Mission Statement

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

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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

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

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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

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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

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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.

#### e. Demonstrate how to set-up, run, and maintain Gas Chromatographers/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.

### 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.

#### 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.

#### 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 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
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