

University of North Alabama**Industrial Hygiene Program****TPG Annual Report****SECTION I: TPG Summary and Relevance**

The Industrial Hygiene (IH) Program at the University of North Alabama (UNA) offers the degree of Bachelor of Science or Bachelor of Arts with a double major in IH and general chemistry. The UNA IH Program is one of four baccalaureate programs in IH accredited by the Applied Science Accreditation Commission (ASAC) of ABET in the U.S. The program has earned a reputation for graduating a pool of qualified industrial hygienists who are providing valuable services to workers and employers in this geographical region and beyond. During this cycle, the objectives of the NIOSH-TPG were threefold: (i) support the efforts of continuous academic improvement; (ii) promote recruitment of qualified students into the occupational health and safety (OH&S) field; and (iii) expand the educational opportunities and services of the IH Program.

Enrollment in the program is at an all-time high with a trend upward in the last five-year cycle (12% of average increase). Sixty-three IH students were enrolled in the academic program in the fall semester of 2015 and fifty-five in the spring semester of 2016. Five students graduated in the fall semester of 2015 and twelve in the spring semester of 2016. All but one graduate is currently employed practicing in the field of OH&S or enrolled in graduate programs. The UNA NIOSH TPG funds a number of academic scholarships that offset, partially, the cost of tuition fees. With the provision of NIOSH scholarships, a number of high-caliber students have been attracted to the IH field. Twelve scholarships were awarded in the fall 2015 and spring 2016 semesters. Program recruitment efforts have been directed to the campus community and high schools of the region.

The description of the UNA IH Program, objectives and outcomes can be found at the UNA Chemistry and Industrial Hygiene Department (<https://www.una.edu/chem-ih/majors-options-and-minor/industrial-hygiene.html>). The principal investigator, Leshan Elliott, Ph.D., CIH, CSP, can be reached at lelliott1@una.edu or (256) 765-4652.

SECTION II: Program Highlights of High Impact Outcomes

In the last four years, the average enrollment of the UNA IH Program has been of 51 students per semester with a range of 43 to 61 students. The annual enrollment and subsequent number of graduates during the 2015-2016 academic year is the highest on record for the UNA IH Program. Graduates have been successful obtaining employment, receiving job offers before or soon after graduation. A diverse group of companies have offered employment to this academic year's graduates. These companies are: 3M; Littlejohn Engineering, Fluor Federal Services,

Browns Ferry, DalTile, TASUS, Clayton Supply, Global Fire Protection, River City Consulting, DRM, Bridgestone Firestone, and Terrell Technical Services. A record number of graduates (4) are pursuing a Master's in Public Health in Environmental Health Sciences/Industrial Hygiene: one student is enrolled at the University of Alabama at Birmingham (UAB) School of Public Health, one student is enrolled at the University of Michigan School of Public Health, one student is enrolled at The University of Texas School of Public Health (UTHealth), and one student is enrolled at the University of Miami (UHealth). Opportunities for pre-professionals internships have also been abundant and varied. Seven junior/senior students completed summer (2016) internships in companies representing the manufacturing, service, research and government sectors.

The program completed a re-evaluation for re-accreditation by ASAC of ABET in 2014-2015. The program continued its accreditation, and an interim report documenting additional assessment of a learning outcome deemed by the evaluation to be incomplete was submitted July 1, 2016. The main corrective measures adopted as a result of final statement of accreditation involved the improvement of an assessment tool to evaluate ABET Student Outcome (d), "an ability to function on multidisciplinary teams". Formerly, this outcome was assessed by a survey question sent to former students with one to three years of professional practice in OH&S. To further improve this assessment method, student's performance in multidisciplinary teams is now assessed during course activities as well as internship experiences.

The UNA IH Advisory Board continues advising faculty of the program on issues related to curriculum improvement, placement of graduates, and career opportunities. The IH Program outcomes were reviewed by the Program Director and IH Advisory Board along with a focus group of UNA IH graduates who have obtained CIH certification during the 2015-2016 cycle. The outcomes were reduced from 25 outcomes to 24 outcomes to eliminate redundancy and improve concurrence with current demands of professional practice.

UNA continues to add degree options which require supporting components in OH&S provided by the IH Program. UNA most recently introduced two new Bachelor of Science programs: Earth Systems Sustainability and Engineering Technology. The four-year Earth Systems Sustainability degree within the Department of Physics and Earth Science will require students to complete Occupational Safety and Health (IH 301) and Environmental Regulations (CH 465), as supporting courses for this degree. The four-year Engineering Technology degree will be focused on Electro-Mechanical Engineering and prepare students for a multitude of career choices such as design engineering, robotics, engineering management, automated manufacturing, entrepreneurship and further advanced education. Occupational Safety and Health (IH 301) will be a required supporting course for this degree as well.

Two senior students presented undergraduate research projects at the 4th Annual Future of the Profession Event of the Alabama Section of the AIHA in Florence, AL on March 11, 2016. Student, Trevor Beasley, collaborated with Dr. Olive in a study titled, “The Recognition and Control of Hazards in the Volunteer Fire Service”. Student, Jacob Shedd, collaborated with Dr. Figueroa in a study titled, “Exposure Assessment and Control of Ultra Violet Radiation in Photo-Reactive Curing Processes.”