

## Degree Program Assessment Plan

Name of Department \_\_\_ Natural Sciences  
 Name of Degree Program \_Industrial Chemistry\_  
 Date Plan Submitted \_\_\_ February 8, 2008 \_\_\_\_\_

Dean's Approval George Pincus  
 (Dean's signature)

Notes: (1) All assessment measures are Direct (based on definitions in The University of Houston-Downtown Assessment Plan) except for Learning Outcome #6; (2) BIOL faculty will establish levels of competency and score results as "meets expectations," "exceeds expectations," or does not meet expectations;" (3) Each year, three Learning Outcomes will be evaluated (e.g., Spring, 2008 – Learning Outcomes 1-3; Fall 2008 – Learning Outcomes 4-6)

Learning Outcomes	Methods of Assessment	Time-Table 2006 -2012
1. Graduates will have a basic knowledge in discipline	ASC scores for General Chemistry, Organic Chemistry, and Physical Chemistry will be compared with the national mean and the means of previous UHD across 2-5 years.	Sp 2008, Fall 2009, Fall 2011
2. Graduates will be able to effectively use the scientific method and scientific reasoning	Samples of exams and papers (at each grade level from A-D) from junior-level and senior-level courses will be evaluated 2-3 faculty for demonstration of scientific reasoning and applications of the scientific method.	Sp 2008, Fall 2009, Fall 2011
3. Graduates will have laboratory skills common to modern laboratories	Samples of lab reports and lab notebooks from 2 junior-level or senior-level courses will be evaluated 2-3 faculty for demonstration of laboratory skills, in particular, proper notebook maintenance, computational skills for setting up experiments, and experimental design	Sp 2008, Fall 2009, Fall 2011
4. Graduates will be able to effectively communicate scientific information in writing and in oral presentations	(1) Papers from junior-level and senior-level courses will be evaluated by 2-3 faculty for competency in expository writing using WPE benchmarks. (2) Random samples of research posters from the Student Research Conference and other professional conferences will be evaluated by 2-3 faculty.	Fall 2008, Fall 2010, Fall 2012
5. Graduates will be able to carry out independent research	Random samples of student research notebooks and research posters from the Student Research Conference and other professional conferences will be evaluated by 2-3 faculty.	Fall 2008, Fall 2010, Fall 2012
6. Graduates will be able to work as part of a team	Faculty and students will complete a survey assessing teamwork in research projects, clubs, and lab courses wherein teamwork is emphasized.	Fall 2008, Fall 2010, Fall 2012