Program Highlights
The period under review was marked by significant changes in the Department of Occupational and Environmental Safety & Health (OESH) and its programs. These changes encompassed the Department’s orientation and designation, the composition of its student and faculty bodies, and its curricula.

The Department changed its name from Department of Safety Studies to Department of Occupational and Environmental Safety & Health. The new name better conveys the Department's current areas of expertise (i.e., Occupational Safety and Health) and the directions where we see ourselves expanding our activities in the future (i.e., Environmental Safety and Industrial Hygiene). The new designation better identifies to potential students the Department's vocation and gives a clear direction to our efforts.

The Master’s Program in Occupational Safety has traditionally attracted a mature student population with previous education and professional experience in the field. This primarily non-traditional student would typically enroll in one or two courses per semester resulting in fairly extended time required for graduation. More recently, however, significant changes in the student body have been observed. In addition to a large growth in its size, an increased proportion of more traditional, full-time students, with diverse backgrounds and varied undergraduate education, now characterizes the student body. Many of these new students have recently concluded their undergraduate education and have little or no previous experience in occupational safety. The diversity in the student body grew in terms of age, gender, culture, ethnicity, nationality, education, and professional experience. This justifies the maintenance of a flexible curriculum and individualized advising. This growth may be attributed to the efforts by the Department to promote its graduate program while improving the qualifications of the faculty, coupled with a favorable job market in the OESH field.

Pre-requisites to the master’s program include a semester of college chemistry (Chem 102 – General Chemistry or equivalent), proficiency in statistics and in the fundamentals of OESH (SAFETY 380 Industrial Accident Prevention or equivalent). The Occupational Safety program requires the completion of 36 credits, with at least half of these credits in advanced courses (i.e. 700-level). The program requirements include a research component (6-9 credits) constituted by a mandatory research methods class, EDFOUND 740 – Techniques of Research, and by two alternatives for an individual research project. The first option (SAFETY 789 - Readings and Research in Safety) involves the development of an individual research project under the direction of a faculty member with additional support from a second faculty member. This is a grade-basis course where the student is expected to demonstrate understanding of the state of the art of a selected OESH topic, to identify a relevant gap in the existing knowledge and frame a research question and/or hypothesis, and finally to design a study to address this
question. Many of these studies do not involve substantial data collection and analysis. The course carries a three-credit load and requires the students to take a comprehensive examination at the conclusion of their coursework. Students failing the exam are allowed to re-take it. The second option, SAFETY 799 – Thesis Research, is a six-credit pass/fail course, where the student works under the direction of a faculty advisor and also receives guidance from a committee made up by the advisor and two other faculty members. Expectations for Thesis Research are significantly higher, with most projects involving considerable data collection, analysis, and reflection. Students selecting Thesis Research are waived from the comprehensive examination.

During the fall 2000 an OESH faculty member offered the mandatory research methods class, EDFOUND 740 – Techniques of Research, in a special session dedicated to safety students. Although the session was very successful, the low enrollment at the time discouraged further offerings. With the sharp increase in the enrollments observed recently we are considering the possibility of offering a dedicated session again. The Department contemplated in the past the idea of making SAFETY 799 – Thesis Research mandatory. However, after taking into consideration that only a small minority of students opt for that alternative and how protracted some of these studies become, the Department decided to maintain the two alternatives.

The OESH program requires a field experience component, SAFETY 793 – Practicum (1-6 credits), which is commonly waived for students with professional experience in safety. The changed composition of the student body described above will result in an eventual increase in the number of students requiring field experience.

The Department has recently revised its graduate program curriculum with the purpose of simplifying and clarifying some of its aspects. These changes do not significantly alter the contents of the program but make it easier for students to “navigate” requirements and enhance academic advising as well. The proposal has been approved by the Department and is being submitted to the College and University curriculum committees in the Fall 04. Please refer to Appendix B for the current and proposed versions of the program description.

A Departmental Advisory Board has been convened to advise on curriculum and other long-term issues affecting the program and its graduates. This group consists of noteworthy professionals from academia, industry, and government. The Board has a rotating chairperson with a two-year mandate. The Advisory Board roster and the first two reports issued by the Board Chairperson can be found in the Appendix F.

The Department has successfully implemented a new certificate program in construction safety. This initiative was developed under the guidance of the Construction Safety Advisory Board, which consists of 16 members representing the Department faculty, the construction industry, federal regulatory agencies, and organized labor. The partners in this innovative project were involved not only in designing the curriculum and course content, but also participated directly in the delivery of the content. The certificate requirements include three construction safety courses. This initiative involved the
extensive redesign of an existing course, SAFETY 582 - Safety in the Construction Industry, and the development and implementation of two new courses, SAFETY 584 - Construction Accident Prevention and SAFETY 682 - Construction Safety Management. Finally, we enlisted a number of regional construction companies willing to provide practicum experiences to our students.

The Department is developing another new program resulting in certification in Occupational Ergonomics. An ad hoc advisory committee has been formed with members representing industry, academia, and government. With substantial input from the advisory board the basic structure of the program has been defined and the curriculum is being elaborated. The Occupational Ergonomics certificate program will entail significant changes in the content of two existing courses (i.e. SAFETY 687 – Safe Handling of Materials and SAFETY 688 - Ergonomics), and the creation of an entirely new course. As part of this effort the Department will identify regional organizations willing to offer practical experiences in the field of ergonomics.

The Department has merged its courses SAFETY 684 – Industrial Hygiene and SAFETY 680 - Industrial Hygiene Instrumentation into a new course with an associated laboratory component. The new course, SAFETY 679 – Principles and Methods of Industrial Hygiene, will improve the integration of the critical aspects of industrial hygiene theory and practice. This change has been approved by the College and the University and will be implemented in the Fall 05.

Other changes planned for this academic year include a review of the course SAFETY 689 - Chemical Safety, which will be renamed and have its content revised. A new course is being developed in the area of environmental programs, which will be offered for the first time in a workshop format in the Spring 2005. These two courses, in tandem with the existing SAFETY 620 – Principles of Environmental Safety, will provide the basis for a potential certificate program in Environmental Safety Management.

Part of the Department’s strategy to improve the quality of the graduate program is to increase the number of graduate level courses and reduce the number of slash courses. A first step in that direction will start this semester with the course SAFETY 657 Principles of Occupational Epidemiology, which will become a 700 level offering, increasing the graduate course selection and eliminating a slash course that has not been popular with our undergraduate students. The course SAFETY 753 – Legal Aspects of Occupational Safety will have its content updated and be offered more frequently in the near future to offset the planned deletion of the graduate component of the course SAFETY 453/653 - Legal Aspects in Safety.

The Department is making good progress in the implementation of a new multi-use safety laboratory. This project involves the use of funds from the University Lab Modification program complemented by funds obtained from private organizations and donors. Construction of the new lab has started and fundraising activities will continue for the next academic year.
The Department is conducting an in-depth evaluation of the requirements for the Accreditation Board for Engineering and Technology (ABET) accreditation. Discussion involving the Department faculty and the OESH Advisory Board has occurred. Contacts with the six similar programs accredited nation-wide are being made to appraise the cost-benefits of the initiative. Pending the results of that evaluation an action plan will be developed and undertaken.

The Department has implemented some important assessment initiatives in this period including an exit survey, a fieldwork survey, and an alumni survey. The exit survey is a written questionnaire administered by the Graduate Studies Office at the time students apply for graduation. The fieldwork survey is a self-administered mail questionnaire completed by companies participating in the OESH practicum program. Finally, the alumni survey was developed and administered for this first time this summer. This is a standardized phone interview with graduates of the program in the last five years.

The Department will continue working closely with the Advisory Board for its long term strategic development, and with its ad hoc advisory boards (i.e., Construction Safety and Occupational Ergonomics) and the OESH professional community to further improve curriculum.

II. Academic Assessment

Centrality
The graduate program in Occupational Safety provides a natural extension to the successful major and minor undergraduate programs offered by the OESH Department. OESH course offerings support a number of other programs at UW-Whitewater including Geography, Health Physical Education Recreation & Coaching, Management, Sociology, and Social Work. In addition courses such as SAFETY 650 - Behavioral Aspects of Accident Prevention, and SAFETY 583 - Introduction to Security attract students from several other programs.

The OESH Department has a strong regional presence having supplied qualified safety professionals to a substantial number of prominent organizations across Wisconsin and the Midwest. The Department has developed innumerable collaborations with many private and public organizations through its fieldwork program, and through multiple student projects in several of its courses. Other significant partnerships include the OESH Advisory Board, the Construction Safety Advisory Board, and the Occupational Ergonomics Advisory Board described elsewhere in this report.

Mission statement
The Department of Occupational and Environmental Safety & Health prepares students for rewarding careers protecting America's work force, the public and the natural environment from harm in today's age of rapid technological and scientific development. The Environmental Safety & Health (ESH) professional is concerned with the interaction between people and the physical, chemical, biological and psychological factors which
affect their safety, health, and productivity. Coursework covers a wide range of subjects including ergonomics, accident prevention, security, and environmental protection. The students are provided with essential skills that enable them to recognize, devise and implement methods to control hazards. In addition, in consonance with the UWW Vision Statement, which calls for active learning experiences as an essential component of the educational process, occupational safety students are provided with a number of practical work site activities, including a full semester practicum with a practicing ESH professional.

Program Goals and Assessment
OESH graduates possess the technical skills required for success in the profession. Graduates are able to determine which methodologies allow them to collect and analyze the relevant information necessary to reduce/eliminate workplace hazards. As discussed elsewhere, although a definitive decision has not been made on the issue of accreditation, the OESH program overwhelmingly adheres to the ABET curriculum criteria. Core areas of technical expertise listed by that accreditation association and embraced by the OESH graduate program include:

- Safety & Health (S&H) fundamentals
- Legal aspects of Environmental, Safety & Health (EHS) practice
- Psychological aspects of safety
- Industrial hygiene & monitoring
- Systems safety
- Environmental aspects of S&H
- Safety training & development
- Ergonomics
- Fire protection and prevention
- Safety program management
- Product safety
- Construction safety
- Accident investigation
- Transportation safety
- Hazardous materials handling
- Security
- Written & oral communication

Links between the core areas listed above and the curriculum are described in Appendix C. Appendix C indicates where in the curriculum (i.e., which courses) the required competences are addressed. In each completed table cell the assessment tools employed in the specific course are summarized. For a complete list of course requirements for the MS program please refer to Appendix B.
Assessment data
The OESH Department makes use of a variety of assessment strategies focusing both on internal and external constituencies’ perspectives. From an external vantage point the Department receives regular feedback from organizations cooperating in its fieldwork programs, from the Departmental Advisory Board, from the Construction Safety Advisory Board, from the Occupational Ergonomics Advisory Board, and from its membership and contacts with professional associations including the American Society of Safety Engineers (ASSE), and the National Safety Council (NSC). From an internal perspective the Department relies on assessments conducted at each course level (refer to Appendix C), on the OESH Graduate Program Evaluation Exit Survey completed by students applying for graduation, and on the alumni survey.

Membership rosters and samples of meetings minutes/agendas for the three advisory boards listed above can be found in appendices G and H. Companies participating in the OESH fieldwork programs provide information on the quality of the knowledge and skills demonstrated by the students during that experience. At the end of the fieldwork period the site supervisor is asked to complete the Practicum Program Evaluation, a comprehensive mail-in survey focusing on the main technical areas of the intern performance. A copy of the Practicum Program Evaluation survey can be found is Appendix D. Since most students in this review period were practicing safety professionals, only a minority was enrolled in the practicum after the implementation of the survey. At this point we have received only two complete Practicum Program Evaluation surveys. The recent changes in the student body composition described elsewhere in this report will produce a significant increase in the demand for field experiences, and consequently we expect to establish a larger data basis on this constituency.

