

Annual Goals for Chemistry & Industrial Hygiene

2010-2011

Title:	Retention of Professional Chemistry Major
Description:	The Department plans to implement a tracking system in order to monitor our professional chemistry majors' progress towards graduation.
Budget:	0.00
University Goals:	2
Strategic Goals:	238
Responsibility:	Program Coordinator
Participation:	Department Chair
Results:	A tracking system has been designed and implemented. The new system should allow the department to have a better understanding of how our majors are progressing, and will give a historic record of when majors are added and dropped. The data is collected each semester as students are advised.
Actions:	The system was designed and implemented this past academic year. The results from the first year are being reviewed.
Improvements:	As additional data are acquired, any trends that exist relating to commons pitfalls, etc. should be apparent. For example, if it becomes apparent that a particular class is giving our majors trouble, advisors can instruct the students as to how to better prepare themselves for that particular course. This data should be a valuable tool as we advise our majors.

Title:	Minority Recruitment
Description:	The Department plans to assess the effectiveness of our minority recruitment efforts, and consider implementation of new methods.
Budget:	0.00
University Goals:	3

**Strategic
Goals:**

Responsibility: Program Coordinator

Participation: Department Chair

Results: Highlights of the IH academic program and professional opportunities in IH were brought up to the attention of participants of the Annual Presidential Mentors Academy (PMA) Program at UNA. The PMA is a program that provides financial help and learning experience to incoming minority freshmen whose racial group is underrepresented on the UNA campus. Eligible students to the PMA program are those who possess leadership and academic potential and are a resident of the state of Alabama or one of eleven contiguous counties in TN and MS.

Actions: This and other efforts have increased awareness of the need for focus on minority recruitment. Currently, the Department helps to host an annual high school exam competition. The student's information given on the exam score sheet is used to contact top scoring students to make them aware of scholarship opportunities and to invite the students to visit campus. The information form has been changed so as to include race and gender. All minority students participating in the exam competition will be invited to visit campus and our department for an open house event.

Improvements:

Title: Assessment of Physical Resources

Description: Given the strong possibility that a new science and technology building will be constructed in the relatively near future, the Department plans to assess our current and projected needs for office, research, laboratory, and classroom space.

Budget: 0.00

**University
Goals:** 1,5

**Strategic
Goals:** 238,239

Responsibility: Department Faculty

Participation: Department Chair

Results: To date, departmental faculty have each met with the designers at Exp for the purpose of determining our department's needs now, and into the future.

Actions: A space program has been created that will be used in the design of the new

building.

Improvements:

Title:	Faculty Development
Description:	The Department plans to promote faculty development by emphasizing the importance of travel to professional conferences and presentations.
Budget:	0.00
University Goals:	1
Strategic Goals:	238,239
Responsibility:	Department Faculty
Participation:	Department Chair
Results:	The Department helped to send two faculty members (Drs. Figueroa and Olive) to the annual American Industrial Hygiene Associated Conference and Exposition in Portland, Oregon; two faculty members (Drs. Diaz and Hofacker) to the Southeastern Regional Meeting of the American Chemical Society in New Orleans, LA; and one faculty member (Dr. Moeller) to the annual meeting of the Alabama Academy of Science held at Jacksonville State University.

Actions:

Improvements:	Traditionally, our analytical chemist attends The Pittsburgh Conference (PittCon) on Analytical Chemistry and Applied Spectroscopy, a Pennsylvania not-for-profit educational corporation which is comprised of the Spectroscopy Society of Pittsburgh (SSP) and the Society for Analytical Chemists of Pittsburgh (SACP). Pittcon attracts nearly 20,000 attendees from industry, academia and government from 90 countries worldwide. Dr. Huffman plans to attend this coming year.
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Title:	Student Career Opportunities/Job Placement
Description:	The Department plans to host a Career Day specifically oriented to chemistry and industrial hygiene.
Budget:	0.00
University Goals:	2,5

Strategic**Goals:**

Responsibility: Student Organization Advisors

Participation: Department Chair

Results: A career symposium was organized by the Department of Chemistry and Industrial Hygiene where chemistry and occupational health professionals discussed with UNA students the demands, responsibilities, challenges and opportunities of their appointments. Government and private industries were represented at this symposium. The local OSHA Area Director, EH&S Managers of Wyle Laboratories and the National Alabama Corporation, Industrial Hygienists of Bridgestone Firestone and Honda Manufacturing, and Environmental Engineers of SCA Tissue North America were among the presenters.

