

2017-2018 Assessment Cycle

## Assessment Plan

### Mission Statement

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The primary mission of the **National Technical Institute for the Deaf** is to provide deaf and hard-of-hearing students with outstanding state-of-the-art technical and professional education programs, complemented by a strong arts and sciences curriculum, that prepare them to live and work in the mainstream of a rapidly changing global community and enhance their lifelong learning.

Secondarily, NTID prepares professionals to work in fields related to deafness; undertakes a program of applied research designed to enhance the social, economic and educational accommodation of deaf people; and shares its knowledge and expertise through outreach and other information dissemination programs.

The LST program was developed from an industrial perspective and is focused on preparing deaf and hard-of-hearing students for careers in the laboratory testing field.

### Measures

#### ▼ Laboratory Science Technology AAS/AOS Program Outcome Set

1. Develop and document appropriate laboratory safety skills, quality control, technical communication, and professional readiness

#### Student Learning Outcome: a. Apply safety regulations and protocols and correctly utilize safety equipment

- ▼ **Measure:** Laboratory Methods Course [NLST-260] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description:	Review of laboratory reports and ancillary course material in LST Portfolio
Acceptable Benchmark:	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.
Implementation Plan (timeline):	Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

### Student Learning Outcome: b. Demonstrate adherence to quality control procedures

▼ **Measure:** Laboratory Methods Course [NLST-260] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description: Review of laboratory reports and ancillary course material in LST Portfolio

Acceptable Benchmark: 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.

Implementation Plan (timeline): Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

### Student Learning Outcome: c. Demonstrate effective technical communication of results

▼ **Measure:** Laboratory Methods Course [NLST-260] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description: Review of laboratory reports and ancillary course material in LST Portfolio

Acceptable Benchmark: 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.

Implementation Plan (timeline): Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

### Student Learning Outcome: d. Develop a professional resume

▼ **Measure:** Laboratory Methods Course [NLST-260]- Resume in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description:	Review of resume found in the LST Portfolio
Acceptable Benchmark:	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.
Implementation Plan (timeline):	Annually
Key/Responsible Personnel:	Collected by LST Assessment Coordinator or Program Director

2. Demonstrate use of analytical instrumentation including: electroanalytical, spectroscopy, and chromatography instruments

### Student Learning Outcome: a. Demonstrate processes and procedures to set-up, run, and maintain selected electroanalytical probes/meters

▼ **Measure:** Quantitative Instrumental Analysis Course [NLST-250] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description:	Review of laboratory reports and ancillary course material found in the LST Portfolio
Acceptable Benchmark:	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.
Implementation Plan (timeline):	Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

**Student Learning Outcome: b. Demonstrate how to set-up, run, and maintain selected molecular spectrophotometers**

▼ **Measure:** Quantitative Instrumental Analysis Course [NLST-250] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description: Review of laboratory reports and ancillary course material found in the LST Portfolio

Acceptable Benchmark: 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.

Implementation Plan (timeline): Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

**Student Learning Outcome: c. Demonstrate how to set-up, run, and maintain selected atomic spectrophotometers**

▼ **Measure:** Quantitative Instrumental Analysis Course [NLST-250] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description: Review of laboratory reports and ancillary course material found in the LST Portfolio

Acceptable Benchmark: 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.

Implementation Plan (timeline): Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

### Student Learning Outcome: d. Demonstrate how to set-up, run, and maintain High Performance Liquid Chromatographers

▼ **Measure:** Laboratory Methods Course [NLST-260] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description: Review of laboratory reports and ancillary course material in LST Portfolio

Acceptable Benchmark: 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.

Implementation Plan (timeline): Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

### Student Learning Outcome: e. Demonstrate how to set-up, run, and maintain Gas Chromatographers/Gas Chromatographer – Mass Spectrometers

▼ **Measure:** Laboratory Methods Course [NLST-260] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description: Review of laboratory reports and ancillary course material in LST Portfolio

Acceptable Benchmark: 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.

