

Digital Circuits I

08/23/2022



Program/Course Assessment - Electronic Engineering Technology (AS)

ELET121N:Digital Circuits I

<i>Course Competencies</i>	<i>Assessment Methods</i>	<i>Results</i>	<i>Use of Results</i>
1. Number System Conversions - Convert between number systems and express signed numbers in binary signed magnitude using 1's and 2's complement form Course Competency Status: Active Assessment Cycles: 2017 - 2018 (Fall), 2018 - 2019 (Fall), 2019 - 2020 (Fall), 2020 - 2021 (Fall), 2021-2022 (Fall)	Series of Assignments - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL). *Criterion: 50% of students achieve >= 7.0 out of 10.0	Reporting Period: 2021-2022 (Fall) Result Type: Criteria Met 77.77% (05/31/2022) Total # of Students Assessed: 9 # of Students Meeting Criteria: 7 Related Documents: ELET121N Section 1 Assessment Fall 2021.docx ELET121N Section 1 Grades Fall 2021.xlsx ELET121N-A Assessment F2021.docx ELET121N-A Grades F2021.xlsx EET Assessment Report 5-31-22.docx	Use of Results: See "Related Documents" under Results for more information. (05/31/2022)
	Series of Assignments - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL). *Criterion: Average of POL for all students >= 7.0 out of 10.0	Reporting Period: 2021-2022 (Fall) Result Type: Criteria Met Average of POL for all students = 7.24 out of 10.00 (05/31/2022) Total # of Students Assessed: 9 Related Documents: EET Assessment Report 5-31-22.docx ELET121N Section 1 Assessment Fall 2021.docx ELET121N Section 1 Grades Fall 2021.xlsx ELET121N-A Assessment F2021.docx ELET121N-A Grades F2021.xlsx	Use of Results: See "Related Documents" under Results for more information. (05/31/2022)
		Reporting Period: 2020-2021 (Fall) Result Type: Criteria Met Average of POL for all students = 9.20 out of 10.00 (05/31/2021)	Use of Results: See "Related Documents" under Results for more information. (05/31/2021)

Course Competencies	Assessment Methods	Results	Use of Results
		<p>Total # of Students Assessed: 13 Related Documents: Electrical Engineering Technology May 31 2021 Assessment Report.docx ELET Assessment Meeting Notes 011421.pdf ELET121 Grades Fall 2020 updated POLS vp.xlsx ELET121 Grades Fall 2020.xlsx ELET121N-1_F2020_Assessment (2).docx ELET121N-1_F2020_Assessment.docx</p>	
		<p>Reporting Period: 2019-2020 (Fall) Result Type: Criteria Met Average of POL for all students = 8.41 out of 10.00 (05/26/2020) Total # of Students Assessed: 21 Related Documents: ELET121N Grades Fall 2019.xlsx ELET121N-1_F2019_Assessment.docx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/26/2020)</p>
		<p>Reporting Period: 2018 - 2019 Result Type: Criteria Met Average of POL for all students = 9.11 out of 10.00 (12/19/2018) Total # of Students Assessed: 10 Related Documents: ELET121N-1_F2018_Assessment.docx Grades Fall 2018.xlsx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (12/19/2018)</p>
		<p>Reporting Period: 2017 - 2018 Result Type: Criteria Met Average of POL for all students = 8.15 out of 10.00 (01/10/2018) Total # of Students Assessed: 19 Related Documents: ELET Assessment Meeting Notes 020518.docx EET Curriculum_Change_Request_For ELET115N and ELET121N (1).docx ELET121N-1_F2017_Assessment.docx ELET121N-A_F2017_Assessment.docx ELET121N-A-Exam-Grades_Evals_Wksheet.xlsx F2017 ELET121 Classes w16b - wksht.xlsx</p>	<p>Use of Results: No problem so will continue with no change. See "Related Documents" under Results for more information. (01/10/2018)</p>

