Occupational Safety, Health, and Environment (OSH&E) Program
Department of Computer Science and Industrial Technology
Southeastern Louisiana University
SLU 10847
Hammond, LA 70402

June 23, 2010

Dear OSH&E Advisory Committee Member,

On behalf of Southeastern Occupational Safety, Health, and Environment (OSH&E) Program, we would like to give our sincere appreciation for your involvement in the OSH&E Advisory Committee as well as your participation in the meetings and discussion.

Enclosed please find the report of the OSH&E Advisory Committee meeting that was held on April 23, 2010. Please feel free to let us know should you have your questions and comments!

Our first meeting for the upcoming 2010-2011 academic year will be held as part of the Annual Departmental Advisory Committee Meeting. The meeting is usually scheduled sometime in October on the Hammond campus. A formal letter will be sent to you when the meeting date and venue are determined. Meanwhile, we have received the confirmation from ABET that the site visit for the OSH&E program evaluation will take place on October 17 - 19, 2010. More information and requirements about the site visit will be available soon.

Thank you very much for your consistent contribution to the program!

Sincerely,

Mr. Lawrence Maurer
Coordinator, OSH&E

Dr. Lu Yuan
Assistant Professor

Ms. Dorinda Folse
OSH&E IAC Chairperson
OSH&E Advisory Committee
April 23, 2010 Meeting Report by Ms. Dorinda Folse and Dr. Lu Yuan

The last Occupational Safety, Health, and Environment (OSH&E) Advisory Committee meeting was held from 11:30 AM to 2:30 PM on April 23, 2010 in Anzalone Hall 214 on the Hammond campus. (Please see the attached example photos!) The attendees include ten of the nineteen OSH&E Advisory Committee members (Appendix A with updated information). The meeting was hosted by Mr. Lawrence Mauerman and Dr. Lu Yuan. Two current OSH&E students, Gregory Culberson and Roland McFarlane, were present. Dr. Cris Koutsougeras, the Head of the Department of Computer Science and Industrial Technology, attended the meeting as well. Special guest includes Ms. Chassidy Irvin, Director of Safety, Health, Security, and Workforce Development of the Greater Baton Rouge Industry Alliance (GBRIA). Absent were Richard Matherne, Don Jones, Wayne LaCombe, Chris Buzbee, Lance Roux, Kathleen Loup, Alex Appeaning, Michael Gautreaux, and Owens O’Quinn.

Appendix B contains the agenda of the meeting, which started with the welcoming and introduction from Ms. Dorinda Folse. Ms. Folse presented updates on OSHA. She talked about three main issues:

1) Proposed changes to OSHA through the Protecting American Worker’s Act now in congress; proposed changes to the penalty structure for OSHA inspections.
2) New Regional Emphasis Program (REP): heat stress.
3) April 28, 2010 is the Workers Memorial Day.

The attendees then introduced themselves and a short break was held for lunch. We cordially appreciated Mr. Lance Roux of SafetyPro Resources for sponsoring the lunch.

When the meeting resumed, items on the agenda were discussed in order. Under old business, Mr. Mauerman first reported that ABET has received our request for evaluation for the OSH&E program (Appendix C). A site visit will take place sometime in Fall 2010 and the exact dates will be decided in the summer.

Dr. Yuan then presented the preparation of the OSH&E ABET self-study report (Appendix D). He briefly talked about the purposes of the self-study report, as well as the requirements and plans for working on the report. The entire report should center on the demonstration of the achievement of OSH&E program according to the nine ABET criteria. In particular, the program must establish the documented processes to regularly assess the program educational objectives and student learning outcomes for continuous improvement. Dr. Yuan then explained the plans and procedures for the OSH&E program assessment (Appendix E) including a three-year-cycle plan, direct assessment strategies, indirect assessment methods and schedule, and the assessment plan for 2009-2010. Detailed explanation of these documents is as follows:

1. Three-year-cycle Plan: It has taken an unsustainable amount of time and effort to produce an evaluation of a single OSH&E course by criticizing every detail of the student performance in exams, quizzes, assignments, and final projects, etc. Thus, the OSH&E faculty have decided to follow the ABET’s recommendation “For program assessment, sampling is acceptable and even desirable for programs of sufficient size”. In order to conduct the assessment effectively and
efficiently, we have set up a three-year-cycle plan and timeline which dictate specific tasks for the given year. The three stages are not absolutely separate from each other; rather, they are the focus of the assessment for the particular purpose.