The previously mentioned Departmental Advisory Board was established to provide guidance on long-term plans for the development of the OESH programs. This strategic planning body represents the interests and viewpoints of central constituencies in the OESH field. This body convenes once a year and as necessary when significant decisions arise. The OESH Advisory Board had its latest meeting early this fall. The Construction Safety and the Occupational Advisory Boards, which are more focused bodies, perform similar roles but with an added emphasis on the needs of these specific areas. These advisory boards provide essential information on the economic and societal needs to be met by the OESH programs and meet typically at least once a semester. Reports issued by the chair of the OESH Department Advisory Board can be found in the Appendix G.

From a student perspective, each individual course has its own set of assessment tools of learning outcomes. Throughout the program learning assessment typically includes written examinations, practical projects involving real life problem solving, class activities including presentations, and a number of cooperative learning applications (Please refer to Appendix C). Students selecting SAFETY 789 - Readings & Research in Safety as part of their research requirements need to take a comprehensive examination at
the conclusion of their coursework. The value of the comprehensive examination has been criticized in the past, and a final decision will be made this semester on either its elimination, which is the faculty preference at this point, or its complete restructuring.

Students at the time they apply for graduation are asked by the Graduate Studies Office to complete an exit survey on behalf of the Department. Through the Graduate Program Evaluation survey students assess the value of the different courses in their professional preparation. Please refer to Appendix E for a copy of the questionnaire used. Since its implementation 13 graduating students have completed the survey. Figures 1-4 summarize student responses to the question “for the courses listed below, please rate how valuable each was in your educational experience”. Courses were rated from 1 (No Value) to 5 (Extremely Valuable). Of the 25 courses evaluated by the respondents a significant majority (21) received mean rates between 4 (Valuable) and 5 (Extremely Valuable). Courses with evaluations below 4.0 were in most cases rated by a very small number of students, limiting any meaningful interpretation of the rating. Although the evidence at this point is overall reassuring, as data points are added in the future more reliable conclusions will be reached.

Figure 1
Figure 2

Graduate Exit Survey

Class (#of students which answered per class)

Figure 3
Figure 4

Graduate Exit Survey

Class (# of students which answered per class)
The OESH Department has put in place a phone-administered survey to collect input from its alumni. This survey targeted 23 students who graduated in the last five years. We were able to contact 13 of these students corresponding to a response rate of 57%. All respondents were employed with 11 of them (85%) holding jobs directly related to safety. Figures 5-7 summarize the responses to the question “please rate how valuable the following courses were in the preparation for your professional life. Courses were rated from 1 (No Value) to 5 (Extremely Valuable). Of the 16 courses evaluated the overwhelming majority (14) received mean rates between 4 (Valuable) and 5 (Extremely Valuable). Respondents gave a mean rating of 4.21 for the overall quality of their preparation. Courses with evaluations below 4.0 were in all cases rated by a very small number of students preventing any interpretation of the ratings. In addition to the 100% employment observed, it should be emphasized that 54% of the respondents reported annual incomes between $60,000 and $70,000 with an approximate average of $60,000 for the entire sample.
Figure 5

Mean, Median, and Mode Values per Course

Figure 6

Mean, Median and Mode Values per Course
The Department has made tremendous progress in addressing previous criticism of its assessment by establishing a number of databases with inputs of central constituencies of its programs. The program has a clearly defined mission statement and precise core areas of competency. These core areas of competency are explicitly linked to specific courses as depicted in Appendix C. As recommended by the Audit & Review Committee, the Department has put in place an alumni survey and is working to offer a greater curriculum separation between graduate and undergraduate while maintaining its high level of productivity and quality.

**Future curricular initiatives**

The Departmental long-term plan calls for the gradual implementation of a limited number of certificate programs allowing students to obtain a more in-depth education in specific areas within the occupational safety field. The first successful effort in this direction was accomplished through the implementation of the Certificate in Construction Safety. This initiative clearly meets the needs of the construction sector, one of the most dangerous industries with a reported shortage of qualified personnel to lead their efforts in reducing accidents, injuries and illnesses. The Construction Safety Emphasis represents a tremendous advantage for students seeking a career as a construction safety professional.
The Department is completing the plans for an Occupational Ergonomics Certificate with implementation anticipated for the fall 2005. There is a well-established need for safety professionals with proficiency in ergonomics as indicated by the growing number of musculoskeletal disorders reported across many industries as well as by the soaring costs associated with these injuries. The Department has the required expertise in its current staff and is working diligently to ensure the material resources to implement this new program.

A third area that has been considered for expansion is environmental safety. We are working with a number of departments on campus to design a curriculum that attend to the needs of ESH professionals and others while ensuring efficient use of University resources. Staffing plans for the current academic year ask for the hiring of a full time faculty member who will provide support to this initiative.

The identification and development of these certificate programs are part of a continuous discussion involving the Department members and external constituencies, with an essential role played by the OESH Advisory Board.

Hands-on experience is vital in applied sciences, and the earlier students are immersed in the applications of OESH technology the stronger will be their professional preparation. Early application will also lead to strengthened skills in specialized areas. The Department is fully aware of those needs and it is working to improve and expand its laboratory facilities. After a protracted but ultimately successful negotiation a new and much larger area for the laboratory has been secured. The new area will allow shared space for construction safety, occupational ergonomics, environmental safety, and industrial hygiene. Proposed upgrades include equipment for practical demonstrations of construction safety techniques, ergonomic work assessment, environmental pollution monitoring, and industrial hygiene instrumentation. Since the funds allocated by the University are not sufficient for the completion of this project the enlistment of private donors is necessary.

In summary, the OESH Department provides a quality program that meets the needs of students preparing them to live and work in an increasingly diverse, multicultural and global society linked to an interdependent political, environmental, economic, and information-rich world. The continuous improvement of the OESH master’s program is being conducted with significant input from its several constituencies. This input has been collected in multiple ways including surveys directed at current and past students and at companies hosting students during their practicums, as well as through three advisory boards with membership representing industry, academia, and government. Information on improvement actions taken by the OESH Department is shared with these constituencies through regular meetings of the OESH staff with the advisory boards, through the Department web site, and through occasional mass emails to students.
Dual-level courses
At the end of the fall 2004 semester the Department will be offering 18 dual-level courses as listed below. Although variations exist among the different courses, most of them offer graduate students significant additional learning experiences. Typically, graduate students are expected to work on an advanced individual project related to the course matter under the direction of the instructor. Usually the graduate project requires a class presentation and the submission of a written report. Graduate students are also commonly graded on a different scale reflecting the higher performance expectations set for them. The Department is working diligently to reduce the number of dual-level offerings by expanding graduate-only courses, but the small instructional staff allocation and the demands for high productivity dictate the need for a gradual approach to the issue.

Dual level courses offered by the OESH Department:
SAFETY-581 Motor Fleet Safety
SAFETY-650 Behavioral Aspects of Accident Prevention
SAFETY-653 Legal Aspects in Safety (to be deleted)
SAFETY-688 Ergonomics
SAFETY-690 Workshops in Safety
SAFETY-661 Problems & Materials of Driver Education
SAFETY-582 Safety in the Construction Industry
SAFETY-583 Introduction to Security
SAFETY-584 Construction Accident Prevention
SAFETY-620 Principles of Environmental Safety
SAFETY-657 Principles of Occupational Epidemiology (to become SAFETY 757)
SAFETY-682 Construction Safety Management
SAFETY-683 Industrial Safety Management
SAFETY-679 Principles and Methods of Industrial Hygiene (new course fall 05)
SAFETY-685 Fire Protection/Prevention
SAFETY-686 Safe Handling of Materials
SAFETY-687 Product Safety
SAFETY-689 Chemical Safety

Enrollment
As indicated by the data below the Department is experiencing a recent surge in the demand for its graduate program after some years of fairly stable enrollments. At the time the last audit & review report was issued the Department experienced some difficulties, which probably had some impact on subsequent enrollments. The issues included repeated changes in the Department leadership, and a low proportion of tenure-track faculty in its instructional staff. These difficulties have been overcome and the Department is confident that the changes being implemented will produce a sustained enrollment growth in the near future. The Department has constituted a very active Recruitment Committee, which is working diligently on a number of initiatives. For example, the Department has been working closely with the UWW News & Publications in the preparation of press releases to disseminate information about safety careers.
Detailed information on enrollments, student credit hours, and number of degrees granted can be found below.

<table>
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<tr>
<th></th>
<th>Fall 04</th>
<th>Fall 03</th>
<th>Fall 02</th>
<th>Fall 01</th>
<th>Fall 00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students in the program</td>
<td>35*</td>
<td>21</td>
<td>16</td>
<td>21</td>
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<tr>
<td>Graduate SCH</td>
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<td>80</td>
<td>91</td>
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<tr>
<td>Degrees Awarded (year)</td>
<td>2 (to date)</td>
<td>5</td>
<td>6</td>
<td>4</td>
<td>6</td>
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</tbody>
</table>

*Data provided by Don Wozniak (09/04)

**Demand for Graduates**
The OESH program provides a sound and rigorous academic preparation for prospective safety professionals who upon completion of their studies enjoy a strong job market. The professional literature indicates that the demand for safety professionals with academic preparation in a broad spectrum of safety-related disciplines exceeds the supply of college programs. This need is expected to continue over the next several years.

The safety profession has evolved over the years into many new specialized areas. For example, the field of occupational ergonomics has expanded as musculoskeletal disorders have reached alarming levels in several industries including meat processing, manufacturing and at computer workstations. In addition, an increased emphasis on highway and construction safety has been observed. These areas offer great employment opportunities.

Insurance and worker’s compensation costs have escalated over the last two decades and have become economic concerns for many employers. This has led to a growing emphasis on safety for companies and more employment opportunities for safety professionals.

Responsible companies, concerned public, and advocacy groups have raised their attention to effective environmental protection. Safety professionals are often assigned responsibilities for environmental affairs. This increases the need for safety professionals in organizations with environmental hazards.

There is substantial coverage in the print and broadcast media about hazardous waste spills, accidents, and other events that produce losses which could have been avoided through preventive measures and by better management. Finally, heightened security awareness following the September 11 events has also led to a stronger demand for safety and security professionals. In summary, for a number of years the career opportunities for innovative safety professionals have grown faster than the number of trained and qualified individuals available.

As reported elsewhere OESH graduates enjoy high employment rate and strong salaries with a majority of recent graduates surveyed reporting annual incomes between $60,000 and $70,000.
While many non-U.S. countries have safety standards below those found in the United States, responsible companies require their foreign plants to safeguard all employees. Foreign countries are also raising their safety, health and environmental standards. In many cases, international standards now protect workers everywhere.

Another indication of the strong demand experienced by safety graduates has been made evident during the Department’s fieldwork program. In the recent years the number of fieldwork opportunities has exceeded the number of applicants, and the overwhelming majority of students have been offered monetary compensation for that experience.

**Accreditation**

The Department has conducted, over the past years, a number of discussions on the need and desirability of external accreditation. Although recognizing the importance of this decision, other pressing needs had clear precedence over it, including the imperative need to improve the academic credentials of the instructional staff and establish a core tenure-track body, to redefine the Departmental mission as reflected in its name and undergraduate degree, to overhaul its curricula, and others. Consensus has been reached that the Accreditation Board for Engineering and Technology (ABET) presents the most appropriate accreditation option for the Department at this point. The OESH program currently meets almost the totality of that board requirements with minimal changes needed.

