2016-2017 Assessment Cycle

Assessment Plan

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
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.  

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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
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
### 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:**
**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)

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

**Measure:** Student Satisfaction 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