Actions: The program was well received by students, and presenters gave positive feedback as well. This effort will likely become an annual event. In addition to the Career Day event, it has become standard practice to forward all job postings to faculty for distribution to their students, as well as to post opportunities on the Department's bulletin board.

Improvements:

Student Learning Outcomes for Industrial Hygiene

2010-2011

Title:	Identification of Health Affecting Agents
Description:	It is expected that at the time of graduation, UNA IH students will be able to identify health-affecting agents, factors, and stressors and how they relate to typical industrial processes, unit operations, and tasks.
Budget:	\$0.00
Core Competencies:	4,5
25% Online:	

50% Online:**Core Competencies:**

4,5

How Often:

Every year

Assessed this Year?

Yes

Responsibility:

Program Coordinator

Participation:

Department Chair

Direct Assessments

Hourly and Final Exams

Indirect Assessments**Results:**

A total of 84% of students demonstrated appropriate level of knowledge.

Curriculum:

None

Actions:

No

Improvements:

The IH Program at UNA has identified 25 educational outcomes. These outcomes are defined as broad expectations of knowledge and abilities that students must acquire upon completion of their academic program. Each outcome is evaluated by a set of related measurable performance criteria (MPC). The MPC are measured by using direct and indirect methods of assessment. Direct methods of assessment consist of selected samples of graded work that students must complete as requirements of the IH courses. Indirect methods of assessment consist of specific questions of surveys and questionnaires submitted to former students and employers. During the academic year 2010-2011, a subset of the 25 outcomes was assessed using direct methods. Achievement of at least 75% was considered as a minimum for acceptance, and this outcome achieved that goal.

Title:	Human Response to Exposures
Description:	It is expected that at the time of graduation, UNA IH students will be able to explain mechanisms of human physiological response, toxicity, and health damage associated with the exposure to industrial agents, factors, and stressors.
Budget:	\$0.00
Core Competencies:	1,4,5
25% Online:	
50% Online:	
Core Competencies:	1,4,5
How Often:	Every year
Assessed this Year?	Yes
Responsibility:	Program Coordinator
Participation:	Department Chair
Direct Assessments	
	Hourly and Final Exams
Indirect Assessments	
Results:	A total of 84% of students demonstrated appropriate level of knowledge.
Curriculum:	None
Actions:	No
Improvements:	The IH Program at UNA has identified 25 educational outcomes. These

outcomes are defined as broad expectations of knowledge and abilities that students must acquire upon completion of their academic program. Each outcome is evaluated by a set of related measurable performance criteria (MPC). The MPC are measured by using direct and indirect methods of assessment. Direct methods of assessment consist of selected samples of graded work that students must complete as requirements of the IH courses. Indirect methods of assessment consist of specific questions of surveys and questionnaires submitted to former students and employers. During the academic year 2010-2011, a subset of the 25 outcomes were assessed using direct methods. Achievement of at least 75% was considered as a minimum for acceptance, and this outcome achieved that goal.

Title:	Generation and Dispersion of Chemical Agents
Description:	It is expected that at the time of graduation, UNA IH students will be able to describe mechanisms of generation and air dispersion of chemical agents in quantitative and qualitative terms.
Budget:	\$0.00
Core Competencies:	3,4,5
25% Online:	
50% Online:	
Core Competencies:	3,4,5
How Often:	other
Assessed this Year?	No
Responsibility:	Program Coordinator
Participation:	Department Chair
Direct Assessments	Hourly and Final Exams
Indirect Assessments	

Results: The outcome was not assessed this past year.