Currently, the OESH Department is conducting a complete assessment of the ABET requirements. As reported in the recent report from the OESH Advisory Board (see Appendix G) an ample discussion on the subject has occurred and contacts with the similar accredited programs are being made to evaluate the cost-benefits of the proposal. Upon a positive outcome of this evaluation an action plan will be developed and carried out.

**Comparative Advantage**

Although other safety-related programs are available, the OESH Department offers the only Master of Science in Occupational Safety in Wisconsin. The location of the program at the University of Wisconsin-Whitewater offers great access to innumerable opportunities and resources in the region. The Department has well established connections with many local and regional organizations. Its alumni staff the majority of safety positions in organizations throughout southern Wisconsin.

Different from programs that offer a limited number of courses in safety within their programs, the OESH Department provides a full-fledged comprehensive safety education. Another aspect that sets the UWW-OESH curriculum apart is its fieldwork program which places students for a full semester in some of the top organizations in the State. This is typically a paid opportunity where the students have the chance to apply their knowledge and skill to real life situations under the direction of experienced safety professionals in organizations where in most cases a well conceived safety plan is in place.
Resource Availability and Development

Faculty and Staff Characteristics
At the end of the previous review period the Department had recently hired two full time tenure-track faculty, with one of them resigning shortly after the issuing of the latest audit & review report. In summary, the OESH program started the current review period with only one member of its full-time instructional staff holding a doctoral degree. Since then the foremost priority of the Department has been the improvement of its instructional staff. The Department has hired four outstanding tenure-track faculty members and a number of excellent new part-time instructors, several of them holding doctoral degrees. A senior faculty member who had for several years served in a part time basis will return to the full time faculty in the Spring 2005 further strengthening the instructional staff. The OESH instructional staff today is highly qualified and committed to the different areas covered by the OESH programs. The instructional body is made up of professionals with advanced degrees in engineering and science, and with wide experience in industry, government and academia. The OESH staff is culturally diverse with Latino, Asian, and African-American members. The Faculty and Staff impressive contributions in teaching, research, and service can be found in the Appendix I.

The OESH Department has recently suffered a setback on staffing goals with the departure of one of its tenure-track members. This loss was a result of the widening gap between compensation offered by the Department and the current market value of OESH professionals. The request to replace this faculty member has been approved by the University and the search process is under way.

External Funding
The Department has worked diligently to obtain external funding during this review period. Some of the highlights include a series of grants on traffic safety obtained through the Wisconsin DOT, which totaled to over $370,000. Additional $15,000 was obtained from a variety of research and teaching and curriculum development grants. Other grants in the period included $30,500 received from J.J. Keller, and $60,000 from the DOT – Drivers Education grant. Detailed information on external funding can be found in Appendix I.

Resources for Students in the Program
The OESH Department, through a grant from the safety consulting company J.J. Keller, maintains a student lab equipped with three computers, printers, a scanner, a VCR/TV and a large inventory of videos and safety software. The student lab is staffed by two paid students and is open to all safety students for approximately 20 hours every week. The video collection has over 220 titles covering a wide range of safety topics. The video collection has received additional donations from the Wausau Insurance and the Association of General Contractors of Wisconsin. The lab inventory also includes specialized software packets and a number of professional periodicals and books.
The Occupational and Environmental Safety & Health Department has an active Student Safety Organization (SSO), which has been internationally recognized for student leadership. The SSO has been instrumental in sponsoring monthly professional development seminars. Annually the SSO organizes a full day conference where prominent ESH professional from a variety of industries share their experiences and insights with the students.

Facilities, Equipment, and Library Holdings
The OESH Department has been allocated approximately $15,000 for the purchase of library materials over the past four years. A staff member maintains the library fund and is responsible for submitting purchases from members of the Department. The Department has used all funds allocated by the library and has repeatedly obtained additional resources. The library administration and staff have been exceptionally helpful in assisting the OESH faculty and staff and students with the support necessary to conduct literature reviews, research, and studies.

All members of the Department faculty and staff have access to state of the art personal computers. A grant from the College of Education has allowed the Department to replace its computers every three years. Upgrades in instructional technology implemented in the classrooms of Winther Hall during the last few years have improved considerably the teaching resources of the program.

Equipment needs in OESH require a considerable initial outlay of capital as well as substantial funding for maintenance. The Department is currently working on the implementation of a new multi-use safety laboratory. The process will involve the use of funds from the University lab Modification program ($50,000) complemented by funds from the Gib Harris endowment and private organizations and donors. Construction of the new lab has already started and fundraising activities will proceed in the near future.
APPENDIX A

Previous Audit and Review Evaluation Report
Program  MS in Safety

Program Strengths:
Assessment
1. Good plans for program changes (1.6) with ambitious goals.
2. Assessment plan is being revised
3. Alumni survey is planned

Curriculum
1. The internship program appears to provide a range of opportunities
2. Planned initiatives in industrial hygiene, international safety, and Web-based courses look promising
3. There are extensive partnerships with businesses in practicum program

Faculty
1. Student evaluations of instruction are high

Opportunities for Students
1. They appear to be making efforts to meet the needs of nontraditional students.

Grants
1. The department has secured several grants.

Accreditation
1. The department is reviewing the program in light of new accreditation standards

Placement
1. Demand for graduates appears strong (p. 10).
2. Department is clearly aware of, and adjusting to, employment demand and trends

Program Weaknesses:
Assessment
1. There are no assessment data reported.
2. The program objectives (2.1) appear vague.
3. No recent alumni survey
4. No explicit linking of program objectives to specific courses

Curriculum
1. A need exists for greater separation in course offerings between graduate and undergraduate majors.
Faculty
1. The chair seems to have heavy administrative responsibilities as both chair and
director of the internship program.
2. The proportion of tenured and tenure-track faculty vs. academic staff in the
department is still poor.
3. Faculty/staff do not appear to be publishing in refereed journals.
4. Need better detail on faculty/staff activities (dates, audiences, publishers, etc.)

Enrollment
1. The program has experienced a sharp decline in enrollments.

Resources/Administration
1. Amount/Type of specialized equipment and lack of funds for upkeep.

Overall
1. The department appears to be at a "make it or break it" point in time.

Questions/Comments

Assessment
1. There is one subject matter and three cognitive development objectives. Do these adequately
capture the goals of the program?
2. Could we see the question by question results of the student and supervisor evaluations?
3. An explanation of how the comprehensive exam will be scored should be included since an
open-ended response format is being used. Problems with allowing students to choose
questions that they will answer i.e. they only choose three out of thirteen possible questions
in the elective courses section? How thoroughly can the domain be covered under these
conditions?
4. Overall, assessment information is primarily from internal sources (i.e. gathered from the
faculty in the form of grades, comprehensive exam etc.). External sources should be a more
prominent feature of the assessment plan.
5. While substantive changes in the program are being made, the basis for these decisions is
unclear. Here is an opportunity to use assessment data.

Accreditation
1. What are the reasons for seeking or not seeking ASSE/ABET accreditation?

Curriculum
1. The web-based degree proposal sounded interesting, but appears to need more
investigation.
2. Few students appear to select thesis option; what is the role of research?

Faculty
1. Although they refer to two of the academic staff being likely to earn terminal degrees in the
next year it was unclear if these would remain academic staff positions. They also mention
replacing one tenure track position, but given current university policies regarding searches, has approval for that position been obtained?

2. Is it appropriate for academic staff to be evaluating graduate level theses/research (p. 7)?

Placement
1. What is the graduate placement rate?

Overall
1. Should the graduate program be continued or should the resources be focused on the undergraduate program? Can the department do both programs well?
2. Is there an image problem in the community with potential students?
3. Does the department have the resources (human and financial) to effectively tackle the problems and revisions brought forth by this report? (page 11, for example) Can the department really do all it plans? Will new faculty be able to accomplish all these program changes and still manage to do the work of getting themselves tenured?
4. The report should add the contributions of the two newest members of the department to the list of awards, etc.

Specific Actions Recommended:
1. Pursue possibility of seeking accreditation from ABET.
2. Given the number and extent of the current and planned revisions in the curriculum and assessment of this program (and the undergraduate program), the program should go through another graduate Audit & Review in three years.
3. Continue and expand proposals for external funding to help fund some of the program improvements.
4. Develop a complete assessment program and use the assessment information in making program decisions.

Recommended Result
Note: The Graduate Audit and Review Committee has discussed the issue of the overall recommendation for the program. In that discussion, elements of the following recommendations were considered. The overall recommendation will be considered further when representatives from the program meet with the committee.
1. Continuation subject to annual reports from dean on progress - not so much "remedying deficiencies" as "noting revisions".
2. Withhold recommendation for continuation of the academic program, place the academic program on probation, and require another complete audit and review in three years.
It may be appropriate to combine these recommendations or to take elements from each.
APPENDIX B

PROGRAM DESCRIPTION
OCCUPATIONAL & ENVIRONMENTAL SAFETY AND HEALTH

The Master of Science (M.S.) Degree program in Occupational and Environmental Safety and Health is designed to develop an advanced understanding of general and specific issues relevant to occupational and environmental safety. Students will develop skills in collecting, analyzing, and drawing conclusions from data. Courses will include preparation and delivery of oral and written reports and projects relevant to accident investigations, job safety analyses, health concerns, workers' compensation issues, fire protection measures, workplace economics assessment and hazard investigation.

Program Coordinator:
Alvaro Taveira
Winthrop 8040
Phone: (202) 472-5427
Email: taveira@uw.edu

Department Program Assistant:
Winthrop 6034
Phone: (202) 472-1117
Email: safety@uw.edu

Additional Admission Requirements:
Three letters of recommendation supporting the candidate's ability to do graduate level work, a successful interview with the Program Coordinator, and meeting the prerequisites listed below.

Degree Requirements:
Thirty-six credits of course work which may include a practicum, successful completion of an oral defense of a thesis, or the successful completion of a research paper and a written comprehensive exam. At least 18 credits must be completed in 500-level courses.

SAFETY (M.S.)

REQUISITES (OR EQUIVALENTS)
1. SAFETY-389
   INDUSTRIAL ACCIDENT PREVENTION
2. CHEM-102
   CHEMISTRY
3. MATH-231
   UNDERSTANDING PROBABILITY & STATISTICS

REQUIRED COURSES - 21-27 CREDITS
SAFETY-685
FIRE PROTECTION/PREVENTION
SAFETY-684
INDUSTRIAL HYGIENE
SAFETY-752
SAFETY COMMUNICATIONS
SAFETY-753
LEGAL ASPECTS IN OCCUPATIONAL SAFETY
SAFETY-783
CORPORATE SAFETY MANAGEMENT
SAFETY-787
SYSTEM SAFETY ANALYSIS
SAFETY-788
ADVANCED HUMAN FACTORS ENGINEERING IN SAFETY
SAFETY-793
PRACTICUM
(MAY BE WAIVED FOR THOSE WITH APPROPRIATE WORK EXPERIENCE)

RESEARCH REQUIREMENTS - 6-9 CREDITS
SAFETY-789
READINGS AND RESEARCH IN SAFETY or SAFETY 799
THESIS RESEARCH
EDFUND-760
TECHNIQUES OF RESEARCH

SUGGESTED EXPANSION COURSES - 0-6 CREDITS
SAFETY-381
MOTOR FLEET SAFETY
SAFETY-382
SAFETY IN THE CONSTRUCTION INDUSTRY
SAFETY-383
INTRODUCTION TO SECURITY
SAFETY-384
CONSTRUCTION ACCIDENT PREVENTION
SAFETY-385
PRINCIPLES OF ENVIRONMENTAL SAFETY
SAFETY-650
BEHAVIORAL ASPECTS OF ACCIDENT PREVENTION
SAFETY-653
LEGAL ASPECTS IN SAFETY
SAFETY-657
PRINCIPLES OF OCCUPATIONAL EPIDEMIOLOGY
SAFETY-880
INDUSTRIAL HYGIENE INSTRUMENTATION
SAFETY-882
CONSTRUCTION SAFETY MANAGEMENT
SAFETY-883
INDUSTRIAL SAFETY MANAGEMENT
SAFETY-885
SAFE HANDLING OF MATERIALS
SAFETY PROGRAM

SAFETY-697
PRODUCT SAFETY
SAFETY-698
ERGONOMICS
SAFETY-899
CHEMICAL SAFETY
SAFETY-811
PRINCIPLES OF INSTITUTIONAL SAFETY
MANGEMENT-705
INFORM SYSTEMS FOUNDATIONS

OTHER COURSE(S) CHOSEN IN CONSULTATION WITH ADVISER.