1) **Identification and Method Development**: Different aspects of the OSH&E program, especially objectives, outcomes, curriculum, faculty and students, are scrutinized for problems and concerns. With the assistance from the constituencies, especially the Industrial Advisory Committee, pertinent assessment strategies for modification and improvement are developed.

2) **Data Collection and Evaluation**: Students’ performance in the OSH&E curriculum, especially in the OSH&E courses, is evaluated. Also, input from various constituencies of the program is solicited through surveys, questionnaires, and interviews and data are then analyzed.

3) **Feedback and Action**: Based on the results of data analyses in the previous stage, feedback is summarized and action plans are developed and implemented in the following academic year.

It should be noted that the 2008-2009 academic year is also included in the table, as we have constructed a solid foundation through developing critical documents and strategies for assessment in that particular year.

2. **Direct Assessment Strategies**: In terms of sources of assessment, we have decided to look at both a representative lower-level (100 or 200) course and a representative high-level (300 or 400) course so that we may be able to examine how students progress. The assessment methods vary for different courses, since the instructors are using different strategies. After each assessment coordinator finishes his individual work, the three OSH&E faculty members meet together at the end of the academic year to determine the OSH&E students’ accomplishment of the selected program outcomes based on the program outcome assessment rubric that we had developed in the Spring of 2009.

3. **Indirect Assessment Methods and Schedule**: Since we are using sampling strategy to collect relevant data, every effort has been made to ensure that the samples are statistically representative. Similar rules apply to the indirect assessment, where feedback from the program constituencies including the Industrial Advisory Committee, alumni, employer, and current students will be collected through a documented schedule. The overall goal for assessment is to cover every aspect of the program within one three-year cycle.

Next, Dr. Yuan presented the results of OSH&E Spring 2010 employer survey (Appendix F). The survey was sent out to either a current employer or a past employer of a graduate or a current student from the OSH&E program. The response rate is 9/28 = 32% (Note: We have received one more after the meeting on April 23 so the total is 10). The employers all agreed with the description of the OSH&E program educational objectives. They also rated both the importance of the program outcomes and the level of the OSH&E graduates’ competencies for those outcomes, using a scale of 1 to 5 where 1 means the lowest and 5 the highest.
In regard to “Ability to apply basic laboratory techniques associated with industrial hygiene and basic sciences” that received the lowest rankings for both the importance and level of competencies, the committee members discussed the potential reasons and possible action plans. Some members (including Mrs. Steve Pereira, Rick Saizan, and Alan Rovira) thought that the description of this particular program outcome was inaccurate. The word “techniques” might be misleading as the employers might not care too much about the students’ ability of conducting experiments. They suggested changing the description to “Ability to utilize basic laboratory instrumentations associated with industrial hygiene and basic sciences”. We plan to further examine this in 2010-2011. On the other hand, we also plan to review OSH&E students’ performance in the four lab courses including BIOL 152 General Biology Lab I, CLAB 103 General Chemistry Lab I, CLAB 104 General Chemistry Lab II, and PLAB 193 General Physics Lab in the natural science part of the curriculum.

Mr. Steve Pereira also brought the following issues for discussion. The actions created by the meeting attendees are described as well.

1) What is the appropriate time to take ENGL 322? Many students have trouble with technical writing, so it should be advantageous to take ENGL 322 as early as possible. – Students need to take courses in the order that they appear in the four-year OSH&E curriculum, so it is inappropriate to change the time for ENGL 322. However, the OSH&E faculty members should emphasize the importance of the course and encourage students to take it seriously when the time comes.

2) He had trouble in finding good guest speakers, especially for OSHE 323 Product Safety and Liability. He needs people from manufacturing companies to talk about ergonomic products. – Ms. Connie Fabré has agreed to help Steve find guest speakers.

The meeting then moved on to the discussion of new business. Ms. Beth Inbau asked the question about course offerings including guest speaking through Internet. Dr. Cris Koutsougeras addressed the concerns that the quality of program might be greatly affected through exclusive online offerings, which is not what ABET would like to see. Ms. Chassidy Irvin talked about her experience with Columbia Southern University. The committee members were then invited to review the OSHE course materials as well as other pertinent documents about the program accreditation. Due to time constraints, members did not have chance to look at all the materials thoroughly, but some did write down or tell us their comments and suggestions. In particular, Mr. Rick Saizan sent us his review comments on Dr. Massawe’s OSHE 231 class (Appendix G).

