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		06-27a	App. 3-20-07	App. 5-1-07

Curriculum Proposal Cover Sheet - University-Wide Undergraduate Curriculum Committee

Contact Person Dr. Lon Ferguson	Email Address Ferguson@iup.edu
Proposing Department/Unit Safety Sciences	Phone 7-3019

Check all appropriate lines and complete information as requested. Use a separate cover sheet for each course proposal and for each program proposal.

1. Course Proposals (check all that apply) <input type="checkbox"/> New Course <input type="checkbox"/> Course Prefix Change <input type="checkbox"/> Course Deletion <input checked="" type="checkbox"/> Course Revision <input checked="" type="checkbox"/> Course Number and/or Title Change <input checked="" type="checkbox"/> Catalog Description Change		
SAFE 370 Fleet Safety	SAFE 470 Fleet Safety	
<i>Current Course prefix, number and full title</i>	<i>Proposed course prefix, number and full title, if changing</i>	
2. Additional Course Designations: check if appropriate <input type="checkbox"/> This course is also proposed as a Liberal Studies Course. <input type="checkbox"/> Other: (e.g., Women's Studies, Pan-African) <input type="checkbox"/> This course is also proposed as an Honors College Course		
3. Program Proposals <input type="checkbox"/> New Degree Program <input type="checkbox"/> Program Title Change <input type="checkbox"/> Other <input type="checkbox"/> New Minor Program <input type="checkbox"/> New Track <input type="checkbox"/> Catalog Description Change <input type="checkbox"/> Program Revision		
<i>Current program name</i>	<i>Proposed program name, if changing</i>	
4. Approvals		Date
Department Curriculum Committee Chair(s)	<i>La Ferguson</i>	<i>10/19/06</i>
Department Chair(s)	<i>La Ferguson</i>	<i>11/10/06</i>
College Curriculum Committee Chair	<i>Elizabeth Palmer</i>	<i>12/18/06</i>
College Dean	<i>Patricia J. Zoni</i>	<i>1-3-07</i>
Director of Liberal Studies *		
Director of Honors College *		
Provost *		
Additional signatures as appropriate: (include title)		
UWUCC Co-Chairs	<i>Gail Schuist</i>	<i>3-20-07</i>

Received
JAN - 8 2007

Liberal Studies

Course Revision: SAFE 470 Fleet Safety

Part II. Description of the Curriculum Change

1. Syllabus of Record.

The new syllabus of record for this revised course is attached in Appendix A.

2. A summary of the proposed revisions:

- a. Course number was changed so we can make the course dual level.
- b. The course objectives were expanded to better reflect course content.
- c. Course content was revised to reflect current guidelines for the format of a "Syllabus of Record".
- d. Course description was changed to show the focus on motor fleet operations and to change the course prerequisites.

New Course Description

SAFE 470 Fleet Safety	3 lecture hours 0 lab hours 3 credits (3c-01-3cr)
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Prerequisites: Junior Standing

Includes topics involved with the development and operation of fleet safety programs: driver selection and training, accident investigation and recordkeeping, equipment safety features, preventative maintenance, and driver incentive programs. Although all modes of transportation will initially be discussed the focus will be on motor fleet operations.

Old Course Description

SA 370 Fleet Safety	3c-01-3sh
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Prerequisites: SA 101, Junior Standing

Includes topics involved with the development and operation of motor fleet safety programs: driver selection and training, accident investigation and recordkeeping, equipment safety features, preventative maintenance, and driver incentive programs.

3. Justification/rationale for the revision.

The original course Syllabus of Record was written in the early 1980's and it needed to be updated to reflect current practices. We also wanted to make this class dual level so that we could draw both baccalaureate and masters students creating solid enrollment numbers. This is important for a class like SAFE 470 which will be a free elective for baccalaureate students and a safety science elective for masters students.

4. The old syllabus of record.

The old syllabus of record is attached in Appendix B.