For courses relevant to the Safety Program, please see the following pages:

<table>
<thead>
<tr>
<th>Course Prefix</th>
<th>See Page(s)</th>
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<tbody>
<tr>
<td>MANGEMENT-</td>
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<td>MATH-</td>
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</table>
CERTIFICATE IN CONSTRUCTION SAFETY

The Certificate in Construction Safety is designed to allow the working professional with a Bachelor’s Degree who is employed in the construction industry to acquire specific construction safety and health knowledge. The Certificate will provide the student with a comprehensive background in construction safety and enable him/her to carry out workplace hazard assessments, develop and implement safety and health programs, and fulfill risk management responsibilities in the construction industry.

Program Coordinator:
Dr. E. Andrew Kapp
Winther 6137
Phone: (262) 472-5423
Email: keepea@uwu.edu

Department Secretary:
Winther 6924
Phone: (262) 472-1117
Email: safety@uwu.edu

Additional Admission Requirements:
Evidence of ability to succeed in graduate level Occupational and Environmental Safety & Health course work (evidence of this could include relevant work experience, GRE scores, or professional certification, e.g., CSP).

Note: Students in the Construction Safety Certificate Program may enroll in the Master’s of Science in Safety at UW-Whitewater if they meet the normal criteria for that program.

CERTIFICATE IN CONSTRUCTION SAFETY:
The Certificate Program requires completion of the following three courses:

SAFETY-582
SAFETY IN THE CONSTRUCTION INDUSTRY

SAFETY-584
CONSTRUCTION ACCIDENT PREVENTION

SAFETY-682
CONSTRUCTION SAFETY MANAGEMENT

For courses relevant to the Certificate in Construction Safety, please see the following pages: 114-116
PROPOSED MS OCCUPATIONAL SAFETY
Approved by the OESH Department and COE Curriculum Committee

PRE-REQUISITES
SAFETY 381 INDUSTRIAL ACCIDENT PREVENTION
STATISTICS
CHEM 102 GENERAL CHEMISTRY

REQUIRED COURSES – 18-30 CREDITS
SAFETY-711 PRINCIPLES OF INSTITUTIONAL SAFETY
SAFETY-752 SAFETY COMMUNICATIONS
SAFETY-753 LEGAL ASPECTS IN OCCUPATIONAL SAFETY
SAFETY-757 PRINCIPLES OF OCCUPATIONAL EPIDEMIOLOGY
SAFETY-783 CORPORATE SAFETY MANAGEMENT
SAFETY-787 SYSTEM SAFETY ANALYSIS
SAFETY-788 ADVANCED HUMAN FACTORS ENGINEERING
SAFETY-790 WORKSHOP
SAFETY-793 PRACTICUM (MAY BE WAIVED FOR THOSE WITH APPROPRIATE WORK EXPERIENCE.)
SAFETY-798 INDIVIDUAL STUDIES IN SAFETY

RESEARCH REQUIREMENTS - 6-9 CREDITS
EDFOUND-740 TECHNIQUES OF RESEARCH
SAFETY-799 THESIS RESEARCH OR
SAFETY-789 READINGS AND RESEARCH IN SAFETY*

*Students electing SAFETY 789 - Readings and Research as part of their Research Requirements need to take a mandatory Comprehensive Examination.

SUGGESTED EXPANSION COURSES - 0-18 CREDITS
SAFETY-581 MOTOR FLEET SAFETY
SAFETY-582 SAFETY IN THE CONSTRUCTION INDUSTRY
SAFETY-583 INTRODUCTION TO SECURITY
SAFETY-584 CONSTRUCTION ACCIDENT PREVENTION
SAFETY-620 PRINCIPLES OF ENVIRONMENTAL SAFETY
SAFETY-650 BEHAVIORAL ASPECTS OF ACCIDENT PREVENTION
SAFETY-653 LEGAL ASPECTS IN SAFETY
SAFETY 679 PRINCIPLES AND METHODS OF INDUSTRIAL HYGIENE
SAFETY-682 CONSTRUCTION SAFETY MANAGEMENT
SAFETY-683 INDUSTRIAL SAFETY MANAGEMENT
SAFETY-685 FIRE PROTECTION/ PREVENTION
SAFETY-686 SAFE HANDLING OF MATERIALS
SAFETY-687 PRODUCT SAFETY
SAFETY-688 ERGONOMICS
SAFETY-689 CHEMICAL SAFETY
SAFETY-690 WORKSHOP
APPENDIX C

Matrix linking program objectives and courses
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APPENDIX D

Practicum Supervisor Survey
INSTRUCTIONS: Please answer the following questions regarding the performance of the student you sponsored this semester. Your answers will not be disclosed to the student and will have no effect on the student's grade, but are essential for the continuing improvement of our program. Thank you for completing this survey and returning it in the enclosed self-addressed envelope.

Company:

_____________________________________________________________________

Your name:

_____________________________________________________________________

Intern name:

_____________________________________________________________________

Date: _______________

In your opinion, how prepared was your student to perform the following functions. (Please circle the most appropriate response)

1) Accident Investigation Techniques (e.g. checking for the causes of the accident, follow-up inspections, etc.).

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<th>Poor</th>
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<th>Good</th>
<th>Excellent</th>
<th>Not observed</th>
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2) Industrial Hygiene Techniques (e.g. use of measuring devices and pumps, sampling working environment, etc.).

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3) Safety Inspection Techniques (e.g. general preventive inspections or audits, checking for hazardous conditions, Job Safety Analysis, etc.).

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<td>4)</td>
<td>Analysis of Accident and Health Data (e.g. completing reports, tabulating frequency rates, calculating severity indices, etc.).</td>
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<td>5)</td>
<td>Understanding of federal and state regulations (being able to look up and apply appropriate OSHA, EPA, and DOT regulations, etc.)</td>
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<td>Human Factors Engineering and Ergonomics (e.g., analysis of any human factors or ergonomics problems, and identification and correction of repetitive motion hazards, etc.).</td>
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<td>7)</td>
<td>Legal Aspects and Liability issues (e.g. Workers' Compensation, product liability, court activities, etc.).</td>
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<td>8)</td>
<td>Conducting training sessions (e.g. development and delivery of training).</td>
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<td>9)</td>
<td>Communication and interaction with people.</td>
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<td>10)</td>
<td>Writing ability (e.g., how well did your intern communicate via written reports, etc.).</td>
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11) Acceptance of work-related responsibilities (e.g., on time, meets deadlines, etc.).

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PLEASE EVALUATE THE FACULTY COORDINATION AND SUPERVISION OF THE PRACTICUM PROGRAM.

12) Placement of the intern with your company.

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13) Faculty site supervision of the intern.

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14) Faculty communication with you and your staff.

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15) Faculty site supervisor resolution of internship problems.

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</table>

16) Number of visits the faculty supervisor made to you location__________

Number of faculty visits you would prefer __________

Please provide any additional recommendations you have for the faculty supervisors.
APPENDIX E

Exit Survey
The Department of Occupational and Environmental Safety and Health requests your assistance in improving our program. Please answer the following questions regarding your academic preparation. This evaluation is anonymous and only aggregated data will be made public. Thank you for completing this form. Your input is valued.

For the courses listed below, please rate how valuable each was in your educational experience. Use the following code: *(Note: If you had no coursework in this area, leave the item blank).*

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<thead>
<tr>
<th></th>
<th>Extremely Valuable</th>
<th>Valuable</th>
<th>Somewhat Valuable</th>
<th>Little value</th>
<th>No value</th>
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<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
</tr>
<tr>
<td>1. Industrial Accident Prevention</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
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<tr>
<td>2. Introductory Chemistry</td>
<td>A</td>
<td>B</td>
<td>C</td>
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<td>E</td>
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<tr>
<td>3. Statistics</td>
<td>A</td>
<td>B</td>
<td>C</td>
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<tr>
<td>4. Advanced Human Factors Engineering</td>
<td>A</td>
<td>B</td>
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<tr>
<td>5. Ergonomics</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
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<tr>
<td>7. Corporate Safety Management</td>
<td>A</td>
<td>B</td>
<td>C</td>
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<td>8. Safety Communications</td>
<td>A</td>
<td>B</td>
<td>C</td>
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<td>E</td>
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<tr>
<td>9. Advanced Legal Aspects in Occupational Safety</td>
<td>A</td>
<td>B</td>
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<tr>
<td>10. Legal Aspects in Safety</td>
<td>A</td>
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<tr>
<td>11. Fire Protection and Prevention</td>
<td>A</td>
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<tr>
<td>12. Industrial Hygiene</td>
<td>A</td>
<td>B</td>
<td>C</td>
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<tr>
<td>Course Number</td>
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<td>14</td>
<td>Practicum</td>
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<td>Techniques of Research</td>
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<td>Readings and Research in Safety</td>
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<td>18</td>
<td>Individual Study</td>
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<td>19</td>
<td>Motor Fleet Safety</td>
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<td>20</td>
<td>Behavioral Aspects of Accident Prevention</td>
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<td>21</td>
<td>Principles of Occupational Epidemiology</td>
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<td>Product Safety</td>
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<td>23</td>
<td>Chemical Safety</td>
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<td>Principles of Institutional Safety</td>
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<td>Information Systems Foundations</td>
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<td>26</td>
<td>Safety in the Construction Industry</td>
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<td>27</td>
<td>Introduction to Security</td>
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<td>28</td>
<td>Industrial Safety Management</td>
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<td>29</td>
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<td>30</td>
<td>Principles of Environmental Safety</td>
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<td>31</td>
<td>Occupational Hearing Conservation</td>
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<td>32</td>
<td>Insurance</td>
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Please feel free to provide any comments or suggestions about the program or individual courses:

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Thanks!
APPENDIX F

Alumni Survey
Hello this is [your name] and I’m calling on behalf of the Department of Occupational and Environmental Safety & Health at UW-Whitewater (former Safety Studies). The Department is searching for feedback from its former graduate students to improve our program. We would like to ask you some questions related to how our program prepared you for a safety career. This is a very short survey that will not take more than 15 minutes to answer. Your individual answers are confidential and only aggregated data will be made public. Your input is essential for the development of our safety program at UW-Whitewater. Would agree to participate?

Date of graduation __________ (month/year)

Job Title: ___________________________________________________________

Employer: ____________________________________________________________

I am going to list a number of courses offered by the Department, please rate how valuable each was in preparing for your professional life. Use the following code:

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<tr>
<th>Extremely Valuable</th>
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<th>Somewhat valuable</th>
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</table>

If you had no coursework in this area, just let me know.