The meeting adjourned at 2:30 PM after group pictures were taken.
Appendix A
OSH&E Advisory Committee

Members

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* indicates a former member
## Appendix B
OSH&E Advisory Committee

**Semi-Annual Meeting Agenda**  
April 23, 2010

<table>
<thead>
<tr>
<th>Time</th>
<th>Issues</th>
<th>Actions</th>
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<tr>
<td>11:30 - 11:45 am</td>
<td>Welcome &amp; Introduction</td>
<td>(By Ms. Dorinda Folse)</td>
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<td>11:45 am - 12:15 pm</td>
<td>Lunch (Courtesy of Mr. Lance Roux and SafetyPro Resources, LLC)</td>
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<td>12:15 - 1:00 pm</td>
<td>Old Business</td>
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<td>1. Confirmation of ABET Site Visit</td>
<td>(By Mr. Lawrence Mauerman)</td>
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<td>2. Preparation of ABET Self-Study Report</td>
<td>(By Dr. Lu Yuan)</td>
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<td>3. OSH&amp;E Employer Survey</td>
<td>(By Dr. Lu Yuan)</td>
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<td>1:00 - 2:00 pm</td>
<td>New Business</td>
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<td></td>
<td>1. Review of ABET Documents</td>
<td>(By All Members)</td>
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<td>2. Plans of ABET Site Visit</td>
<td>(By Mr. Lawrence Mauerman)</td>
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<td>3. Others</td>
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<td>2:00 - 2:15 pm</td>
<td>Portraits &amp;Bios</td>
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Dear Dr. Yuan,

This email is to inform you that ABET, Inc. received your institution’s Request for Evaluation for the Occupational Safety, Health, and Environment program on January 26, 2010. Because this request is being made as a NEW evaluation, as indicated on the form, in order to further process it I would greatly appreciate the following information:

1) **The month and year the first student is expected to graduate from the program.**
2) **What kind of degree the student should received upon completing the program.**

Thanks so much for your help and efforts! Any questions please do not hesitate to contact myself or the Accreditation department at ABET.

Kind Regards,

Bryna Ashley  
Accreditation Assistant - ASAC  
ABET  
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Baltimore, MD 21202-4012  
Phone: 410-347-7714  Fax: 410-625-2238  
bashley@abet.org  
www.abet.org  

*Leadership and Quality Assurance in Applied Science, Computing, Engineering, and Technology Education*
Preparation of the ABET Self-Study Report

Dr. Lu Yuan
OSH&E Advisory Committee Meeting
April 23, 2010

Purposes of Self-Study Report

• Qualitative and quantitative assessment of the strengths and limitations of the program.
• Foundation document later validated by ABET site visit.
• First impression about our program as specifics can be clarified before the site visit.
Criterion 1. Students

- Requirements and process for:
  - Admission
  - Transfer
- Advising
- Retention and Graduation
- Enrollment trends
- Ongoing assessment of policies

Criterion 2. Program Educational Objectives

- Mission Statements
  - Institution
  - Department
  - Program
- Program Educational Objectives
- Program Constituencies
  - Industrial Advisory Committee
  - Students
  - Alumni
  - Employers
- Ongoing assessment
Criterion 3. Program Outcomes

- General and specific program outcomes
- Linkage between course objectives and program outcomes
- Major field assessment plan and evaluation
- Process to assure student outcome competencies
- Ongoing assessment

Criterion 4. Continuous Improvement

-Scheduled regular assessment
  – Timeline
  – Tasks
  – Action plans
Criterion 5. Curriculum

- Curriculum map
- Course materials
  - Syllabus
  - Textbook
  - Exams
  - Projects
  - Assignments
  - Others

Criterion 6. Faculty

- Faculty workload
- Faculty resumes
- Ongoing assessment
Criterion 7. Facilities

- Space and resources
- Equipment inventory
- Student access to space and equipment
- Adequacy evaluation

Criterion 8. Support

- Program budget
- Financial support
- Industrial support
  - Advisory committee
  - Adjunct instruction
  - Equipment
  - Scholarship
  - Internship
  - Many others ...
Criterion 9. Program Criteria