5. Liberal Studies course approval.

Not applicable

Part III. Letters of Support or Acknowledgement

These course changes will not affect other departments, therefore letters of support from other departments were not necessary.

APPENDIX A: NEW SYLLABUS OF RECORD

I. Catalog Description

SAFE 470 Fleet Safety

3 lecture hours
0 lab hours
3 credits
(3c-01-3cr)

Prerequisites: Junior Standing

Includes topics involved with the development and operation of fleet safety programs: driver selection and training, accident investigation and recordkeeping, equipment safety features, preventative maintenance, and driver incentive programs. Although all modes of transportation will initially be discussed the focus will be on motor fleet operations.

II. Course Objectives

Students will be able to:

1. describe the importance of fleet operations.
2. analyze driver selection criteria.
3. complete an accident investigation involving fleet operations.
4. develop a pre/post trip inspection and preventive maintenance program for a fleet.
5. analyze a safe driver incentive program.
6. utilize federal & state regulations to develop and evaluate a fleet safety program.
7. examine DOT regulations related to the transport of Hazardous Materials.

III. Course Outline

- A. Historical Overview of the Transportation System in the United States (3 hrs)
1. Surface, air, water, railroad and pipeline transportation
 2. Contractor and Independent Owner Operations
- B. Accidents in Motor Fleet Transportation (5 hrs)
1. Nature of fleet accidents
 2. Causes of fleet accidents
 3. Fleet accident rates including death rates

- C. Components of a Fleet Safety Program (10 hrs)
1. Driver selection
 2. Driver training
 3. Pre/Post trip inspections
 4. Hours of service regulations
 5. Equipment safety features
 6. Preventive maintenance
 7. Incentive programs
 8. Inter and Intra State Operations Pertaining to Drivers
 9. Drug screening
 10. Hazardous materials
- Midterm Examination** (1 hr)
- D. Driver Training Programs (10 hrs)
1. National Safety Council Defensive Driving Course
 2. JJ Keller Safety Training
 3. Behavior based training
 4. Insurance carrier packages
 5. Smith System Driver Improvement
 6. Determining fit and economic return
- E. Accident Investigation (6 hrs)
1. Recordkeeping
 2. Accident reconstruction & preservation of evidence
 3. Accident review committee
 4. Cause analysis
 5. Corrective measures
- F. Administration of Fleet Program (7 hrs)
1. Functions of a fleet safety director
 2. Cultural issues
 3. Risk assessment and insurance
 4. Cost Benefit
- G. Culminating Activity (2 hrs)
1. Final Exam Week

IV. Evaluation Methods

The faculty person assigned to teach this course could be one of several faculty within the Safety Sciences Department. What follows is an example of the evaluation methods and weighting used for this course:

Your final grade in this class will be a compilation of the following:

A. Examinations	60%
B. Homework	20%
C. Group Project	15%
D. Class Participation	5%

Examinations: The two examinations will be short answer, multiple choice, true/false and matching with material coming from lecture notes, textbooks and handouts.

Homework: Homework will include specific assignments related to material covered in the specific unit, many of which are case studies and small group projects involving fleet safety, as well as assignments involving the use of OSHA and NFPA standards.

Group Project: Students will work in groups to develop one of the components to a fleet safety program. The students will present their findings to the remainder of the class.

Class Participation: This includes but is not limited to individual participation in whole class and small group discussions and other brief class presentations.

V. Example Grading Scale

The following grading scale will be used:

A = 90 - 100%
B = 80 - 89%
C = 70 - 79%
D = 60 - 69%
F = Below 60%

VI. Attendance Policy

The attendance policy for this course conforms to the University's Undergraduate Course Attendance Policy in that all students are expected to attend and participate in class to enhance their learning.

VII. Required Texts

Motor Fleet Safety Manual, National Safety Council, Itasca, Ill, 1996.