1. Behavioral Aspects of Accident Prevention 5 4 3 2 1 NA
2. Legal Aspects in Safety 5 4 3 2 1 NA
3. Ergonomics or Advanced Human Factors 5 4 3 2 1 NA
4. Traffic Safety/Motor Fleet Safety 5 4 3 2 1 NA
5. Industrial Accident Prevention/Federal Code of Regulations 5 4 3 2 1 NA
6. Safety in the Construction Industry 5 4 3 2 1 NA
7. Security 5 4 3 2 1 NA
8. Occupational Epidemiology 5 4 3 2 1 NA
9. Industrial Hygiene 5 4 3 2 1 NA
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<td>Fire Protection and Prevention</td>
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<td>Practicum</td>
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<td>How would rate the overall quality of the preparation you received from the program</td>
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20. Based on your experience in the safety program what aspects you would like to see expanded or improved?

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

19. Which of the following ranges includes your current annual income from your employment (full time equivalent):
   a. Less than $20,000
   b. Between $20,000 and $30,000
   c. Between $30,001 and $40,000
   d. Between $40,001 and $50,000
   e. Between $50,001 and $60,000
   f. Between $60,001 and $70,000
   g. More than $70,000

Do you have any questions for me?
Thank you very much for your help! If you have any question please call the Department at 262-472-1117
APPENDIX G

OESH Advisory Board
Ms. Sheri Ackley  
Director  
Office of Safety and Loss Prevention  
University of Wisconsin System  
780 Regent St., Rm 145  
Madison WI 53706  
Phone: (608) 265-5383  
sackley@uwsa.edu

Mr. Rick Barton  
Vice-President  
AON Risk Services  
330 E. Kilbourn Ave, Suite 450  
Milwaukee WI 53202  
Phone: 414-225-5377  
Cell: 414-331-2938  
1-800-437-0555 (Green Bay)  
Rick_Barton@aon.com

Dr. Eric E. Hobbs (Chair)  
Partner  
Michael Best & Friedrich LLP  
Phone: (414) 225-4991  
Email: eehobbs@mbf-law.com  
100 East Wisconsin Avenue  
Suite 3300  
Milwaukee, WI 5320

Mr Patrick M. Ostrenga  
Compliance Assistance Specialist  
U.S.Department of Labor, Occupational Safety and Health Administration  
310 West Wisconsin Ave. Suite 1180  
Milwaukee, Wisconsin 53203  
Telephone 414.297.3315  
Fax 414.297.4299  
“Ostrenga, Patrick” patrick.ostrenga@osha.gov
Professor Michael J. Smith  
Department of Industrial Engineering  
University of Wisconsin-Madison  
1513 University Ave.  
Madison, WI 53706  
Phone: (608) 263-6329  
mjsmith@engr.wisc.edu

Ms. Lynn Tess  
ASSE Milwaukee Chapter President  
Rockwell Automation Control Systems  
1201 South Second St  
Dept 717  
Milwaukee WI 53219  
414.382.3815  
l tess@wi.rr.com
REPORT

TO: Dr. Alvaro Taveira, Chairperson
Department of Occupational and Environmental Safety & Health
University of Wisconsin-Whitewater

FROM: Eric E. Hobbs, Chairperson
Department of Occupational and Environmental Safety & Health Advisory Board

The newly-created Advisory Board for the University of Wisconsin-Whitewater’s Department of Occupational and Environmental Safety and Health convened for the first time on March 19, 2003. The Board includes six members: Ms. Sheri Ackley, Director of the University of Wisconsin Systems Office of Safety and Loss Prevention; Mr. Rick Barton, Risk Management Consultant with AON Risk Services; Mr. Patrick Ostrenga, Compliance Assistance Specialist with the Milwaukee Area Office of the U.S. Occupational Safety and Health Administration; Dr. Michael Smith, Professor in the University of Wisconsin-Madison’s Department of Industrial Engineering; Ms. Lynn Tess, Safety Manager with Rockwell Automation Control Systems in Milwaukee and President of the Milwaukee Chapter of the American Society of Safety Engineers; and Eric Hobbs, an employment relations partner with the Milwaukee law firm of Michael Best & Friedrich LLP, whose practice emphasizes safety and health issues. Also present at the meeting were members Anderson, Bowen, Cole, Kapp, Taveira (Chairperson), and Wucivic of the Occupational and Environmental Safety & Health Department. Dean Barnett of the University’s College of Education at Whitewater also visited.

The meeting began with an introduction by the Board and the Department members of themselves and with a presentation by Department members Taveira, Bowen and Wucivic on the history of the Department. Dr. Taveira also highlighted certain of the Department’s recent accomplishments: its adoption of a new title; the change of the undergraduate degree offered from a B.S.E. to a B.S.; consolidation of the minor programs offered; and the granting by the University System of general education credits for two Department course offerings. Members of the Department also described for the Board the ongoing development of the Department’s new Construction Safety Emphasis and Certificate Program.

Dr. Taveira outlined, for question and comment by the Board members, the Department’s plans for the future. He brought the Board up to speed on the Department’s implementation of a new safety laboratory, its intention to develop emphasis programs in occupational ergonomics and in environmental safety, which would result in graduate certificates. He also described the Department’s consideration of bringing to the University, under the Department’s responsibility, the State’s Occupational Safety and Health consulting function, federally-funded by OSHA and most recently a part of the Wisconsin Department of Commerce (safety branch). The Board members discussed with the Department members and among themselves all of those plans and proposals.
Dr. Taveira, on behalf of the Department, posed several questions of the Board, which generated much discussion and suggestion. Those questions included what future directions for the safety profession the Board members see to be on the horizon; what the most promising areas are for new safety and health professionals; what resources might be available to the Department in increasing the strength of existing programs and in developing new ones to prepare students better to serve the public and the private sectors in occupational and environmental safety and health; what professional opportunities there are and likely will be for graduates now and in the foreseeable future; and what other thoughts the Board members might have. Among the many comments, observations and recommendations offered in the discussion were the following:

- Mr. Hobbs addressed the need for an additional emphasis in the Department’s program on health-related issues, believing that most safety professionals with whom he deals are not well enough informed about occupational health issues like the risks related to the handling of and exposures to various chemicals.

- Ms. Ackley emphasized that students in the program need to be taught analytical skills that will equip them to deal with more than just regulation compliance. The students must be knowledgeable in related, but relatively unregulated, areas like worker’s compensation and ergonomics and need to be educated in working with different groups and “constituencies” with vested or tangential interest in environmental and occupational safety and health issues – for example, labor unions, insurers and advocacy organizations. She suggested that the area of labor relations be explored as a possible subject for coursework.

- Mr. Smith articulated his belief that there is a tremendous potential for the development of an attractive curriculum in security, which has become an increasingly high visibility issue since “9/11”. He also emphasized that the tight financial times educational institutions like the University are finding themselves in require departments like this Department to seek even more diligently grant monies and means of increasing revenue by the offering of, for example, short-format courses to the community. The Department’s working to establish more and tighter relationships with the business community is a critical part of finding success in that area.

- Mr. Ostrenga suggested that the Department might find significant value in developing an alliance with OSHA, much the way businesses have been entering into such alliances. The University’s assumption of responsibility for the State’s occupational safety and health consultation service would require such an alliance that could be expanded and strengthened in other ways. He also emphasized the very positive outcomes of the developing Construction Safety Emphasis Program of the Department and suggested that the model of that Program could and should be repeated successfully with other safety/health emphases.
• Mr. Barton began a discussion among the Board members of the benefits of curricula that develop students and graduates who have safety/health specializations as compared and contrasted with curricula that develop students/graduates who are more generalists in environmental or occupational safety and health. The consensus of the Board members was that there needs to be a balance of general safety and health education with selected specialization emphases from which students can and should be required to choose. The Board members also agreed that there needs to be an emphasis, even in the general safety program, on environmental as well as occupational safety and health issues given that managers of safety and health increasingly are being required to oversee both occupational and environmental matters.

• The Department members expressed concern that imposing additional chemistry course requirements as a part of the Department’s “core” curriculum might result in an adverse reaction by the students, who already find the coursework demands to be heavy. The members of the Department also shared their own concerns that existing faculty might not have the background necessary to teach such subjects and that the Department presently lacks funding to bring aboard new faculty with the appropriate backgrounds.

Both the Board and the Department members expressed regret that not more ground could be covered in the time allotted for the meeting. All agreed the work of the Board to be valuable, the interest of the Board members to be continuing and the need of continued conversation among the Department and the Board members to be in the best interests of the Department, the University as a whole, the students, and the University’s constituents.

Respectfully submitted,

Eric E. Hobbs
Chairperson of the Board
The Advisory Board for the University of Wisconsin–Whitewater’s Department of Occupational and Environmental Safety & Health convened on August 27, 2004. The Board includes six members: Ms. Sheri Ackley, Director of the University of Wisconsin Systems Office of Safety and Loss Prevention; Mr. Rick Barton, Risk Management Consultant with AON Risk Services; Mr. Patrick Ostrenga, Compliance Assistance Specialist with the Milwaukee Area Office of the U.S. Occupational Safety and Health Administration; Mr. Michael Smith, Professor in the University of Wisconsin-Madison’s Department of Industrial Engineering; Ms. Lynn Tess, Safety Consultant and President of the Milwaukee Chapter of the American Society of Safety Engineers; and Eric Hobbs, an employment relations partner with the Milwaukee law firm of Michael Best & Friedrich, LLP, whose practice emphasizes safety and health issues. Also present at the meeting were Department members Bowen, Choi, Cole, Gruetzmacher, Kapp, Rodman, Taveira (Chair), Wucivic, and Zehel. The meeting began with an introduction by the Board and the Department members of themselves.

Department members Choi, Kapp, Rodman and Taveira updated the Board on a number of departmental initiatives. Those initiatives include recent activities in the Construction Safety Emphasis/Certificate Program, the development of the Occupational Ergonomics Emphasis/Certificate Program to be implemented sometime during the 2005-06 academic year, and planning for a new Environmental Program Management minor. Dr. Taveira briefed the Board on the Department’s and the College’s fund raising activities for its new safety lab and on developments of the past year regarding the transfer of the Department from the College of Education to the College of Business and Economics, which currently is on hold. He additionally reported on the strong increase in graduate enrollment and the gains that the Department has seen in the past year in undergraduate enrollment.

The Board members received Dr. Taveira’s additional report on changes in the Principles of Occupational Epidemiology, Chemical Safety, Safe Handling of Materials, Advanced Human Factors, and Legal Aspects of Safety course. The Department members responsible for those courses responded to questions from Board members about the changes and received various Board members’ reactions and suggestions. On the whole, the Board was pleased with the curriculum modifications being made. The Board also expressed its pleasure at the increase in both graduate and undergraduate enrollment.
Dr. Taveira also reported to the Board on the unfortunate departure of former Department member Anderson and noted that the Department has requested University authorization to conduct a national search for an industrial hygienist to replace Dr. Anderson. Mr. Hobbs emphasized to the Department members that industrial hygiene is becoming an increasingly critical area of expertise for safety and health professionals in industry and in other business and emphatically urged the Department to do all it can to ensure the inclusion on the faculty of an otherwise well-qualified industrial hygienist. Mr. Smith, Mr. Barton and other Board members discussed the issue and concurred regarding the importance of maintaining continuity in the industrial hygiene elements of the Department’s curriculum.

The Board and Department members discussed at length the potential costs and potential benefits associated with both seeking and maintaining accreditation of the Department’s programs by the Accreditation Board for Engineering and Technology (“ABET”). Dr. Taveira mentioned that the benefits likely would include increased prestige and regional recognition of the Department’s programs. Dr. Gruetzmacher noted that students likely would benefit from ABET accreditation, given that certain requirements for various professional certifications, like those for CSP, CIH and CPE, are waivable for candidates who have graduated from accredited programs.