- Summary and description of How the Program Meets ABET Criteria

Appendices

- Appendix A – Course Syllabi
- Appendix B – Faculty Resumes
- Appendix C – Field and Laboratory Equipment
- Appendix D – Institutional Summary
Appendix E
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<td>1. Ability to apply basic mathematical and statistical knowledge in the safety, health, and environment field</td>
<td>1. Ability to apply basic mathematical and statistical knowledge in the safety, health, and environment field</td>
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<td>2. Understanding basic principles in chemistry, physics, and biology as it pertains to the practice of safety, health, and environment</td>
<td>2. Understanding basic principles in chemistry, physics, and biology as it pertains to the practice of safety, health, and environment</td>
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<td>2A2. Ability to know legal aspects of safety, health, and environmental practices</td>
<td>2A2. Ability to know legal aspects of safety, health, and environmental practices</td>
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<td>2A3. Understanding the interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors on the human body</td>
<td>2A3. Understanding the interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors on the human body</td>
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<td>2A4. Understanding the application of laws, regulations, standards, and codes to safety, health and environmental conditions</td>
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<td>2B1. Ability to apply basic laboratory techniques associated with industrial hygiene and basic sciences</td>
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<td>2B2. Ability to anticipate, identify and evaluate hazardous agents, conditions, and practices</td>
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<td>2B3. Understanding fundamental exposure assessment techniques</td>
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<td>2B4. Ability to develop hazard control designs, methods, procedures, and programs</td>
<td>2B4. Ability to develop hazard control designs, methods, procedures, and programs</td>
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<td>2B5. Ability to conduct accident/incident investigation and analysis</td>
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<td>2B6. Ability to implement and manage effective safety, health, and environment programs</td>
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</table>

3. An ability to express thoughts effectively in oral and written communications, and to understand ethical behaviors and professional responsibility

<table>
<thead>
<tr>
<th>1. Ability to effectively express thoughts in oral and written communications</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Understanding the techniques, skills, and modern behavioral tools necessary for the practice of safety, health, and environment</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
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<tr>
<td>3. Ability to effectively function as a part of multi-disciplinary team</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

4. An ability to broaden education and life-long learning necessary to understand safety, health, and environment issues within a global and social context

<table>
<thead>
<tr>
<th>1. Students are encouraged to become a member of ASSE (American Society of Safety Engineers) Southeastern Louisiana University Student Section and be actively involved in the events and activities organized by the Student Section. At least 50% of upper-level students are ASSE members.</th>
<th>Y</th>
<th>Y</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Students are encouraged to continue personal growth and improvement by pursuing the widely recognized certifications including Certified Safety Professional (CSP) and Certified Industrial Hygienist (CIH). As measured on the Southeastern Alumni Survey, 50% of the OSH&amp;E graduates will become CSPs.</td>
<td>Y</td>
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</tbody>
</table>

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Students are encouraged to become a member of ASSE (American Society of Safety Engineers) Southeastern Louisiana University Student Section and be actively involved in the events and activities organized by the Student Section. At least 50% of upper-level students are ASSE members. As measured on the Southeastern Alumni Survey, 50% of the OSH&E graduates will become CSPs.
**Objective 1:** Apply knowledge and principles of mathematics, science, technology, and management in industry, business, or other related areas of employment as occupational safety, health, and environment professionals.

**Expected Outcomes:** Students completing the Baccalaureate degree in OSH&E will demonstrate the ability to apply basic mathematical and scientific knowledge in the safety, health, and environment field.

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Courses</th>
<th>Sources of Assessment</th>
<th>Assessment Method(s)</th>
<th>Assessment Coordinator</th>
<th>Time of Data Collection</th>
<th>Actions</th>
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</thead>
<tbody>
<tr>
<td>1. Students know how to apply basic mathematical and statistical knowledge in the safety, health, and environment field.</td>
<td>111, 121, 141, 242, 261, 381, 421, 424, 441</td>
<td>141</td>
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<td>EM</td>
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<td>421</td>
<td>Three Exams</td>
<td>LM</td>
<td>Spring 2010</td>
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<td>Group Project</td>
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<tr>
<td>2. Students know basic principles in chemistry, physics, and biology as it pertains to the practice of safety, health, and environment.</td>
<td>111, 112, 141, 242, 261, 381, 382, 424, 441</td>
<td>242</td>
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</tbody>
</table>
3. Students know basic principles in business management as it pertains to the practice of safety, health, and environment.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Details</th>
<th>Instructor</th>
<th>Semester</th>
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<tr>
<td>121</td>
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<td>LM</td>
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<tr>
<td>311</td>
<td>Three Exams, Case Studies, Assignment, Final Paper</td>
<td>EM</td>
<td>Fall 2009</td>
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</table>
Objective 2: Apply practical-oriented knowledge and skills in safety, health, and environment to anticipate, identify and evaluate hazardous conditions and practices, to develop hazard control designs, methods, procedures and programs, and to implement and manage effective safety and health programs.