Supplemental Readings:

VIII. Special Resource Requirements

None

IX. Bibliography

Della-Giustina, Daniel E., Motor Fleet Safety and Security Management.
CRC Press LLC, 2000 N. W. Corporate Blvd., Boca Raton, FL, 2004.

Keller, J.J., Fleet Safety Compliance Manual. Keller, J.J. and Associates Inc,
2002

Knipling, R.R.; Hickman, Jeffrey Scott; Bergoffen, Gene, Effective Commercial
Truck and Bus Safety Management Techniques: Commercial Truck
and Bus Safety, Synthesis 1. Transportation Research Board 2003

Knipling, R.R., Individual Differences and the ‘high-risk’ Commercial Driver:
Commercial Truck and Bus Safety, Syntheses 4. Transportation
Research Board 2004

Knipling, R.R., Training of Commercial Motor Vehicle Drivers: Commercial Truck
and Bus Safety, Synthesis 5. Transportation Research Board 2004

Historical

Donsalvo, Dan, Motor Fleet Safety Manual a Guide to Building and Maintaining
Effective Accident Systems. National Safety Council: 3rd Edition 1986

Johnson, Margaret L., et al. Drive Right, 8th Edition. Scott, Foresman &
Co., Glenview, IL, 1987

Motor Fleet Safety Supervision: Principals and Practices. North American
Transportation Management Institute Staff 1998

Appendix B: Old Syllabus of Record

Syllabus of Record

I. Catalog Description

SA 370 Fleet Safety

3c-01-3sh

Prerequisites: SA 101, Junior Standing

Includes topics involved with the development and operation of motor fleet safety programs: driver selection and training, accident investigation and recordkeeping, equipment safety features, preventative maintenance, and driver incentive programs.

II. Course Objective

The students will be able to evaluate the effectiveness of a fleet safety program by analyzing: driver selection and training, accident investigation and recordkeeping, equipment safety features, preventive maintenance and driver incentive programs.

III. Course Outline

- A. Historical Overview of the Transportation System in the United States (2 hours)
- B. The Accident Problem in the Transportation Systems (5 hours)
- C. The National Safety Council's Defensive Driving Course (DDC) (6 hours)
- D. Components of a Fleet Safety Program (6 hours)
- E. Driver Selection (2 hours)
- F. Driver Training and Supervision (3 hours)
- G. State and Federal Regulations Governing Inter and Intra State Operations Pertaining to Drivers (4 hours)
- H. Selection/Maintenance/Inspection of Vehicles and Equipment (4 hours)
- I. Accident Investigation: The State of the Art (5 hours)
- J. Transportation of Hazardous Materials (5 hours)

IV. Evaluation Methods

The final grade will be determined by using any combination of at least four (4) of the following evaluation methods within the range of weights shown as determined by the individual faculty member and which must total 100%.

0-60% Exams

There will be a minimum of two written exams consisting of combinations of multiple choice, true/false, matching, completion, and essay questions; or other interactive

exams. Make-up exams are at the discretion of the individual faculty member.

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| 0-25% Quizzes | Period quizzes will be given. Some individual faculty members may utilize unannounced quizzes. Make-up quizzes are at the discretion of the individual faculty member. |
| 0-15% Homework | Periodic out-of-classroom assignments will be given. |
| 0-40% Term Papers/
Projects | Each student will prepare various assignments in class utilizing free-style writing techniques as scheduled by the individual faculty member. |
| 0-20% In-Class Writing | Each student will prepare various assignments in class utilizing free-style writing techniques as scheduled by the individual faculty member. |
| 0-25% Presentations | Each student will participate in an oral presentation topic approved by the individual faculty member. |

Extra credit can be assigned to any one of the above evaluation methods at the discretion of the instructor.

The grading scale will be based on the following:

- A = 90-100%
- B = 80-89%
- C = 70-79%
- D = 60-69%
- F < 60%

or at the discretion of the faculty member a grading curve that results in a normal distribution of grades.