Course Competencies	Assessment Methods	Results	Use of Results
<p>2. Logic Gates - Understand and apply Logic Gates, Adders, Encoders, Decoders, Comparators, Multiplexers, and De-multiplexers.</p> <p>Course Competency Status: Active</p> <p>Assessment Cycles: 2017 - 2018 (Fall), 2018 - 2019 (Fall), 2019 - 2020 (Fall), 2020 - 2021 (Fall), 2021-2022 (Fall)</p>	<p>Series of Assignments - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL).</p> <p>*Criterion: 50% of students achieve >= 7.0 out of 10.0</p>	<p>Reporting Period: 2021-2022 (Fall)</p> <p>Result Type: Criteria Met</p> <p>55.55% (05/31/2022)</p> <p>Total # of Students Assessed: 9</p> <p># of Students Meeting Criteria: 5</p> <p>Related Documents:</p> <p>ELET121N Section 1 Assessment Fall 2021.docx</p> <p>ELET121N Section 1 Grades Fall 2021.xlsx</p> <p>ELET121N-A Assessment F2021.docx</p> <p>ELET121N-A Grades F2021.xlsx</p> <p>EET Assessment Report 5-31-22.docx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/31/2022)</p>
	<p>Series of Assignments - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL).</p> <p>*Criterion: Average of POL for all students >= 7.0 out of 10.0</p>	<p>Reporting Period: 2021-2022 (Fall)</p> <p>Result Type: Criteria Not Met</p> <p>Average of POL for all students = 6.91 out of 10.00 (05/31/2022)</p> <p>Total # of Students Assessed: 9</p> <p>Related Documents:</p> <p>EET Assessment Report 5-31-22.docx</p> <p>ELET121N Section 1 Assessment Fall 2021.docx</p> <p>ELET121N Section 1 Grades Fall 2021.xlsx</p> <p>ELET121N-A Assessment F2021.docx</p> <p>ELET121N-A Grades F2021.xlsx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/31/2022)</p>
		<p>Reporting Period: 2020-2021 (Fall)</p> <p>Result Type: Criteria Not Met</p> <p>Average of POL for all students = 6.93 out of 10.00 (05/31/2021)</p> <p>Total # of Students Assessed: 13</p> <p>Related Documents:</p> <p>Electrical Engineering Technology May 31 2021 Assessment Report.docx</p> <p>ELET Assessment Meeting Notes 011421.pdf</p> <p>ELET121 Grades Fall 2020 updated POLS vp.xlsx</p> <p>ELET121 Grades Fall 2020.xlsx</p> <p>ELET121N-1_F2020_Assessment (2).docx</p> <p>ELET121N-1_F2020_Assessment.docx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/31/2021)</p>
		<p>Reporting Period: 2019-2020 (Fall)</p> <p>Result Type: Criteria Met</p> <p>Average of POL for all students = 8.72 out of 10.00</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/26/2020)</p>

Course Competencies	Assessment Methods	Results	Use of Results
		<p>(05/26/2020) Total # of Students Assessed: 21 Related Documents: ELET121N Grades Fall 2019.xlsx ELET121N-1_F2019_Assessment.docx</p> <hr/> <p>Reporting Period: 2018 - 2019 Result Type: Criteria Met Average of POL for all students = 8.53 out of 10.00 (12/19/2018) Total # of Students Assessed: 10 Related Documents: ELET121N-1_F2018_Assessment.docx Grades Fall 2018.xlsx</p> <hr/> <p>Reporting Period: 2017 - 2018 Result Type: Criteria Met Average of POL for all students = 8.07 out of 10.00 (01/10/2018) Total # of Students Assessed: 19 Related Documents: ELET Assessment Meeting Notes 020518.docx EET Curriculum_Change_Request_For ELET115N and ELET121N (1).docx ELET121N-1_F2017_Assessment.docx ELET121N-A_F2017_Assessment.docx ELET121N-A-Exam-Grades_Evals_Wksheet.xlsx F2017 ELET121 Classes w16b - wksht.xlsx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (12/19/2018)</p> <hr/> <p>Use of Results: No concern so will continue with no change. See "Related Documents" under Results for more information. (01/10/2018)</p>
<p>3. Boolean Algebra Rules /DeMorgans's Theorem /Karnaugh Maps - Simplify algebraic expressions using Boolean algebra, DeMorgan's theorems and Karnaugh maps to simplify expressions or truth tables. Course Competency Status: Active Assessment Cycles: 2017 - 2018 (Fall), 2018 - 2019 (Fall), 2019 - 2020 (Fall), 2020 - 2021 (Fall), 2021-2022 (Fall)</p>	<p>Series of Assignments - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL). *Criterion: 50% of students achieve >= 7.0 out of 10.0</p> <hr/> <p>Series of Assignments - Exam(s), in</p>	<p>Reporting Period: 2021-2022 (Fall) Result Type: Criteria Not Met 44.44% (05/31/2022) Total # of Students Assessed: 9 # of Students Meeting Criteria: 4 Related Documents: ELET121N Section 1 Assessment Fall 2021.docx ELET121N Section 1 Grades Fall 2021.xlsx ELET121N-A Assessment F2021.docx ELET121N-A Grades F2021.xlsx EET Assessment Report 5-31-22.docx</p> <hr/> <p>Reporting Period: 2021-2022 (Fall)</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/31/2022)</p> <hr/> <p>Use of Results: See "Related</p>

Course Competencies	Assessment Methods	Results	Use of Results
	<p>addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL). *Criterion: Average of POL for all students >= 7.0 out of 10.0</p>	<p>Result Type: Criteria Not Met Average of POL for all students = 6.54 out of 10.00 (05/31/2022) Total # of Students Assessed: 9 Related Documents: EET Assessment Report 5-31-22.docx ELET121N Section 1 Assessment Fall 2021.docx ELET121N Section 1 Grades Fall 2021.xlsx ELET121N-A Assessment F2021.docx ELET121N-A Grades F2021.xlsx</p>	<p>Documents" under Results for more information. (05/31/2022)</p>
		<p>Reporting Period: 2020-2021 (Fall) Result Type: Criteria Not Met Average of POL for all students = 5.99 out of 10.00 (05/31/2021) Total # of Students Assessed: 13 Related Documents: Electrical Engineering Technology May 31 2021 Assessment Report.docx ELET Assessment Meeting Notes 011421.pdf ELET121 Grades Fall 2020 updated POLS vp.xlsx ELET121 Grades Fall 2020.xlsx ELET121N-1_F2020_Assessment (2).docx ELET121N-1_F2020_Assessment.docx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/31/2021)</p>
		<p>Reporting Period: 2019-2020 (Fall) Result Type: Criteria Met Average of POL for all students = 8.97 out of 10.00 (05/26/2020) Total # of Students Assessed: 21 Related Documents: ELET121N Grades Fall 2019.xlsx ELET121N-1_F2019_Assessment.docx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/26/2020)</p>
		<p>Reporting Period: 2018 - 2019 Result Type: Criteria Met Average of POL for all students = 7.11 out of 10.00 (12/19/2018) Total # of Students Assessed: 10</p>	<p>Use of Results: See "Related Documents" under Results for more information. (12/19/2018)</p>
		<p>Reporting Period: 2017 - 2018 Result Type: Criteria Met Average of POL for all students = 8.24 out of 10.00</p>	<p>Use of Results: No concern so will continue with no change. See "Related Documents" under</p>