Expected Outcomes 2A: Students completing the Baccalaureate degree in OSH&E will demonstrate the understanding of safety, health, and environment knowledge.

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Courses</th>
<th>Sources of Assessment</th>
<th>Assessment Method(s)</th>
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<th>Time of Data Collection</th>
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<td>Final Paper</td>
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<tr>
<td>2A2. Students know legal aspects of safety, health, and environmental practices.</td>
<td>111, 112, 121, 141, 231, 242, 251, 261, 381, 382, 421, 424</td>
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<tr>
<td>2A3. Students understand the interactions of physical, chemical, biological, and ergonomic agents, factors, and/or stressors on the human body.</td>
<td>141, 242, 341, 441</td>
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<tr>
<td>2A4. Students understand the application of laws, regulations, standards, and codes to safety, health and environmental conditions.</td>
<td>111, 121, 231, 251, 381, 382, 451</td>
<td>121</td>
<td>Three Exams&lt;br&gt;Assignment&lt;br&gt;Final Paper</td>
<td>LM</td>
<td>Spring 2010</td>
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<tr>
<td>2A5. Students understand and use basic principles of fire prevention and protection in the workplace.</td>
<td>111, 261, 381</td>
<td>261</td>
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<td>Spring 2010</td>
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<tr>
<td>2A6. Students know industrial and construction safety throughout the work processes.</td>
<td>111, 382, 424</td>
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<td>424</td>
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</tbody>
</table>
Expected Outcomes 2B: Students completing the Baccalaureate degree in OSH&E will demonstrate the ability to obtain the necessary skills to anticipate, identify and evaluate safety, health, and environment hazards, and to develop and implement hazard control methods, programs, and system designs.

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Courses</th>
<th>Sources of Assessment</th>
<th>Assessment Method(s)</th>
<th>Assessment Coordinator</th>
<th>Time of Data Collection</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2B1. Students know how to apply basic laboratory techniques associated with industrial hygiene and basic sciences.</td>
<td>141, 341, 441</td>
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<tr>
<td>2B2. Students know how to anticipate, identify and evaluate hazardous agents, conditions, and practices.</td>
<td>111, 112, 121, 141, 242, 341, 381, 382, 424, 441</td>
<td>112</td>
<td>Three Exams</td>
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<td>381</td>
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<td>Assignment</td>
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<tr>
<td>2B4. Students know how to develop hazard control designs, methods, procedures, and programs.</td>
<td>112, 141, 242, 261, 311, 341, 381, 424</td>
<td>261</td>
<td>Three Exams&lt;br&gt;Assignment&lt;br&gt;Final Paper</td>
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<td>Three Exams&lt;br&gt;Assignment&lt;br&gt;Group Project</td>
<td>LM</td>
<td>Fall 2009</td>
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<tr>
<td>2B5. Students know how to conduct accident/incident investigation and analysis.</td>
<td>111, 121, 421</td>
<td>111</td>
<td>Three Exams&lt;br&gt;Assignment&lt;br&gt;Final Paper</td>
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<td>Spring 2010</td>
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<td>421</td>
<td>Three Exams&lt;br&gt;Assignment&lt;br&gt;Group Project</td>
<td>LM</td>
<td>Fall 2009</td>
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<tr>
<td>2B6. Students know how to implement and manage effective safety, health, and environment programs.</td>
<td>111, 121, 311, 322, 323, 421, 424, 471</td>
<td>311</td>
<td>Three Exams&lt;br&gt;Assignment&lt;br&gt;Final Paper</td>
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<td>471</td>
<td>Three Exams&lt;br&gt;Assignment&lt;br&gt;Presentation</td>
<td>LM</td>
<td>Spring 2009</td>
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</tbody>
</table>
Objective 3: Become effective communicators and ethical facilitators within the practice of safety, health, and environment.