Implementation Plan (timeline): Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

3. Demonstrate processes involved in volumetric & gravimetric analyses including: sample preparation, titrations, & gravimetric techniques

**Student Learning Outcome: a. Perform sample preparation procedures and the corresponding calculations**

▼ **Measure:** Analytical Chemistry Course [NLST-220] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description: Review of laboratory reports and ancillary course material found in the LST Portfolio

Acceptable Benchmark: 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.

Implementation Plan (timeline): Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

**Student Learning Outcome: b. Perform gravimetric procedures and the corresponding calculations**

▼ **Measure:** Analytical Chemistry Course [NLST-220] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description: Review of laboratory reports and ancillary course material found in the LST Portfolio

Acceptable Benchmark: 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.

Implementation Plan (timeline):	Annually
Key/Responsible Personnel:	Collected by LST Assessment Coordinator or Program Director

**Student Learning Outcome: c. Perform acid/base titrations and the corresponding calculations**

▼ **Measure:** Analytical Chemistry Course [NLST-220] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description:	Review of laboratory reports and ancillary course material found in the LST Portfolio
Acceptable Benchmark:	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.
Implementation Plan (timeline):	Annually
Key/Responsible Personnel:	Collected by LST Assessment Coordinator or Program Director

**4. Demonstrate biological & biotechnology-related techniques including: sterile technique & manipulation of proteomic & genomic material**

**Student Learning Outcome: a. Demonstrate appropriate use of sterile technique**

▼ **Measure:** Laboratory Methods Course [NLST-260] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description:	Review of laboratory reports and ancillary course material in LST Portfolio
Acceptable Benchmark:	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.
Implementation Plan (timeline):	Annually
Key/Responsible Personnel:	Collected by LST Assessment Coordinator or Program Director

**Student Learning Outcome: b. Perform proteomic and genomic manipulation techniques**

▼ **Measure:** Laboratory Methods Course [NLST-260] - Lab Reports and Ancillary Course Material in the LST Portfolio  
*Course level; Direct - Portfolio*

Details/Description:	Review of laboratory reports and ancillary course material in LST Portfolio
Acceptable Benchmark:	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.
Implementation Plan (timeline):	Annually
Key/Responsible Personnel:	Collected by LST Assessment Coordinator or Program Director

5. Develop professional skills required to be effective on the job

**Student Learning Outcome: a. Engage productively in a collaborative team project**

▼ **Measure:** Laboratory Methods Course [NLST-260] - Team Project  
*Course level; Indirect - Other*

Details/Description:	
Acceptable Benchmark:	80% of students will score “3” or higher on a rubric scale of 1-5.
Implementation Plan (timeline):	Annually



Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

**Student Learning Outcome: b. Accurately and clearly present technical information to peers**

▼ **Measure:** Laboratory Methods Course [NLST-260] - Project  
*Course level; Direct - Student Artifact*

Details/Description:

Acceptable Benchmark: 80% of students will score “3” or higher on a rubric scale of 1-5.

Implementation Plan (timeline): Annually

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director

**Student Learning Outcome: c. Apply technical knowledge and skills on a co-operative work experience**

▼ **Measure:** Co-op Work Experience [NLST-299] - RIT Supervisor Co-op Evaluation  
*Course level; Direct - Other*

Details/Description:

Acceptable Benchmark: 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

Implementation Plan (timeline): Annually, end of summer.

Key/Responsible Personnel: Collected by NTID Center on Employment (NCE)

**Student Learning Outcome: d. Gain entry level employment in the laboratory science field**

▼ **Measure:** NCE Job Placement Data

Details/Description:  
**Student Learning Outcome: e. Assess program preparation and course satisfaction**

Acceptable Benchmark: 90% of graduates who are seeking employment in the laboratory science field will be employed.

Implementation Plan (timeline): Annually, Spring semester starting 2016/2017

▼ **Measure:** Student Satisfaction Survey  
Key/Responsible Personnel: Collected by NTID Center on Employment (NCE)  
*Program level; Indirect - Survey*

Details/Description:

Acceptable Benchmark: 80% of students will indicate they Strongly Agree or More Agree than Disagree (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.

Implementation Plan (timeline): Annually, Fall semester starting 2015/2016

Key/Responsible Personnel: Collected by LST Assessment Coordinator or Program Director