Mr. Smith described his personal experience as a University of Wisconsin-Madison engineering faculty member with the ABET accreditation process, and he explained in some detail the significant volume of administrative work involved in the application process and in the subsequent maintenance/renewal process. Mr. Smith also shared his skepticism about the weight or value of the benefits resulting from accreditation, at least when balanced with the significant quantifiable and non-quantifiable expenses of accreditation. The Board and Department members agreed that the Department should contact similar accredited programs across the nation to inquire about their experiences with the accreditation process and their evaluation of the pros and cons of seeking and maintaining accreditation.

In response to inquiries by the Department’s members, the Board members discussed and agreed upon the importance of the Department’s offering courses on production processes and on accident investigation. The Board members concurred that coverage of those topics should be increased within the curriculum. The Department members, in agreement, indicated that the process of planning courses on those subjects is anticipated to start later this academic year.

The Board subsequently engaged in an open “forum” on areas of growth opportunity for the Department. The Department members reported on previous initiatives, such as the possible but aborted transfer of the Wisconsin OSHA safety consulting services function from the State to the University for administration. The Board’s members were in agreement that the demand by employers of all kinds for security-knowledgeable safety and health experts is increasing and will continue to increase for the foreseeable future. Ergonomics knowledge and expertise similarly is sought after in safety and health managers and consultants.
Finally, the Board members discussed with the Department members third-party resources that might be sought out and solicited to support the continued development of the Department’s programs and continuing education efforts. Mr. Hobbs and Mr. Smith strongly recommended that the Department look into cooperation with the Wisconsin Council of Safety to extend the Department’s reach in continuing education off-site and potentially on a profitable fee-for-service basis.

Both the Board members and the Department members agreed that their interaction during the course of the meeting was valuable and interesting to all and that a continuing dialogue among the members during the course of the year would be of benefit to the Department, the College, the University and the University’s students and constituents. It is the Department’s intention, at various of the Board members’ invitation, to call upon the Board members individually to contribute as each one can during the course of the year.

Respectfully submitted

Eric E. Hobbs  
Chairperson of the Board
APPENDIX H

CONSTRUCTION SAFETY

&

OCCUPATIONAL ERGONOMICS

ADVISORY BOARDS
Construction Safety Advisory Board

1. Adam Gerson  E-mail Address: adam.gerson@osha.gov  
   Business Information: Company: OSHA  
   Address: Madison WI  USA  Phone: 608-250-2602

2. Alvaro Taveira  E-mail Address: taveiraa@mail.uww.edu

3. Andrew Kapp  E-mail Address: kappa@mail.uww.edu  
   Business Information: Company: UW Whitewater  
   Address: 800 West Main St.  Whitewater WI 53190-1790  
   Phone: 262-472-5423  Fax: 262-472-1091

4. Brian Oberle  E-mail Address: boberle@jpcullen.com  
   Business Information: Company: J.P. Cullen & Sons, Inc.  
   Address: 330 East Delavan Drive PO Box 1957 Janesville WI 53547-1957  
   Phone: 608-754-6601  Fax: 608-754-9171 Cell:608-751-8733

5. Carl Thiesen E-mail Address: cthiesen@payneanddolan.com  
   Business Information: Company: Payne & Dolan  
   Address: Waukesha WI  USA  Phone: 262-524-1836

6. Christopher Urech  E-mail Address: curech@zenithtechinc.com  
   Business Information: Company: Zenith Tech  
   Address: Waukesha WI  USA  Phone: 262-524-1952

7. Dan Burazin  E-mail Address: dburazin@age-gm.org  
   Association of General Contractors WI

8. Debra Redell  E-mail Address: debredell@aol.com  
   Business Information: Title: President  Company: C&I Safety  
   Address: 1201 South Ohio St. Racine WI 53405  USA  
   Phone: 262-633-8851  Fax: 262-633-8853  Pager: 262-399-1621

9. Fred Rideout  E-mail Address: frideout@crmeyer.com  
   Business Information: Title: Corporate Risk Manager  Company: C R Meyer  
   Address: 895 W. 20th Ave PO Box 2157 Oshkosh, WI 54903-2157  
   Phone: 920-235-3350  Fax: 920-235-3439
10. Patrick Ostrenga  E-mail Address:  patrick.ostrenga@osha.gov  
   Business Information: Company: OSHA  
   Address: Milwaukee WI  USA  Phone: 414-297-3315

11. Rick Barton  E-mail Address:  Rick_Barton@aon.com  
   Business Information: Company: Aon Risk Services  
   Address: Milwaukee WI  USA  Phone: 414-225-5377

12. Wayne Cole  Email Address: colew@uww.edu  
   Business Information: Company: UW Whitewater  
   Address: 800 West Main St.  Whitewater WI 53190-1790  
   Phone: 262-472-1911  Fax: 262-472-1091
Sang Choi, Ph.D., CPE  
Assistant Professor  
Department of Occupational and Environmental Safety & Health  
University of Wisconsin-Whitewater  
800 W. Main St.  
Whitewater, WI 53190  
(262) 472-1641  
chois@uww.edu

Sharon Falkenburg, CPE  
Vice President  
Ergonomics By Design  
678 Scenic Heights Dr.  
Delafield, WI 53018  
Shari_Falkenburg@URSCorp.com  
sfalkenburg@wi.rr.com  
262-893-0347 (cell)  
(262) 646 - 2837  
(262) 893 -0347 (cell)

Tycho K. Fredericks, Ph.D.  
Associate Professor  
Department of Industrial and Manufacturing Engineering  
Western Michigan University  
Parkview Campus  
Kalamazoo, MI 49008-5336  
Phone (269) 276-3360 FAX: (269) 276-3353  
E-mail: tycho.fredericks@wmich.edu

George Gruetzmacher, Ph.D., PE, CIH  
OSHA Consultation Service  
Division of Public Health  
Department of Occupational and Environmental Safety & Health  
University of Wisconsin-Whitewater  
1027 Beech St. Sun Prairie, 53590  
608-267-2927  
GRUETGR@dhfs.state.wi.us  
george.gruetzmacher@alum.mit.edu
Dan McCausland  
Consultant  
Foth & Van Dyke Engineering  
Meat Institute of America  
Foth and Van Dyke  
1402 Pankratz Street  
Madison, WI  53704  
(608) 242-5950  
cell 608-358-7142  
jmccausland@foth.com

Ben-Tzion Karsh, Ph.D.  
Assistant Professor  
Department of Industrial Engineering  
University of Wisconsin-Madison  
1513 University Avenue  
Madison, WI  53706  
bkarsh@engr.wisc.edu  
262-472-3002

Patricia Seeley, CPE  
Principal consultant  
We Energies  
414-389-4382  
patricia.seeley@we-energies.com

William Skelly, Ph.D.  
Assistant Professor  
Department of Health, Physical Education, Recreation, and Coaching  
University of Wisconsin-Whitewater  
800 W. Main St.  
(262) 472-5646  
skellyw@uww.edu

Alvaro Taveira, Ph.D.  
Professor & Chair  
Department of Occupational and Environmental Safety & Health  
University of Wisconsin-Whitewater  
800 W. Main St.  
(262) 472-5427  
taveiraa@uww.edu
APPENDIX I

Faculty & Staff contributions in teaching, research, and service
Teaching assignments between 2000-2004 (in alphabetical order):

Name: Subhi Abderrezaq, PhD (Spring 2000)
- Safety in the Construction Industry- SAFETY 382
- Principles of Environmental Safety- SAFETY 420/620
- Chemical Safety- SAFETY 489/689

Name: Thomas Anderson, PhD, CIH (Fall 2002 to Spring 04)
- Industrial Hygiene Instrumentation- SAFETY 480/680
- Industrial Hygiene – SAFETY 484/684
- Principles of Environmental Safety- SAFETY 420/620
- Introduction to Safety- SAFETY 251
- Personal & Public Safety- SAFETY 201
- Alcohol and Other Drugs- SAFETY 255

Name: Deborah Bowen (Spring 2000 to Present)
- Industrial Accident Prevention- SAFETY 380
- Fire Protection/Prevention- SAFETY 485/685
- Introduction to Safety- SAFETY 251
- Personal & Public Safety- SAFETY 201

Name: Maureen Buechel (Fall 2001 to Present)
- Alcohol and Other Drugs- SAFETY 255

Name: John Bushman (Spring 1999 and Spring 2001)
- Principles of Environmental Safety- SAFETY 420/620

Name: Sang Choi, PhD, CPE (Fall 2003 to Present)
  - SAFETY-382/582 Safety in the Construction Industry
  - SAFETY-384/584 Construction Accident Prevention
  - SAFETY-486/686 Safe Handling of Materials
  - SAFETY-487/687 Product Safety
  - SAFETY-488/688 Ergonomics
  - SAFETY-492 Fieldwork Internship in Safety
  - SAFETY-787 System Safety Analysis
  - SAFETY-788 Advanced Human Factors

Name: Wayne Cole (Spring 2000 to Present)
- Industrial Safety Management- SAFETY 483/683
- Safety in the Construction Industry- SAFETY 382/582
- Construction Accident Prevention- SAFETY 384/584
- Construction Safety Management- SAFETY 482/682
• Workshop Construction III- SAFETY 490/690
• Safe Handling of Materials- SAFETY 486/686
• Industrial Accident Prevention- SAFETY 380
• Corporate Safety Management-SAFETY 783
• Fieldwork Internship in Safety- SAFETY 492/793

Name: Frank Conway, PhD, PE (Spring 2001)
• Legal Aspects of Safety- SAFETY 453/653

Name: William Freeman (Spring 2001)
• Principles of Environmental Safety- SAFETY 420/620

Name: Greg Green (Summer 2000, Chair until Spring 2000)
• Legal Aspects of Safety- SAFETY 453/653
• Seminar-Safety- SAFETY 470
• Fieldwork Internship in Safety- SAFETY 492
• Independent Study- SAFETY 498
• Readings and Research- SAFETY 789
• Individual Studies- SAFETY 798
• Thesis Research- SAFETY 799
• Analysis and Design for Safety in Industrial Operations- SAFETY 481

Name: George Gruetzmacher, PhD, CIH, PE (Fall 2001 to Present)
• Industrial Hygiene Instrumentation- SAFETY 480/680
• Industrial Hygiene – SAFETY 484/684
• Workshop: Safety and Security in Air Transportation- SAFETY 490/690
• Workshop: Special Topics in Industrial Hygiene SAFETY 490/690

Name: Rodney Handy, PhD, CIH (Summer 2001)
• Analysis & Design for Safety in Industrial Operations- SAFETY 481

Name: Dennis Hussey, PhD., CIH (Fall 2001)
• Principles of Environmental Safety- SAFETY 420/620

Name: Andrew Kapp, PhD (Spring 2000 to Present)
• Analysis and Design for Safety in Industrial Operations- SAFETY 481
• Seminar-Safety- SAFETY 470
• Fieldwork Internship in Safety- SAFETY 492
• Legal Aspects of Safety- SAFETY 453/653
• Safety in the Construction Industry- SAFETY 382/582
• Alcohol and Other Drugs- SAFETY 255
• Industrial Accident Prevention- SAFETY 380
• Behavioral Aspects of Accident Prevention- SAFETY 450/650
• Safe Handling of Materials- SAFETY 486/686
• Product Safety- SAFETY 487/687
• Corporate Safety Management- SAFETY 783

