

**ASSESSMENT RECORD FOR  
DEPARTMENT  
OF**

**Sciences and Mathematics**  
(Academic Department Name)

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2005-2006  
(Assessment Period Covered)

November 15, 2006  
(Date Submitted)

**Includes Assessment Reports for those Instructional Programs listed below:**

Title of Instructional Degree Program

Degree Level

(Associate, Bachelors,  
Master's, etc.)

Chemistry

Bachelor's

Submitted By: Robert Holloway

(Departmental Chair or Faculty Assessment Representative)

# ASSESSMENT REPORT FOR

**Chemistry**

(Instructional Degree Program)

**Bachelor's**

(Degree Level)

**2005-2006**

(Assessment Period Covered)

**November 15, 2006**

(Date Submitted)

## Expanded Statement of Institutional Purpose Linkage:

**Institutional Mission Reference:** As a university committed to the liberal arts as fundamental to education and committed to our affiliation with the Presbyterian Church (U.S.A.), Schreiner is dedicated to excellence in preparing students to live purposeful, humane and productive lives in their work, faith groups, families and communities.

**College/University Goal(s) Supported:** Schreiner is dedicated primarily to educating undergraduate students in the liberal arts, sciences, and professional disciplines, preparing them for entry into specific careers and graduate or professional programs.

## Intended Educational (Student) Outcomes:

1. Upon graduating with a major in chemistry a student will be able to design and carry out an independent experiment.

2. Upon graduating with a major in chemistry a student will be able to obtain, read, and analyze the current research literature.

3. Upon graduating with a major in chemistry a student will be able to write scientific research papers.

# ASSESSMENT REPORT FOR

Chemistry

(Instructional Degree Program)

2005-2006

(Assessment Period Covered)

Bachelor's

(Degree Level)

November 15, 2006

(Date Submitted)

## Intended Educational (Student) Outcome:

*NOTE: There should be one form C for each intended outcome listed on form B. Intended outcome should be restated in the box immediately below and the intended outcome number entered in the blank spaces.*

  1   A graduate in chemistry will be able to design and carry out an independent experiment.

## First Means of Assessment for Outcome Identified Above:

  1   a. **Means of Program Assessment & Criteria for Success:** Satisfactory performance (C or better) in general chemistry, organic chemistry, analytical chemistry, physical chemistry, and in the senior project.

  1   a. **Summary of Assessment Data Collected:** 2005-2006 general chemistry 85%; organic chemistry 94%; analytical chemistry 100%; physical chemistry (off rotation in 2005-6); no senior projects in chemistry in 2005-6.

  1   a. **Use of Results to Improve Instructional Program:** No changes are planned at this time.

# ASSESSMENT REPORT FOR

Chemistry

(Instructional Degree Program)

2005-2006

(Assessment Period Covered)

Bachelor's

(Degree Level)

November 15, 2006

(Date Submitted)

## Intended Educational (Student) Outcome:

*NOTE: There should be one form C for each intended outcome listed on form B. Intended outcome should be restated in the box immediately below and the intended outcome number entered in the blank spaces.*

  2   Upon graduating with a major in chemistry a student will be able to obtain, read, and analyze the current research literature.

## First Means of Assessment for Outcome Identified Above:

  2   a. **Means of Program Assessment & Criteria for Success:** The students will make a presentation of research results at end of BIOL 3350, Writing and Research. The students will show correct use and analysis of primary literature in a group of related articles. All students must meet the above criteria. Students may be given the opportunity to redo the research project. Satisfactory performance (C or better) in writing and research is a strong measure of the desired outcome.

  2   a. **Summary of Assessment Data Collected:** 2005-2006 – 71%

  2   a. **Use of Results to Improve Instructional Program:** No changes are planned at this time.

# ASSESSMENT REPORT FOR

Chemistry

(Instructional Degree Program)

2005-2006

(Assessment Period Covered)

Bachelor's

(Degree Level)

November 15, 2006

(Date Submitted)

## Intended Educational (Student) Outcome:

*NOTE: There should be one form C for each intended outcome listed on form B. Intended outcome should be restated in the box immediately below and the intended outcome number entered in the blank spaces.*

  3   Upon graduating with a major in chemistry a student will be able to write scientific research papers.

## First Means of Assessment for Outcome Identified Above:

  3   a. **Means of Program Assessment & Criteria for Success:** Students will complete a coherent research paper. Students will show correct use of the literature and will write a paper in the scientific style. All students must complete this program. Students may be given the opportunity to redo the research paper. Satisfactory performance (C or better) in writing and research, and in the senior project.

  3   a. **Summary of Assessment Data Collected:** 2005-2006 - 64%, No senior projects in chemistry

  3   a. **Use of Results to Improve Instructional Program:** No changes are planned at this time.