Expected Outcomes: Students completing the Baccalaureate degree in OSH&E will demonstrate the ability to express thoughts effectively in oral and written communications, and to understand ethical behaviors and professional responsibility.

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Courses</th>
<th>Sources of Assessment</th>
<th>Assessment Method(s)</th>
<th>Assessment Coordinator</th>
<th>Time of Data Collection</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students are able to effectively express thoughts in oral and written communications.</td>
<td>111, 112, 121, 141, 231, 242, 251, 322, 381, 382, 421, 424, 441</td>
<td>251</td>
<td>Three Exams</td>
<td>EM</td>
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<td>Ten Quizzes</td>
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<tr>
<td>2. Students know the techniques, skills, and modern behavioral tools necessary for the practice of safety, health, and environment.</td>
<td>111, 112, 121, 322, 382, 421, 424</td>
<td>322</td>
<td>Two Exams</td>
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<td>382</td>
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<tr>
<td>3. Students are able to effectively function as a part of multi-disciplinary team.</td>
<td>111, 112, 242, 382, 421, 424, 451, 471</td>
<td>242</td>
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<td>LY</td>
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<td></td>
<td>Group Project</td>
<td>LM</td>
<td>Summer 2009</td>
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</tbody>
</table>
Objective 4: Continue professional development to address the need of applying principles of safety, health, and environment within a constantly changing and increasingly diverse environment.

Expected Outcomes: Students completing the Baccalaureate degree in OSH&E will demonstrate the ability to broaden education and life-long learning necessary to understand safety, health, and environment issues within a global and social context.

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Sources of Assessment</th>
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<th>Assessment Coordinator</th>
<th>Time of Data Collection</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students are encouraged to become a member of ASSE (American Society of Safety Engineers) Southeastern Louisiana University Student Section and be actively involved in the events and activities organized by the Student Section. At least 50% of upper-level students are ASSE members.</td>
<td>All Junior and Senior Students</td>
<td>ASSE Student Section Meeting Attendance</td>
<td>LY</td>
<td>Spring 2010</td>
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<tr>
<td></td>
<td>Conversation with Students</td>
<td>All Faculty</td>
<td></td>
<td>Spring 2010</td>
<td></td>
</tr>
<tr>
<td>2. Students are encouraged to continue personal growth and improvement by pursuing the widely recognized certifications including, but not limited to, Certified Safety Professional (CSP) and Certified Industrial Hygienist (CIH). As measured on the Southeastern Alumni Survey, 50% of the OSH&amp;E graduates will become CSPs.</td>
<td>All Graduates</td>
<td>Exit Interview</td>
<td>All Faculty</td>
<td>Spring 2010</td>
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<tr>
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<td></td>
<td>Alumni Survey</td>
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</table>
OSH&E Program Outcomes - Indirect Assessment
Schedule, 2009-2010 to 2013-2014
Draft by Dr. Lu Yuan 04/21/2010

<table>
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<td>Employer</td>
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<td>Advisory Committee</td>
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<td>Current Student*</td>
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</tbody>
</table>
# OSH&E Program Outcomes - Assessment in 2009-2010

Draft by Dr. Lu Yuan 04/21/2010

<table>
<thead>
<tr>
<th>Performance Criteria</th>
<th>Courses</th>
<th>Sources of Assessment</th>
<th>Assessment Method(s)</th>
<th>Assessment Coordinator</th>
<th>Time of Data Collection</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.2. Students know basic principles in chemistry, physics, and biology as it pertains to the practice of safety, health, and environment.</td>
<td>111, 112, 141, 242, 261, 381, 382, 424, 441</td>
<td>242</td>
<td>Two Exams, Three Homework, Assignment, Group Project</td>
<td>LY</td>
<td>Spring 2010</td>
<td></td>
</tr>
<tr>
<td>2. A4. Students understand the application of laws, regulations, standards, and codes to safety, health and environmental conditions.</td>
<td>111, 121, 231, 251, 381, 382, 451</td>
<td>121</td>
<td>Three Exams, Assignment, Final Paper</td>
<td>LM</td>
<td>Spring 2010</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>382</td>
<td>Three Exams, Assignment, Final Paper</td>
<td>LY</td>
<td>Spring 2010</td>
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</tbody>
</table>
2. B1. Students know how to apply basic laboratory techniques associated with industrial hygiene and basic sciences.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>141</td>
<td>Three Exams, Ten Quizzes, Homework, Project</td>
</tr>
<tr>
<td>341</td>
<td>Three Exams, Ten Quizzes, Homework, Project</td>
</tr>
</tbody>
</table>