Name: Robert Lepkowski (Spring 2000 to Present)
• Introduction to Security- SAFETY 383/583
• Introduction to Safety- SAFETY 251

Name: Leslie Reed, CIH (Spring 2000 to Spring 2001)
• Industrial Hygiene Instrumentation- SAFETY 480/680
• Industrial Hygiene – SAFETY 484/684

Name: Vay Rodman, PhD (Spring 2000 to Present)
• Legal Aspects in Occupational Safety- SAFETY 753
• Legal Aspects of Safety- SAFETY 453/653
• Safety Communications- SAFETY 752
• Principles of Institutional Safety- SAFETY 711
• Principles of Occupational Epidemiology- SAFETY 657

Name: Alvaro Taveira, PhD (Spring 2000 to Present, Chair Fall 2000-Present)
• Ergonomics- SAFETY 488/688
• Behavioral Aspects of Accident Prevention- SAFETY 450/650
• Analysis & Design for Safety in Industrial Operations- SAFETY 481
• Product Safety- SAFETY 487/687
• Independent Study- SAFETY 498
• Fieldwork Internship in Safety- SAFETY 492
• Techniques of Research- EDFOUND 740
• System Safety Analysis- SAFETY 787
• Readings and Research- SAFETY 789
• Individual Studies- SAFETY 798
• Thesis Research- SAFETY 799

Name: Kenneth Terbeek, PhD (Fall 2002)
• Principles of Environmental Safety- SAFETY 420/620

Name: Mary Wagner (Victor) (Spring 2000 to Present)
• Alcohol and Other Drugs- SAFETY 255
Name: Treena Ward (Spring 2000 to Spring 2002)
- Analysis & Design for Safety in Industrial Operations- SAFETY 381
- Fieldwork Internship in Safety- SAFETY 492
- Introduction to Safety- SAFETY 251
- Alcohol and Other Drugs- SAFETY 255

Name: Terry Witkowski (Spring 2001 to Present)
- Fieldwork Internship in Safety- SAFETY 492
- Introduction to Safety- SAFETY 251
- Alcohol and Other Drugs-SAFETY 255

Name: Craig Wucivic (Spring 2000 to Present)
- Introduction to Safety- SAFETY 201
- Personal and Public Safety- SAFETY 201
- Motor Fleet Safety- SAFETY 381/581
- Basic Traffic Safety- SAFETY 260
- Problems and Material of Drivers Education- SAFETY 461/661
- Techniques of Laboratory Instruction- SAFETY 464

Name: Roger Young (Spring 2000 to Present)
- Alcohol and Other Drugs- SAFETY 255

Name: David Zehel, PhD  (Fall 2000 to Present)
- Behavioral Aspects of Accident Prevention- SAFETY 450/650
- Industrial Accident Prevention- SAFETY 380
- Alcohol and Other Drugs- SAFETY 255
- Advanced Human Factors-SAFETY 788
Teaching and Professional Development Activities between 2000 and 2004 (in alphabetical order):

Name: Thomas Anderson, PhD, CIH
- Participation in on-campus and off-campus teaching enhancement activities UWW First Year Program for new faculty
- Faculty Seminar on Grading and Assessment
- Learn Center Symposium-Gains in Student Learning
- Title II Instructional Workshop
- Work with undergraduate students on research projects
- Supervised graduate readings and research: Glyndis Mack – health effects of silica. Hank Bongers – original research on effects of biohazard regulations on The food industry
- New course development; and/or involvement with interdisciplinary course development and/or delivery
- Curriculum change by the University to make Intro to Safety a Gen-Ed Personal and Public Safety course

Name: Deborah Bowen
- OESH Internship Program Coordinator: 2000-2001
- Member of the UW President Search and Screen Committee: 2003-2004
- Attended UW-W workshop: Web-Based Diversity Tools: An Internet Resource.
- Attended the COE meeting on the Conceptual Framework and Unit Assessment Plan
- Attended COE Fall Retreat, UW-W
- Actively involved in COE Focus Week
- Attended SSO Professional Development Conference.
- Served as moderator for the workshop session on Ecofeminism and Spirituality during the 27th Annual Women’s Studies Conference, UW-Madison, November 1-2, 2002.
- Attended the 27th Annual Women’s Studies Conference, UW-Madison, November 1-2, 2002
- Attended the OSHA Training Institute's Train the Trainer Program
- Attended the 58th Annual Wisconsin Safety & Health Congress/Exposition
- Attended the Wisconsin Council of Safety 2000 Safety and Health Congress and Exposition. Middleton, WI
- Attended the Wisconsin Council of Safety 1999 Safety and Health Congress/Exposition, Middleton, WI
• Attended the World Safety Organization (WSO) 12th World Safety and Accident Prevention Conference.

Name:  Sang Choi, PhD, CPE

• Completed in the First Year Program by LEARN Faculty Development Center at the University of Wisconsin-Whitewater, Whitewater, WI, USA (August 2003-April 2004)
• Completed in the Product Safety and Liability Prevention for Engineers course in the Engineering Professional Development Department at the University of Wisconsin-Madison, Madison, WI, USA (March 2004)
• Advising 21 undergrad students and 7 grad students in OESH department
• Occupational Ergonomics Emphasis and Certificate Program (Under development)

Name:  E. Andrew Kapp, PhD

• Attended Title III Faculty Technology Workshop; July 9-20, 2001
• Attended OSHA National Training Institute Class 510: Occupational Safety & Health Standards - Construction Industry; Des Plaines IL; August 6-10, 2001
• Attended Charles Bonwell, Ph.D. Seminars on Active Learning and Learning Styles August 28, 2001
• Attended OSHA National Training Institute Class 301: Excavating, Trenching, & Soil Mechanics; Des Plaines, IL; January 8-11, 2002
• Attended OSHA National Training Institute Class 500: Trainer Course in Occupational Safety and Health Standards for the Construction Industry; Des Plaines, IL; July 22-26, 2002.
• Attended Lion Gardiner's, Ph.D. Seminars on Producing Dramatic Gains in Student Learning; August 27, 2002 UW System Faculty College, June 2-5, 2003
• Wisconsin Workers Compensation Update, Green Bay, WI, June 16-17, 2003.
• Summer Institute for Teaching Fellows and Scholars, June 22-27, 2003
• LEARN Center Workshop: Perspectives on Critical Thinking and their Classroom Application, presented by Craig Nelson, August 26 2003.
• University of Wisconsin System Teaching Fellowship recipient 2003-2004.
• Advise 11 Graduate students
• Redesigned curriculum for SFTYGEN 453/653: Legal Aspects of Safety Taught Fall 2001 and Spring 2002
• Designed Curriculum for SFTYGEN 490/690: Construction Accident Prevention to be taught Spring 2002
• Developed curriculum and submitted curricular proposal package for new undergraduate emphasis Occupational Safety-Construction Emphasis including new submajor proposal, two new courses proposals and one course description change.
• Developed curriculum and submitted curricular proposal package for new graduate Certificate in Construction Safety including new submajor proposal, two new courses proposals and one course description change
• Redesigned curriculum for SFTYIND 783 Corporate Safety Management to be taught Spring 2002
• Redesigned curriculum for SFTYIND 481 Analysis & Design for Safety to be taught Spring 2002
• Web-enhanced 100% of courses taught through inclusion of Blackboard

Name: Vay Rodman, PHD

• Attended UW-System Risk Management and Worker Compensation Conference, UW-River Falls, River Falls, Wisconsin, May 15-17, 2001
• Attended UW-System Risk Management and Worker Compensation Conference, UW-Stevens Point, Stevens Point, Wisconsin, May 13-14, 2003
• Attended UW-System Risk Management and Worker Compensation Conference, UW- Eau Claire, Eau Claire, Wisconsin, May 11-12, 2004
• Attended, 8th Annual Wisconsin State Risk Management Conference, Madison, Wisconsin, November 8-10, 2000
• Attended, 9th Annual Wisconsin State Risk Management Conference, Madison, Wisconsin, November 7-9, 2001
• Attended, 10th Annual Wisconsin State Risk Management Conference, Madison, Wisconsin, November 6-8, 2002
• Attended, Wisconsin School Safety Coordinators Association Spring Conference, Stevens Point, Wisconsin, March, 1-3, 2000
• Attended, 20th College and University Hazardous Waste Conference, Iowa State University, Ames, Iowa, August 11-13, 2002
• Attended, 22nd College and University Hazardous Waste Conference, Virginia Tech&University, Roanoke, Virginia, August 8-11, 2004
• Attended, Hazardous Waste Disposal Training, Department of Administration, Madison, Wisconsin, February 7, 2000
• Attended, Hazardous Waste Disposal Training, Department of Administration/ONYX, Madison, Wisconsin, March, 3, 2001
• Attended, Hazardous Waste Disposal Training, Department of Administration/ONYX, Madison, Wisconsin, March, 25, 2002
• Attended, Hazardous Waste Disposal Training, Department of Administration/ONYX, Madison, Wisconsin, April 9, 2003
• Attended, Hazardous Waste Disposal Training, Department of Administration/ONYX, Madison, Wisconsin, March, 16, 2004
• Attended, Campus Fire Safety Seminar, Campus safety Systems, Louisville, Kentucky, December 3-7, 2001
• Attended, OSHA 2001 Guidelines for Medical providers, Cross Country University, Madison, Wisconsin, July 23, 2001
• Attended, Defensive Driving, Wisconsin Council of Safety, Madison, Wisconsin, February 1, 2000
- Attended, Wisconsin Public Health Law Conference, Wisconsin Public Health Association, Madison, Wisconsin, June 2, 2004
- Attended, DOT HazMat Shipper Training, UW-System, UW-Stevens Point, Stevens Point, Wisconsin, June 18, 2004
- Attended, Fire Safety for Campus Housing, CSHEMA, Chicago, Illinois, July 8, 2004
- Attended, Essentials of Radiation Safety, College and University Hazardous Waste Conference, Roanoke, Virginia, August 8, 2004
- Attended, Wisconsin Chemical terrorism Preparedness, the Wisconsin State Laboratory of Hygiene, UW-Steven Point, Stevens Point, Wisconsin, November 13, 2003
- Attended, Academic Advising, College of Education Retreat, UW-Whitewater, Whitewater, Wisconsin, August 25, 2004
- Revised: Principles of Occupational Epidemiology to a 757 graduate level course, Fall 2004
- Attended, Desire two Learn (D2L) Workshop, UW-Whitewater, Whitewater, Wisconsin, July 7-18, 2003
- Attended, Assessing the Quality of Student Writing and Strategies for Improving Students’ Writing, College of Education Retreat, UW-Whitewater, Whitewater, Wisconsin, August 25, 2004

Name: Alvaro Taveira, PhD (Chair)
- Participated in the mentoring program sponsored by the College of Education. Faculty mentor - Tom Ganser. Fall 1999-Spring 2000.
- Attended workshop on student misconduct led by Mary Beth Mackin, Assistant Dean of Students. Spring 2000.
- Participated in the reading and discussion group on student motivation organized by the LEARN Center and led by Professor Pam Clinkenbeard. Four one-hour meetings. Spring 2000.
- Attended the workshop "Web Graphics Preparation" sponsored by the Instructional Technology Services and the LEARN Center. Spring 2000
- Attended the presentation “Profiling the Health & Safety of Wisconsin Schools and Students” delivered by Steven A. Fernan and sponsored by the College of Education. Fall 2000
- Attended the lecture “Excellence in Teaching” delivered by Professor Robert Burrows. Fall 2000
- Participated in reading and discussion group led by Professor Greg Valde on Boyer's "Scholarship Reconsidered". Four one-hour meetings. Fall 2000
- Participated in the discussion group “Active Learning: Methods for Moving Beyond Information Sharing” led by Professor Jim Winship and sponsored by the LEARN Center. Six one-hour meetings. Spring 2001
• Participated in the workshop “Improving Your Scholarly Writing: Reducing Barriers to Academic Publication and Successful Grant-Writing” sponsored by the LEARN Center and led by Professor Robert Lucas. Spring 2002.
• Faculty Development Award ($1650). Grant to support a one-week training at OSHA (OSHA 501-Trainer Course in Occupational Safety and Health Standards for General Industry). 2002
• Upper Extremity Injuries. Workshop sponsored by the Medical college of Wisconsin. Spring 04
• Enhancing the Engineer’s Product Liability Experience. Engineering Professional Development Seminar. UW-Madison. Summer 04
• The Role of Warnings and Instructions. Engineering Professional Development Seminar. UW-Madison. Summer 04
**Research activities between 2000-2004** (in alphabetical order):

