in 2021. Note that 69% of the students already correctly answered in the pre-test in 2021.

MODIFICATION: Continue current strategy.

Q7. Regardless of a governmental or political act, an existing language may be selected and used by different language communities for social or commercial communication purposes. What is this type of language called?

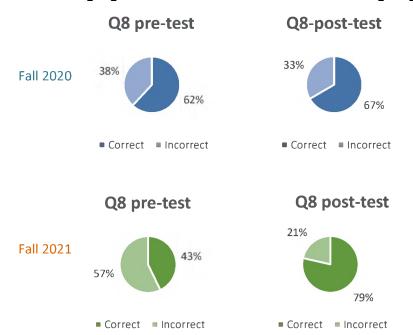
- a. official language
- b. standard language
- c. pidgin
- d. lingua franca



67% of the students selected the correct answer in 2020, and 81% of the students selected the correct answer in 2021. The achievement target was not met in 2020, but it was met in 2021.

MODIFICATION: Add an in-class exercise.

- Q8. A proto-language is __
 - a. a descendant language of an ancestral language
 - b. an ancient language written in a document
 - c. a language spoken by primitive people
 - d. a language reconstructed from two or more existing languages that are related

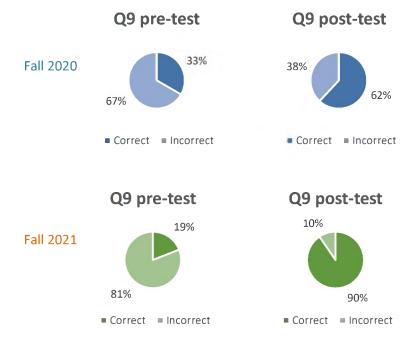


67% of the students selected the correct answer in 2020. 79% of the students selected the correct answer in 2021. The achievement target was not met in 2020, but it was met in 2021.

MODIFICATION: Revised lectures so that more in-class time can be spent on this topic.

Q9. Which of the following supports the easiness of L1 acquisition and difficulty of L2 acquisition?

- a. Innateness hypothesis
- b. Sapir-Whorf hypothesis
- c. Critical-Age hypothesis
- d. Universal Grammar hypothesis

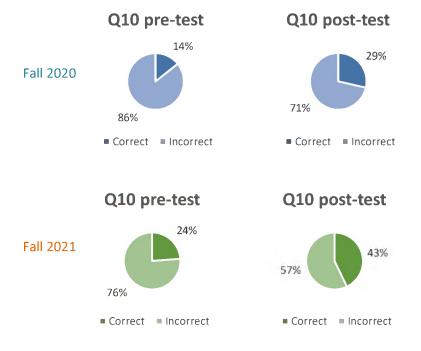


62% of the students selected the correct answer in 2020, 90% of the students selected the correct answer in 2021. The achievement target was not met in 2020, but it was met in 2021.

MODIFICATION: Continue current strategy.

Q10. What is the approximate population of natural bilinguals/multilinguals in the world?

- a. 30%
- b. More than 50%
- c. 2%
- d. 10%



29% of the students selected the correct answer in 2020, and 43% in 2021.

MODIFICATION: Revise lectures to focus on more in-class discussion on this topic.

Appendix 3: Selected exam question results for LING 470: Linguistic Analysis (2021)

• Achievement target: 75% of students achieve at least 80% on each question

Questions pertaining to Learning Outcome 1:

QA1

RESULT: 74% of students achieved at least 80% on this final exam question

MODIFICATION: Continue current strategy

QA3

RESULT: 59% of students achieved at least 80% on this final exam question

MODIFICATION: increase hands-on practice with natural classes in English and other languages

QB₁

RESULT: 63% of students achieved at least 80% on this final exam question

MODIFICATION: revise units on allophony, change unit practice exercises to required components

Question pertaining to Learning Outcome 2:

QC1

RESULT: 56% of students achieved at least 80% on this final exam question

MODIFICATION: increase number of complex data sets

Questions pertaining to Learning Outcome 3:

QD1

RESULT: 56% of students achieved at least 80% on this final exam question

MODIFICATION: separate phrase structure unit into different units

QD2

RESULT: 26% of students achieved at least 80% on this final exam question

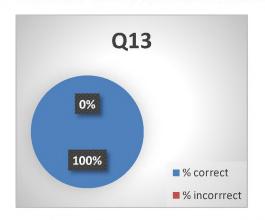
MODIFICATION: increase time examining syntactic structures in unfamiliar languages

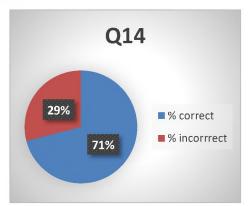
Appendix 4: Senior Exit Exam results (2020-2022)