Course Competencies	Assessment Methods	Results	Use of Results
		<p>(01/10/2018) Total # of Students Assessed: 19 Related Documents: ELET Assessment Meeting Notes 020518.docx EET Curriculum_Change_Request_For ELET115N and ELET121N (1).docx ELET121N-1_F2017_Assessment.docx ELET121N-A_F2017_Assessment.docx ELET121N-A-Exam-Grades_Evals_Wksheet.xlsx F2017 ELET121 Classes w16b - wksht.xlsx</p>	<p>Results for more information. (01/10/2018)</p>
<p>4. Latches and Flip-Flops - Apply Latches and Flip-Flops and use One-shots and Multi-vibrators as clocking sources Course Competency Status: Active Assessment Cycles: 2017 - 2018 (Fall), 2018 - 2019 (Fall), 2019 - 2020 (Fall), 2020 - 2021 (Fall), 2021-2022 (Fall)</p>	<p>Series of Assignments - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL). *Criterion: 50% of students achieve >= 7.0 out of 10.0</p>	<p>Reporting Period: 2021-2022 (Fall) Result Type: Criteria Not Met 44.44% (05/31/2022) Total # of Students Assessed: 9 # of Students Meeting Criteria: 4 Related Documents: ELET121N Section 1 Assessment Fall 2021.docx ELET121N Section 1 Grades Fall 2021.xlsx ELET121N-A Assessment F2021.docx ELET121N-A Grades F2021.xlsx EET Assessment Report 5-31-22.docx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/31/2022)</p>
	<p>Series of Assignments - Exam(s), in addition to Laboratory Assignment(s) and Homework Assignment(s) contribute to assessing student performance for this point of learning (POL). *Criterion: Average of POL for all students >= 7.0 out of 10.0</p>	<p>Reporting Period: 2021-2022 (Fall) Result Type: Criteria Not Met Average of POL for all students = 4.85 out of 10.00 (05/31/2022) Total # of Students Assessed: 9 Related Documents: EET Assessment Report 5-31-22.docx ELET121N Section 1 Assessment Fall 2021.docx ELET121N Section 1 Grades Fall 2021.xlsx ELET121N-A Assessment F2021.docx ELET121N-A Grades F2021.xlsx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/31/2022)</p>
		<p>Reporting Period: 2020-2021 (Fall) Result Type: Criteria Not Met Average of POL for all students = 4.98 out of 10.00 (05/31/2021) Total # of Students Assessed: 13 Related Documents:</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/31/2021)</p>

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		Electrical Engineering Technology May 31 2021 Assessment Report.docx ELET Assessment Meeting Notes 011421.pdf ELET121 Grades Fall 2020 updated POLS vp.xlsx ELET121 Grades Fall 2020.xlsx ELET121N-1_F2020_Assessment (2).docx ELET121N-1_F2020_Assessment.docx	
		<p>Reporting Period: 2019-2020 (Fall) Result Type: Criteria Met Average of POL for all students = 7.11 out of 10.00 (05/26/2020) Total # of Students Assessed: 21 Related Documents: ELET121N Grades Fall 2019.xlsx ELET121N-1_F2019_Assessment.docx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (05/26/2020)</p>
		<p>Reporting Period: 2018 - 2019 Result Type: Criteria Not Met Average of POL for all students = 5.92 out of 10.00 (12/19/2018) Total # of Students Assessed: 10 Related Documents: ELET121N-1_F2018_Assessment.docx Grades Fall 2018.xlsx</p>	<p>Use of Results: See "Related Documents" under Results for more information. (12/19/2018)</p>
		<p>Reporting Period: 2017 - 2018 Result Type: Criteria Not Met Average of POL for all students = 6.19 out of 10.00 (01/10/2018) Total # of Students Assessed: 19 Related Documents: ELET Assessment Meeting Notes 020518.docx EET Curriculum_Change_Request_For ELET115N and ELET121N (1).docx ELET121N-1_F2017_Assessment.docx ELET121N-A_F2017_Assessment.docx ELET121N-A-Exam-Grades_Evals_Wksheet.xlsx 2017 ELET121 Classes w16b - wksht.xlsx</p>	<p>Use of Results: Requested for more lab time (from 2 to 3 hours / week) to improve this. See "Related Documents" under Results for more information. (01/10/2018) Follow-Up: The extended lab hour was approved and will be implemented the next time the course is offered. (02/09/2018) The ELET Department put in a request (12/2017) to increase the contact lab hours from 2 to 3 per week. (12/16/2017) (01/10/2018)</p>