Name: **Thomas Anderson, PhD, CIH**
- American Society of Safety Engineers grant for research on communication for non-English-speaking workers ($10,000.00)

Name: **Sang Choi, PhD, CPE**
- Fredericks, T.K., **Choi, S.D., Jason, H., & Mital A.** An Investigation of Myocardial Aerobic Capacity as a Measure of both Physical and Cognitive Workloads. *International Journal of Industrial Ergonomics*. (submitted)
- The Effects of Fall Protection Equipment Anchorages on Maximum Acceptable Frequencies for a Roof Shingling Task. Principal Investigator. Project supported by American Society of Safety Engineers Foundation (ASSEF). (submitted)
In: J. Fernandez, T. Fredericks, S. Butt (Eds.), *Advances in Industrial Engineering Theory, Applications and Practice VIII*, Las Vegas, Nevada, USA.


- Session Chair (Safety Management) in the 18th Annual International Conference on Industrial Engineering Theory, Applications and Practice, Las Vegas, Nevada, USA (November 2003)

Name: **Wayne Cole**

- Moderator National Safety Council Congress- Technical Session “Building Effective Teams”
- Moderator for the Technical Session on Workplace Multi-Employer Liability under OSHA-NSC 2000 Congress and Exposition, Orlando, FL.
- Presentation National Safety Council-Mid-Year Meeting Subject: Team Dynamics
- Presentation AON Insurance Group- Green Lake, WI. Construction Course at Whitewater-Building a Community Based Educational Process
- National Safety Council-Technical Session “Universities, Students and the Construction Industry”- Building a community based education program to develop safety professionals for the construction industry.

Name: **Edward Kapp, PhD**


- Kapp, E. Subcultures of Safety and the Understandings of Safety and Risk at a Midwestern Manufacturing Plant. Under Review with Le Travail Humain


- Presentation: Beating the Big Ten: Understanding & Avoiding the 10 Most Frequently Cited OSHA Violations in the Textiles Services Industry, Wisconsin Association of Textile Services Fall Conference, Lake Geneva, WI September 11, 2002

- Presentation: Warning: Multi-Employer Worksite Ahead; 90th Annual Wisconsin Safety Council Congress and Exposition, Madison, WI April 24, 2002

Name: Vay Rodman, PhD

- Rodman, Vay; Brandt, Betsy; and Gabbey, Robert, “Planning and Implementation of a University High Rise Residence Hall Fire Evacuation Drill Training Exercise with Local Volunteer Fire and Rescue Departments”, 51st International Conference on Campus Safety, Campus Safety Health and Environmental Management Association (CSHEMA), National Safety Council, University of Illinois-Chicago, Chicago, Illinois, July 4-7, 2004

- Grieshaber, Robert and Rodman, Vay, “An Art Department Air Quality/HVAC Survey”, 49th International Conference on Campus Safety, Campus Safety Health and
• Ackley, Sheri, Rodman, Vay, Pulda, Dave, Orr, Pat and Pastella, Mike “Student Organizations: Their Role and Responsibility in the University Community”, 48th International Conference on Campus Safety, Campus Safety Health and Environmental Management Association (CSHEMA), National Safety Council, Texas A&M University, College Station, Texas, July 8-12, 2001

• Rodman, Vay, McGuire, Dan, and Grieshaber, Robert “Recommended Standard Operating Procedures for Iron Pouring from a Cupola Furnace in the Art Sculpture Studio”, 48th International Conference on Campus Safety, Campus Safety Health and Environmental Management Association (CSHEMA), National Safety Council, Texas A&M University, College Station, Texas, July 8-12, 2001


• Presented “Playground Safety Issues”, 26th Annual UW-Whitewater Early Childhood Conference, Whitewater, Wisconsin, April 17, 2004

Name: Alvaro Taveira, PhD, (Chair)


Name: Craig Wucivic

• Annual Wisconsin Driver and Traffic Safety Education Association (WDTSEA)
• Annual SSO professional development conference-Wisconsin Governor’s conference on Highway Safety
• Annual World Safety Organization conference
• Wisconsin Safety and Health Congress and Exposition
Professional and Public Service

Name:  Thomas Anderson, PhD, CIH
- UWW Coalition for Alcohol and Other Drug Abuse Prevention
- OESH Scholarship Committee
- COE Faculty Development Committee
- OESH Faculty Search Committee

Name:  Deborah Bowen
- Director of the J.J. Keller Safety Lab
- Serve as member of the O.E.S.H. Scholarship Committee
- Serve as advisor for majors in OESH program
- Member of the ASA Promotion Committee (Also serve as liaison between ASA and Promotion Committee)
- Serve as member of the ASA Title Appeals Committee
- Serve as member of COE Audit and Review Committee, and Who's Who committee.
- UW System Women of Color Award recipient for 2002, representing the UW-W campus.
- Participated in On Campus Day, February 8 and February 22.
- Member of OESH Search and Screen Committee and Scholarship Committee
- Served as member of WSO and their Board of Directors
- Served on the OESH Minor Revision Committee.

Name:  Sang Choi, PhD, CPE
- College of Education Curriculum Committee
- International Society of Occupational Ergonomics and Safety Advisory Committee (2004-present)
- Member: American Society of Safety Engineers (August 2003-present)
- Member: Human Factors and Ergonomics Society (February 2002-present)
- Member: International Society of Occupational Ergonomics and Safety (May 2004-present)
- Member: Institute of Industrial Engineers (July 2000-present)
- Member Student Recruitment Committee
- Member Construction Safety Advisory Committee

Name:  Wayne Cole
- Establish a working relationship with between the department and Miller Brewing Company
- Rebuild a working relationship with the Beloit Company
• Served as Co-Leader of the Construction Safety Emphasis for undergraduate Students. Focus on community involvement and course development.
• Serve on Recruitment Committee
• Serve on Merit Committee
• Served on New Classroom Design and Development Team
• Served as ASSE representative to the Student Safety Organization, 2002 - 2004
• National Safety Council (NSC)
  o Elected to serve on the Executive Committee of the Educational Resources Division, 2000.
  o Elected Chair of the Occupational Safety and Health Educators Section of the Educational Resources Division - 2002.
  o Appointed as Co-Leader of the National Safety Council Scholarship Development Committee. Created to develop a national scholarship program for safety students - 2003
  o Appointed Vice Chairman of the Educational Resources Division, 2004
  o Appointed to the Board of Delegates, 2004

Name:  E. Andrew Kapp, PhD
• Graduate Council member (Fall 2000-Spring 2004)
• Faculty Senate member
• College of Education Curriculum Committee member
• Search and Screen Committee member (2 searches)
• UWW Fraternity Advisor
• 1990-Present American Society of Safety Engineers
• 1997-Present National Safety Council
• 2003-Present Academy of Management
• 2004 Reviewer for Organizations and the Natural Environment (ONE) Interest Group program at the 64th Annual Meeting of the Academy of Management

Name:  Vay Rodman, PhD
• Member of an interdisciplinary course development team to create an environmental science option or minor for the campus, Fall 2004
• Member, Wisconsin Chapter of the American Society of Safety Engineers, 1984 – present
• Member, Wisconsin Environmental Health Association, 1984 – present
• Member, National Safety Council, 1984 – present
• Member, National Safety Council. Campus Safety Health and Environmental Management Association (CSHEMA), 1984 – present
• Member, International Health Care Safety Association, 1983 – present
• Member, Institute of Hazardous Materials Management, 1983 - present
• Registered Environmental Health Specialists, 1971 - Present, National Environmental Health Association, #701001
- Certified Executive Level Health Care Safety Professional, 1983 - Present, International Health Care Safety Professional, #266
- Senior Level Certified Hazardous Materials Manager, 1984 - Present, Institute of Hazardous Materials Management, #530

Name: Alvaro Taveira, PhD (Chair)

- Chair – Safety Technical Session, 46th Annual Congress of the Human Factors and Ergonomics Society. Fall 2002
- Co-chair - Safety Technical Session, 45th Annual Congress of the Human Factors and Ergonomics Society. Fall 2001
- Member: Human Factors and Ergonomics Society
- Library representative. Fall 1999-present
- Graduate Program Coordinator: Fall 2000-present
- Chair of Search and Screen Committee. Responsible for all recruitment effort. One tenure track position. 2002-2003.
- Chair of Search and Screen Committee. Responsible for all recruitment effort. Two tenure track positions. 2001-2002.
- Member: College of Education Curriculum Committee. 2000-2001
- Member: Field Experiences Appeals Committee. 2002-present
- Member: COE Personnel Committee. 2003-present
- Member COE Promotions Committee
- Project leader: development of criteria for a BS degree in the COE.
- Member: Graduate Council. Spring 2000- Fall 2001
- Advisor: Phi Chi Epsilon Fraternity (Spring 2000-Fall 2003)
- Member: Whitewater Bicycling Advocacy Committee
- Project advisor: traffic safety at Lincoln Elementary
- Tenure & Promotion External Reviewer – University of Western Virginia-Morgantown
- Human Computer Interaction International – Session Chair
- Reviewer: Applied Ergonomics Journal
- Member: UWW Graduate council (Fall 04-)
- Member: Field experiences appeals committee
- Member: COE Director of Advancement search and screen committee
- Member: OESH student recruitment committee
- Member: Occupational Ergonomics committee
- Coordinator: Fundraising effort for OESH lab
- COE Fall 04 Retreat co-chair “Collaboration” session

Name: Craig Wucivic
- Board of Directors of WDTSEA
- Wisconsin DOT Motorcycle Safety Advisory Committee
External Funding
1999-2003

Name: Thomas Anderson, PhD, CIH

- Learn Center Grant - $1,000.00 – For online media development.
- American Society of Safety Engineers grant - $10,000.00 – for research on Communication for non-English-speaking workers

Name: Edward Kapp, PhD

- University of Wisconsin-Whitewater Chancellor’s Excellence Grant for the Development of Construction Safety Emphasis and Graduate Certificate. $4,000.

Name: Alvaro Taveira PhD, (Chair)


Name: Craig Wucivic

- Milwaukee County Seatbelt Use Survey ($22,000)
- Department of Transportation (DOT), Bureau of Transportation Safety (BOTS) annual seatbelt survey for the entire state of Wisconsin ($166,197)
- DOT-BOTS Neighborhood Lawn Speed Limit Sign evaluation project ($18,678)
- DOT-BOTS African American Occupant Restraint Use Study ($15,181)
- DOT-BOTS Child Occupant Protection Use Survey ($14,462)
- DOT-BOTS Combination Winter Seatbelt Survey, Entire State of Wisconsin ($73,000)
- DOT-BOTS Combination Summer Seatbelt Survey ($93,000)