Objectives, Outcomes, and Enrollment and Graduation (July 2014)

Educational Objectives of the Industrial Hygiene Curriculum:
To produce graduates who will, within a few years of graduation:
A. Demonstrate a high level of technical and scientific competence in the application of fundamentals principles and the practice of industrial hygiene addressing the health of workers and the community
B. Address occupational health issues in the private sector, government, education/research, or other work environments
C. Communicate and interact effectively with technical and non-technical audiences
D. Integrate ethical and social issues and responsibilities in industrial hygiene practice
E. Work individually or on teams to critically analyze & address complex problems in occupational health
F. Recognize that the practice of industrial hygiene requires ongoing learning, and undertake appropriate activities to address this need.

Student Outcomes of the Industrial Hygiene Curriculum:
1. Anticipate and recognize agents, factors, and stressors generated by and/or associated with defined sources, unit operations, processes, and work tasks
2. Describe qualitative and quantitative aspects of generation of agents, factors, and stressors
3. Understand the physiologic and toxicologic interactions of physical, chemical, and biological, agents, as well as ergonomic factors, with biological systems and the potential effects of occupational and environmental contaminants on the human body
4. Evaluate qualitative and quantitative aspects of exposure assessment, dose-response, and risk characterization
5. Properly interpret results from epidemiologic and toxicologic studies for the evaluation of health risks associated with occupational and environmental exposures
6. Evaluate and recommend engineering, administrative, and personal protective equipment controls or other interventions to reduce or eliminate hazards
7. Recognize important ethical, social and cultural issues impacting worker health
8. Understand applicable business and managerial practices
9. Interpret and apply applicable occupational and environmental regulations
10. Participate in the development and implementation of applicable industrial hygiene- and occupational health-related programs
11. Review and interpret occupational hygiene data; calculate appropriate statistics, where needed

12. Prepare scientific and technical summaries and reports, and effectively communicate this information orally, and in writing

13. Propose and conduct a research or other type of project approved by the School of Public Health and the student’s committee resulting in a master’s thesis or project report that demonstrates both mastery of the subject matter and a high level of communication skills**

14. Apply fundamental aspects of safety & environmental health as critical fields allied with industrial hygiene

15. Understand the necessity of teamwork among workers, management, industrial hygienists, safety specialists, environmental specialists, engineers, and occupational physicians and nurses

16. Recognize importance of, and plan to attain, recognized professional certification after an applicable period of professional practice.

** Revision under discussion

| IH curriculum enrollment, entry, and graduation, by year (as of November 2014) |
|-------------------------------------------------|---------------------------------|-------------------|-----------------|-------------------|-------------------|
| all IH enrollment, avg. | Masters IH enrollment, avg. | entered program, all | entered program, masters | graduated, all | graduated, masters |
| 2010-2011 | 31 | 17 | 8 | 4 | 9 | 8 |
| 2011-2012 | 25 | 12 | 6 | 4 | 11 | 8 |
| 2012-2013 | 25 | 11 | 6 | 5 | 5 | 2 |
| 2013-2014 | 26 | 13 | 9 | 8 | 12 | 7 |
| 2014 fall only | 23 | 15 | 6 | 5 | expect 2 | expect 2 |

Notes: (1) numbers listed as 'all' are for doctoral and masters combined.