



2015-2016 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.

### Outcomes and Measures

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

##### 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

▼ **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

###### 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

**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

**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**

**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

**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

**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

**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

**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**

**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

**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

**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

##### 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

##### 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

##### 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

##### 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

##### 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)

**d. Gain entry level employment in the laboratory science field**

▼ **Measure:** NCE Job Placement Data

**Details/Description:**

**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

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

**e. Assess program preparation and course satisfaction**

▼ **Measure:** Student Satisfaction Survey  
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

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