Curriculum:

Actions:

Improvements:

Title: Interpretation of Exposure Standards

Description: It is expected that at the time of graduation, UNA IH students will be able to understand the scope, application, use, and interpretation of occupational exposure standards and guidelines.

Budget: \$0.00

Core Competencies: 4,5

25% Online:

50% Online:

Core Competencies: 4,5

How Often: Every year

Assessed this Year? Yes

Responsibility: Program Coordinator

Participation: Department Chair

Direct Assessments

Hourly and Final Exams

Indirect Assessments

Results:	A total of 81% of students demonstrated appropriate level of knowledge.
Curriculum:	None
Actions:	No
Improvements:	The IH Program at UNA has identified 25 educational outcomes. These outcomes are defined as broad expectations of knowledge and abilities that students must acquire upon completion of their academic program. Each outcome is evaluated by a set of related measurable performance criteria (MPC). The MPC are measured by using direct and indirect methods of assessment. Direct methods of assessment consist of selected samples of graded work that students must complete as requirements of the IH courses. Indirect methods of assessment consist of specific questions of surveys and questionnaires submitted to former students and employers. During the academic year 2010-2011, a subset of the 25 outcomes was assessed using direct methods. Achievement of at least 75% was considered as a minimum for acceptance, and this outcome achieved that goal.

Title:	Physical Agents
Description:	It is expected that at the time of graduation, UNA IH students will be able to apply principles of physics and mathematics to describe mechanical systems, energy sources, and the methods used for evaluating occupational exposures to physical agents.
Budget:	\$0.00
Core Competencies:	3,4,5
25% Online:	
50% Online:	
Core Competencies:	3,4,5
How Often:	other
Assessed this Year?	No
Responsibility:	Program Coordinator

Participation: Department Chair

**Direct
Assessments**

Hourly and Final Exams

**Indirect
Assessments**

Results:

Curriculum:

Actions:

Improvements:

Title: Controls

Description: It is expected that at the time of graduation, UNA IH students will apply principles of design and use standard practices for performance evaluations of ventilation systems used for exposure control.

Budget: \$0.00

**Core
Competencies:** 1,3,5

25% Online:

50% Online:

**Core
Competencies:** 1,3,5

How Often: other

**Assessed this
Year?** No

Responsibility: Program Coordinator

Participation: Department Chair

**Direct
Assessments**

Hourly and Final Exams

**Indirect
Assessments**

Results:

Curriculum:

Actions:

Improvements:

Title: Training

Description: It is expected that at the time of graduation, UNA IH students will be able to design programs and training materials for educating constituencies in occupational health and safety.

Budget: \$0.00

**Core
Competencies:** 1,5

25% Online:

50% Online:

**Core
Competencies:** 1,5

How Often: Every year

**Assessed this
Year?** No

Responsibility: Program Coordinator

Participation: Department Chair

**Direct
Assessments**

Hourly and Final Exams

**Indirect
Assessments**

Results:

Curriculum:

Actions:

Improvements:

Title: Safety Programs

Description: It is expected that at the time of graduation, UNA IH students will be able to describe fundamental aspects of safety and understand the importance of creating effective safety programs.

Budget: \$0.00

**Core
Competencies:** 4,5

25% Online:

50% Online:

**Core
Competencies:** 4,5

How Often: other

**Assessed this
Year?** No

Responsibility: Program Coordinator

Participation: Department Chair

**Direct
Assessments**

Hourly and Final Exams

**Indirect
Assessments**

Results:

Curriculum:

Actions:

Improvements:

Title: Effective Communication

Description: It is expected that at the time of graduation, UNA IH students will be able to communicate effectively, both written and orally, with various constituencies.

Budget: \$0.00

**Core
Competencies:** 1,4

25% Online:

50% Online:

**Core
Competencies:** 1,4

How Often: other

**Assessed this
Year?** No

Responsibility: Program Coordinator

Participation: Department Chair

**Direct
Assessments**

Hourly and Final Exams

**Indirect
Assessments**

Results:

Curriculum:

Actions:

Improvements: