

# Biochemistry

## B.S

### *Expanded Statement of Institutional Purpose*

#### **Institutional Mission Reference**

Old Dominion University Catalog 1998 - 2000

#### **Institutional Goal(s) Supported**

Academic Programs - a) quality programs, b) general education, and c) meeting national standards of excellence.

### *Intended Educational (Student) Outcomes, Methods for Assessment, Criteria for Success, Assessment Results, and Use of Results*

#### **Intended Outcome 1**

A thorough knowledge of the basic principles of biochemistry, including atomic and molecular structure, chemical dynamics and the chemical and physical properties of substances.

**Method for Assessing Outcome 1 and Criterion for Success:** We give the Major Field Achievement Test (administered by the Educational Testing Service) to all of our seniors. We expect our students to perform at the 50 percentile level or above. So far our students have never scored below the 67th percentile.

**Summary of Assessment Data Collected for Outcome 1:** Our students all performed above the 67 percentile

**Alternate Method for Assessing Outcome 1 and Criterion for Success:** We administer a departmentally-developed senior survey to assess the students reaction to and opinion of their overall education. We expect that the overall satisfaction level will be greater than 75%

**Summary of Assessment Data Collected, Alternate Method for Outcome 1:** Student satisfaction is greater than 75%

**Alternate Method for Assessing Outcome 1 and Criterion for Success:** We provide an annual report to the American Chemical Society. Every five years we conduct an in-depth self-study which is reported to the American Chemical Society to determine whether or not our academic program should be reaccredited. The goal is to be accredited

**Summary of Assessment Data Collected, Alternate Method for Outcome 1:** We were reaccredited

**Use of Assessment Results from Intended Outcome 1 to Improve Academic Program:** We are at the appropriate level

#### **Intended Outcome 2**

A thorough knowledge of the subfields of chemistry, including analytical, inorganic, organic and physical chemistry

**Method for Assessing Outcome 2 and Criterion for Success:** We give the Major Field Achievement Test (administered by the Educational Testing Service) to all of our seniors. This test includes the sub-areas of analytical, inorganic, organic and physical chemistry. Again a minimum of the 50th percentile is expected.

**Summary of Assessment Data Collected for Outcome 2:** All students scored above the 50th percentile

**Alternate Method for Assessing Outcome 2 and Criterion for Success:** We administer a departmentally-developed senior survey to assess the students reaction to and opinion of their overall education. We expect that the overall satisfaction level will be greater than 75%

**Summary of Assessment Data Collected, Alternate Method for Outcome 2:** Student satisfaction is greater than 75%

**Alternate Method for Assessing Outcome 2 and Criterion for Success:** We provide an annual report to the American Chemical Society. Every five years we conduct an in-depth self-study which is reported to the American Chemical Society to determine whether or not our academic program should be reaccredited. The goal is to be accredited

**Summary of Assessment Data Collected, Alternate Method for Outcome 2:** We were reaccredited

**Use of Assessment Results from Intended Outcome 2 to Improve Academic Program:** We are at the appropriate level

**Intended Outcome 3**

A thorough knowledge of cognitive areas such as mathematics and physics to facilitate the understanding and manipulation of fundamental chemical theories.

**Method for Assessing Outcome 3 and Criterion for Success:** We give the Major Field Achievement Test (administered by the Educational Testing Service) to all of our seniors. We expect our students to perform at the 50 percentile level or above.

**Summary of Assessment Data Collected for Outcome 3:** All students performed above the 50th percentile

**Alternate Method for Assessing Outcome 3 and Criterion for Success:** We administer a departmentally-developed senior survey to assess the students reaction to and opinion of their overall education. We expect that the overall satisfaction level will be greater than 75%

**Summary of Assessment Data Collected, Alternate Method for Outcome 3:** Student satisfaction is greater than 75%

**Alternate Method for Assessing Outcome 3 and Criterion for Success:** We provide an annual report to the American Chemical Society. Every five years we conduct an in-depth self-study which is reported to the American Chemical Society to determine whether or not our academic program should be reaccredited. The goal is to be accredited

**Summary of Assessment Data Collected, Alternate Method for Outcome 3:** We were reaccredited

**Use of Assessment Results from Intended Outcome 3 to Improve Academic Program:** We are at the appropriate level

**Intended Outcome 4**

The ability to read, evaluate and interpret numerical, biochemical and general scientific information.

**Method for Assessing Outcome 4 and Criterion for Success:** We give the Major Field Achievement Test (administered by the Educational Testing Service) to all of our seniors. We expect our students to perform at the 50 percentile level or above.

**Summary of Assessment Data Collected for Outcome 4:** All students performed above the 50th percentile

**Alternate Method for Assessing Outcome 4 and Criterion for Success:** We administer a departmentally-developed senior survey to assess the students reaction to and opinion of their overall education. We expect that the overall satisfaction level will be greater than 75%

**Summary of Assessment Data Collected, Alternate Method for Outcome 4:** Student satisfaction is greater than 75%

**Alternate Method for Assessing Outcome 4 and Criterion for Success:** We are provide an annual report to the American Chemical Society. Every five years we conduct an in-depth self-study which is repoted to the American Chemical Society to determine whether or not our academic program should be reaccredited. The goal is to be accredited

**Summary of Assessment Data Collected, Alternate Method for Outcome 4:** We were reaccredited

**Use of Assessment Results from Intended Outcome 4 to Improve Academic Program:** We are covering the material at an high level

### **Intended Outcome 5**

The ability to communicate effectively both verbally and in writing.

**Method for Assessing Outcome 5 and Criterion for Success:** Extensive writing is required in our junior and senior level courses. Our seniors are expected to pass a one credit hour seminar course.

**Summary of Assessment Data Collected for Outcome 5:** All written reports were very good and the seminars were well put together and presented

**Alternate Method for Assessing Outcome 5 and Criterion for Success:** We administer a departmentally-developed senior survey to assess the students reaction to and opinion of their overall education. We expect that the overall satisfaction level will be greater than 75%

**Summary of Assessment Data Collected, Alternate Method for Outcome 5:** Student satisfaction is greater than 75%

**Alternate Method for Assessing Outcome 5 and Criterion for Success:** We are provide an annual report to the American Chemical Society. Every five years we conduct an in-depth self-study which is repoted to the American Chemical Society to determine whether or not our academic program should be reaccredited. The goal is to be accredited

**Summary of Assessment Data Collected, Alternate Method for Outcome 5:** We were reaccredited

**Use of Assessment Results from Intended Outcome 5 to Improve Academic Program:** Whereas written reports were very good, we need to expand writing.