3. Exams: EM Fall 2009, Ten Quizzes, Homework, Project

2. B2. Students know how to anticipate, identify and evaluate hazardous agents, conditions, and practices.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Details</th>
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<tbody>
<tr>
<td>111, 112</td>
<td>Three Exams, Assignment, Final Paper</td>
</tr>
<tr>
<td>381</td>
<td>Three Exams, Assignment, Group Project</td>
</tr>
</tbody>
</table>

3. Exams: LY Fall 2009, Assignment, Group Project

3. 1. Students are able to effectively express thoughts in oral and written communications.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Details</th>
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<tbody>
<tr>
<td>111, 112</td>
<td>Three Exams, Ten Quizzes, Homework, Project</td>
</tr>
<tr>
<td>421</td>
<td>Three Exams, Assignment, Group Project</td>
</tr>
</tbody>
</table>

4. Exams: EM Fall 2009, Ten Quizzes, Homework, Project

4. Students are encouraged to continue personal growth and improvement by pursuing the widely recognized certifications including, but not limited to, Certified Safety Professional (CSP) and Certified Industrial Hygienist (CIH).

<table>
<thead>
<tr>
<th>Certification</th>
<th>Details</th>
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<tbody>
<tr>
<td>Exit Interview</td>
<td>All Faculty, Spring 2010</td>
</tr>
<tr>
<td>Alumni Survey</td>
<td>LY, Fall 2009</td>
</tr>
</tbody>
</table>

As measured on the Southeastern Alumni Survey, 50% of the OSH&E graduates will become CSPs.
OSH&E Spring 2010
Employer Survey

Dr. Lu Yuan
OSH&E Advisory Committee Meeting
April 23, 2010

Basics

• Either a current employer or a past employer of a graduate or a current student from Southeastern’s OSH&E
• Response rate: 9/28 = 32%
• Example survey questions:
  – Characteristics of organization
  – Opinion on program objectives
  – Rating of importance and students’ performance in the areas of competency
  – Rating of OSH&E courses
  – Certification requirement
  – Regular and future hiring
Characteristics of Organization

- **Names:**
  - Shaw Group
  - United/Anco Services, Inc.
  - SafetyPro Resources, LLC
  - Turner Industries Group
  - MDR Construction, Inc
  - Fairway Medical
  - Pinnacle Polymers
  - Gulf South Safety Consultants

- **Types:**
  - Construction
  - Fab shop
  - Self-employed
  - Healthcare
  - Manufacturing/Processes/Refinery
  - Business

- **Number of OSH&E related employees:**
  - Varies from 1 to 260

Ratings of OSH&E Program

- All agrees with the program objectives
- Importance in the areas of competency
  - Understanding basic principles in chemistry, physics, and biology as it pertains to the practice of safety, health, and environment: 3.8
  - Ability to understand and use basic principles of fire prevention and protection in the workplace: 3.9
  - Ability to apply basic laboratory techniques associated with industrial hygiene and basic sciences: 3.0
- Students’ performance in the areas of competency
  - Ability to apply basic laboratory techniques associated with industrial hygiene and basic sciences: 3.5
Opinions about OSH&E Courses

• Core courses:
  – OSHE 242 Ergonomics: 3.9
  – OSHE 341 Field Methods of Industrial Hygiene and Toxicology: 3.9

• Electives:
  – OSHE 323 Product Safety and Liability: 3.6
  – OSHE 441 Industrial Toxicology: 3.9
  – OSHE 451 Hazardous Materials Management: 3.6

Other Courses

• Social Psychology
• Public Speaking, Technical Writing
• Business Finance & Accounting Emphasis
• Technical Writing, Public Speaking, HIPAA Compliance Training
• The list of courses listed on the previous page seems to capture the required skill set for entry level safety professionals.
Certification requirement

- CSP (3 responses)
- No (2)
- Yes, we encourage and mentor students to pursue CSP.
- ASP/CSP, CSHO
- CSP, CIH, CHP
- Instructor Certification for ATSSA (American Traffic Safety Services Association), ASP or CSP Certification