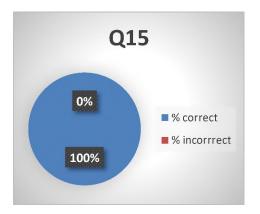
	Q. 1 /5.00 5.00	Q. 2 /5.00 5.00	Q. 3 /5.00 5.00	Q. 4 /5.00 5.00	Q. 5 /5.00	Q. 6 /5.00	Q. 7 /5.00	Q. 8 /5.00	Q. 9 /5.00	Q. 10 /5.00
Student 1			5.00	5.00						
	5.00			5.00	5.00	5.00	0.00	5.00	5.00	5.00
Student 2	3.50	5.00	5.00	5.00	5.00	5.00	0.00	5.00	5.00	5.00
Student 3	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Student 4	5.00	0.00	5.00	5.00	0.00	0.00	5.00	5.00	5.00	5.00
Student 5	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Student 6	5.00	0.00	5.00	5.00	0.00	5.00	0.00	5.00	5.00	5.00
Student 7	5.00	0.00	5.00	5.00	5.00	5.00	0.00	5.00	5.00	0.00
AVG	5.00	2.86	5.00	5.00	3.57	4.29	2.14	5.00	5.00	4.29

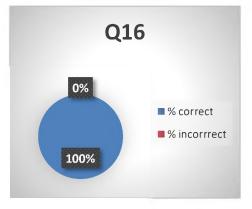
	Q. 11	Q. 12	Q. 13	Q. 14	Q. 15	Q. 16	Q. 17	Q. 18	Q. 19	Q. 20	TOTAL
	/5.00	/5.00	/5.00	/5.00	/5.00	/5.00	/5.00	/5.00	/5.00	/5.00	
Student 1	5.00	5.00	5.00	5.00	5.00	5.00	0.00	5.00	5.00	5.00	90.00
Student 2	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	0.00	90.00
Student 3	5.00	5.00	5.00	5.00	5.00	5.00	0.00	5.00	5.00	5.00	95.00
Student 4	0.00	0.00	5.00	5.00	5.00	5.00	5.00	0.00	0.00	5.00	65.00
Student 5	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	0.00	5.00	95.00
Student 6	5.00	5.00	5.00	0.00	5.00	5.00	5.00	5.00	5.00	0.00	75.00
Student 7	0.00	0.00	5.00	0.00	5.00	5.00	0.00	5.00	0.00	5.00	60.00
AVG	3.57	3.57	5.00	3.57	5.00	5.00	2.86	4.29	2.86	3.57	81.43

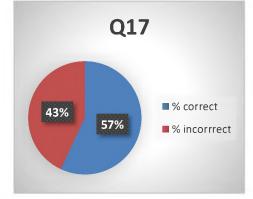
Questions pertaining to Learning Outcome 1:

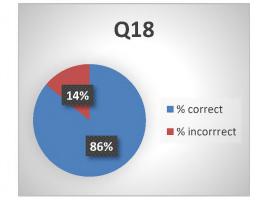




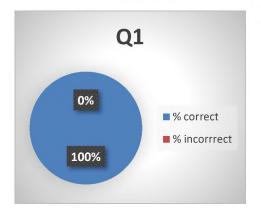


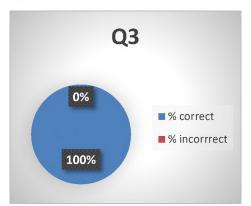


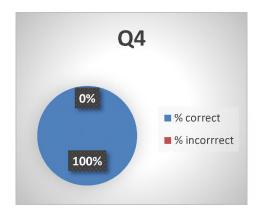


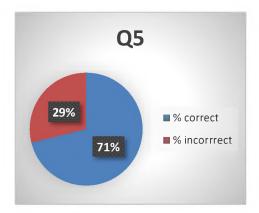


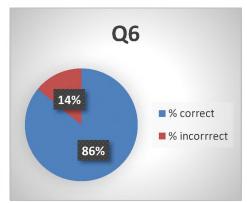
Questions pertaining to Learning Outcome 2:

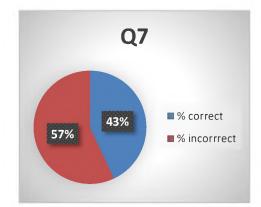


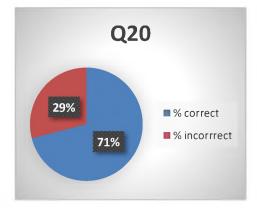












Questions pertaining to Learning Outcome 3:

