

Option 1

Program Level Outcomes Assessment Plan

Program Name/College: Laboratory Science Technology AOS/National Technical Institute for the Deaf

College Contact for Program Assessment: Todd Pagano (Program Director), Vince Daniele (Department Chair)

Program Goals	Student Learning Outcomes	Academic Program Profile	Data Source/Measure Curriculum Mapping	Benchmark	Timeline	Data Analysis Key Findings	Use of Results Action Items and Dissemination
Please List program-level goals	Students will be able to: (task, capability, knowledge, skills, and dispositions) Use measurable verbs.	Alignment to the five RIT essential outcomes - check all that apply. <input checked="" type="checkbox"/> Double click on the check box and find the Default Value and click Checked to check the box. To uncheck, the box, double click and then click Not Checked .	Assessment opportunity (course/experience) method/measures assignment/rubric)	Standard, target, or achievement level (usually a %) Statement of student Success	Identify when and how data are collected, aggregated, and analyzed	Identify who is responsible and list key findings	Identify how results are used and shared. List any recommendations or action items
1. Develop and document appropriate laboratory safety skills, quality control, technical communication, and professional readiness.	a. Apply safety regulations and protocols and correctly utilize safety equipment.	<input checked="" type="checkbox"/> Critical Thinking <input checked="" type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Laboratory Methods Course (NLST-260) Review of laboratory reports and ancillary course material found in the LST Portfolio	80% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating sheet.	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.

	<p>b. Demonstrate adherence to quality control procedures.</p>	<input checked="" type="checkbox"/> Critical Thinking <input checked="" type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	<p>Laboratory Methods Course (NLST-260)</p> <p>Review of laboratory reports and ancillary course material found in the LST Portfolio</p>	<p>80% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating sheet.</p>	<p>Annually, starting Spring 2014/2015</p>	<p>Collected by LST Assessment Coordinator or Program Director</p>	<p>Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.</p>
	<p>c. Demonstrate effective technical communication of results.</p>	<input type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input checked="" type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	<p>Laboratory Methods Course (NLST-260)</p> <p>Review of laboratory reports and ancillary course material found in the LST Portfolio</p>	<p>80% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating sheet.</p>	<p>Annually, starting Spring 2014/2015</p>	<p>Collected by LST Assessment Coordinator or Program Director</p>	<p>Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.</p>
	<p>d. Develop a professional resume.</p>	<input type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	<p>Laboratory Methods Course (NLST-260)</p> <p>Review of resume found in the LST Portfolio</p>	<p>80% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating</p>	<p>Annually, starting Spring 2014/2015</p>	<p>Collected by LST Assessment Coordinator or Program Director</p>	<p>Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.</p>

				sheet.			
2. Demonstrate use of analytical instrumentation including: electroanalytical, spectroscopy, and chromatography instruments.	a. Demonstrate processes and procedures to set-up, run, and maintain selected electroanalytical probes/meters.	<input checked="" type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Quantitative Instrumental Analysis Course NLST-250 Review of laboratory reports and ancillary course material found in the LST Portfolio	85% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating sheet.	Annually, starting Fall 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
	b. Demonstrate how to set-up, run, and maintain selected molecular spectrophotometers.	<input checked="" type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Quantitative Instrumental Analysis Course NLST-250 Review of laboratory reports and ancillary course material found in the LST Portfolio	85% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating sheet.	Annually, starting Fall 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
	c. Demonstrate how to set-up, run, and maintain selected atomic spectrophotometers.	<input checked="" type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Quantitative Instrumental Analysis Course NLST-250 Review of laboratory reports and ancillary course material found in the LST Portfolio -	85% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory	Annually, starting Fall 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.

				Science Technology portfolio rating sheet.			
	d. Demonstrate how to set-up, run, and maintain High Performance Liquid Chromatographs.	<input checked="" type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	<p>Laboratory Methods Course (NLST-260)</p> <p>Review of laboratory reports and ancillary course material found in the LST Portfolio</p>	85% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating sheet.	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
	e. Demonstrate how to set-up, run, and maintain Gas Chromatographs/Gas Chromatograph - Mass Spectrometers.	<input checked="" type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	<p>Laboratory Methods Course (NLST-260)</p> <p>Review of laboratory reports and ancillary course material found in the LST Portfolio</p>	85% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating sheet.	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
3. Demonstrate the processes involved in volumetric and gravimetric analyses including: sample preparation,	a. Perform sample preparation procedures and the corresponding calculations.	<input checked="" type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	<p>Analytical Chemistry Course (NLST-220)</p> <p>Review of laboratory reports and ancillary course material found in the LST Portfolio</p>	85% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.

titrations, and gravimetric techniques.				Laboratory Science Technology portfolio rating sheet.			
	b. Perform gravimetric procedures and the corresponding calculations.	<input checked="" type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global <input type="checkbox"/> Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Analytical Chemistry Course (NLST-220) Review of laboratory reports and ancillary course material found in the LST Portfolio	85% of all students will obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating sheet.	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
	c. Perform acid/base titrations and the corresponding calculations.	<input checked="" type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global <input type="checkbox"/> Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Analytical Chemistry Course (NLST-220) Review of laboratory reports and ancillary course material found in the LST Portfolio	85% of all students obtain a score of at least "2" ("acceptable/meets entry level professional standards") on all related items on the Laboratory Science Technology portfolio rating sheet.	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
4. Demonstrate biological and biotechnology-related techniques including: tasks involving sterile	a. Demonstrate appropriate use of sterile technique.	<input checked="" type="checkbox"/> Critical Thinking <input checked="" type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global <input type="checkbox"/> Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Laboratory Methods Course (NLST-260) Review of laboratory reports and ancillary	80% of all students obtain a score of at least "2" ("acceptable/meets entry level professional	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute

technique and the manipulation of proteomic and genomic material.			course material found in the LST Portfolio	standards”) on all related items on the Laboratory Science Technology portfolio rating sheet.			as requested.
	b. Perform proteomic and genomic manipulation techniques.	<input checked="" type="checkbox"/> Critical Thinking <input checked="" type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Laboratory Methods Course NLST-260 Review of laboratory reports and ancillary course material found in the LST Portfolio	80% of all students will obtain a score of at least “2” (“acceptable/meets entry level professional standards”) on all related items on the Laboratory Science Technology portfolio rating sheet.	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
5. Develop professional skills required to be effective on the job.	a. Engage productively in a collaborative team project.	<input checked="" type="checkbox"/> Critical Thinking <input checked="" type="checkbox"/> Ethical Reasoning <input type="checkbox"/> Integrative Literacies <input checked="" type="checkbox"/> Global Interconnectedness <input checked="" type="checkbox"/> Creative/Innovative Thinking	Laboratory Methods Course (NLST-260) Project	85% of students will score “3” or higher on a rubric scale of 1-5.	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
	b. Accurately and clearly present technical information to peers.	<input checked="" type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input checked="" type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Laboratory Methods Course (NLST-260) Project	85% of students will score “3” or higher on a rubric scale of 1-5.	Annually, starting Spring 2014/2015	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.

	c. Apply technical knowledge and skills on a co-operative work experience.	<input checked="" type="checkbox"/> Critical Thinking <input checked="" type="checkbox"/> Ethical Reasoning <input checked="" type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input checked="" type="checkbox"/> Creative/Innovative Thinking	Co-op Work Experience (NLST-299) RIT Supervisor Co-op Evaluation	80% of the students will successfully complete a program-related work experience and receive a score of "3" or higher (5 point scale) on Overall Co-op Performance	Annually, end of summer, starting 2014/2015	Collected by NTID Center on Employment (NCE)	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
	d. Gain entry level employment in the laboratory science field.	<input type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	NCE Job Placement Data	90% of graduates who are seeking employment in the laboratory science field will be employed.	Annually, Spring semester starting 2016/2017	Collected by NTID Center on Employment (NCE)	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.
	e. Assess program preparation and course satisfaction.	<input type="checkbox"/> Critical Thinking <input type="checkbox"/> Ethical Reasoning <input type="checkbox"/> Integrative Literacies <input type="checkbox"/> Global Interconnectedness <input type="checkbox"/> Creative/Innovative Thinking	Student Satisfaction Survey	80% of students will indicate they <i>Strongly Agree</i> or <i>More Agree than Disagree</i> (4-point scale) when asked to give an overall rating on two global items, one related to the program in general and the other related to the courses in the major.	Annually, Fall semester starting 2015/2016	Collected by LST Assessment Coordinator or Program Director	Shared with program faculty, annual college summary report, NTID Annual Report, and the greater Institute as requested.