Hiring

- Yes regularly and will hire in the future (3 responses)
- Yes, great internship opportunity
- Not regularly but will hire in the future
- We have hired interns as well as full employees from the OSH&E program. We will continue to utilize students, particularly those who are active in ASSE.
- No, only one OSHE position available at this company. Yes, if company growth presented a need for additional OSHE employees.
- While we do not regularly recruit safety graduates, their good range of training and skills have proven to be valuable.
- We do not actively seek out Southeastern graduates. We have employed them and will continue to do so in the future as our past experiences have been pleasant.
Other Comments

• Computer science should be limited to only program use, such as PPT, EXCEL, ACCESS, etc. It is a waste of time if we are requiring programming classes for students.
Dr. Massawe,

It was a pleasure seeing you again last week.

Regarding your request for my assessment of the course materials, I cannot give you an adequate assessment with the limited time I had to view the material. I can say the following with some degree of confidence:

1. The syllabus had adequate content elements with well written objectives.
2. The text seemed to cover the objectives.
3. While I did not have time to review the lecture notes in detail, I did notice that some of the lecture notes seemed to be copies of material created by others. These other sources need to be given credit in the form of citations, a bibliography, or reference document of some kind and probably should be included as part of the syllabus. This comment should be applied to all course material for the program.
4. I did not look at assignments or test materials at all.

While the information regarding the ABET accreditation was informative, it was too time consuming. I believe that more effort should have been placed on the materials review. Additionally, the review should have taken a more organized approach. You should be able to show in a simple fashion how the learning elements (text, lecture, assignments and exams) are related to the learning objectives. I would suggest separate PowerPoint presentations that are overviews of each course which address the following:

- Objectives for the course and how they address and relate to the overall program objectives
- How the topics relate to the course objectives
- Text elements used and how they relate to the course objectives
- Examples of lecture items and how they relate to the course objectives
• List of assignments and how they relate to the course objectives
• Examples of test questions and how they relate to the objectives
• Identify the weaknesses and strengths of each course as you perceive them

In this way, the whole committee can get a better feel for the overall program. I had an opportunity to review only one small piece of one course and did a poor job of that. I’m sure other committee members felt the same way.

Please accept my comments as constructive criticism. It is not my intention to make negative comments, but rather an effort to seek continuous improvement.

Regarding the question about videos, I have checked our database and Southeastern is not a Safety Council member. I will inquire with my superiors about getting special privileges for the university to access our video collection. Please go to this address http://www.safetyleca.org/t/VideoByCategory.asp?loc=t&tag=t4&pg=VideoByCategory.asp to search our collection by category.

Sincerely,

Rick Saizan
Safety Council LCA
225.282.3291
www.safetyleca.org

If you fail to learn, you learn to fail!

-----Original Message-----
From: Ephraim.Massawe@selu.edu [mailto:Ephraim.Massawe@selu.edu]
Sent: Friday, April 23, 2010 4:17 PM
To: RICHARD SAIZAN
Subject: Your Course Assessment Report for OSHE 231: Safety Laws, Regulations and Standards at our Industrial Advisory Committee Meeting Today (04-23-2010)

Rick Saizan, Safety Council LCA Telephone: 225-282-3291
8180 Siegen Lane rsaizan@safetyleca.org
Baton Rouge, LA 70810

Your Course Assessment Report for OSHE 231: Safety Laws, Regulations and Standards at our Industrial Advisory Committee Meeting Today (04-23-2010)

Dear Rick,

It was nice meeting with at the Industrial Advisory Committee meeting today. Thanks for coming.

I also want to take this opportunity to thank you for reviewing my Courses OSHE 311: Safety Programs Development

I would very much appreciate your written comments on how you evaluated the following:

(1) The syllabus for the course
(2) Exams
(3) Class Assignments and
(4) Homework Assignments
(5) The lecture notes
(6) The textbook used
(7) Any other comments you may have.

Please give me your objective assessment that I could share with my colleagues in our OSHE program at Southeastern Louisiana!

Again thanks.

With best regards

Ephraim

PS: You mentioned something about the videos. I will very much appreciate if I can get a few of them to use for my classes

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SLU 10847 Hammond, LA 70402  
Tel 1-985-549-2243 (w) 1-978-328-3670 (c)  
Fax 1-985-549-5532