V. Required Textbooks, Supplemental Books and Readings

Motor Fleet Supervision Principles Practices, National Committee for Motor Fleet Supervisor Training, Pennsylvania State University, University Park, PA, 1967.

Don Asa, The Trucking and Truck Accident Handbook, Hanrow Press, Columbus, MD, 1984.

VI. Special Resource Requirements

None

VII. Bibliography

Johnson, Margaret L., et al. Drive Right, 8th Edition. Scott, Foresman & Co., Glenview, IL, 1987.

Drivers' Pocket Guide to Hazardous Materials, 8th Edition. J.J. Keller l& Associates, Inc., Neenah, WI.

Shinar, David. Psychology on the Road. John Wiley & Sons, New York, NY, 1978.

VIII. General Course Outline

Unit I Historical Overview of the Transportation System in the United States (2 hrs)

This unit includes an overview of surface, rail, air, water and pipeline transportation. In addition, an overview of the development of federal regulations governing the five modes of transportation are involved.

Unit Objectives: Students will understand the nature of accidents which have occurred over the years in each of the five modes of transportation. The degree of government control and the factors which led to governmental involvement in the safety of each transportation mode will be learned.

Unit II The Accident Problem in the Transportation Systems (5 hrs)

The magnitude of the accident problems involving the transportation systems are explored with special emphasis on surface (highway) transportation. Motor vehicle death rates involving all phases of surface transportation both public and private are explored culminating with the problems associated with the trucking industry.

Unit Objectives: The inherent severity in transportation accidents and the trends in severity rates will be understood by all students. In addition, students must know the relative magnitude of severity rates for the various surface transportation modes.

Unit III The National Safety Council's Defensive Driving Course (DDC) (6 hrs)

During this unit students will complete the 8-hour DDC course offered through the National Safety Council. This provides students with an opportunity to assess their knowledge of the driving task. Topics to be covered include: Preventable or Not, how to avoid collisions with an oncoming vehicle; how to avoid collisions with vehicles behind; how to avoid intersection collisions; the art of passing and being passed; the mystery crash; how to avoid other common types of collisions. Students receive the NSC's certificate of completion following this unit.

Unit Objective: Students must be proficient in the application of defensive driving principles.

Unit IV Components of a Fleet Safety Program (6 hrs)

This unit provides an overview of those components needed for a quality fleet safety program. This overview covers: driver selection, driver training, driver supervision, etc. In-depth study of these components are covered separately in the following units.

Unit Objective: Students must be familiar with the importance of fleet safety and know those elements which comprise fleet safety programs.

Unit V Driver Selection (2 hrs)

Techniques in developing a recruiting campaign are thoroughly investigated to assure, as much as humanly possible, that a company attracts well qualified drivers for their fleet program. Topics include developing a sound recruiting campaign, screening of applicants, interviewing selected applicants and testing (psychological, physiological and physical).

Unit Objective: The various methods utilized to attract and evaluate driver candidates will be learned.

Unit VI Driver Training and Supervision (3 hrs)

Detailed information is presented in the various components of a driver training program. This includes orientation, classroom instruction, behind-the-wheel instruction, inspection of vehicles (pre-trip), and the

supervision of the new as well as the experienced drivers. Procedures for emergency situations such as breakdowns, accidents, etc. are also covered in detail.

Unit Objective: Students will learn how to develop effective driver training programs and the various means of supervising fleet drivers.

**Unit VII State and Federal Regulations Governing Inter and Intra State Operations
Pertaining to Drivers (4 hrs)**

Students are exposed to the Pennsylvania Motor Vehicle Code, Department of Transportation Regulations, selected Interstate Commerce Commission Regulations and others which apply to motor fleet operations both intra and inter state. Specific codes and regulations for which a fleet safety director are responsible are covered in detail.

Unit Objective: Students must know the current PA state and federal regulations which pertain to fleet safety as well as the means by which the fleet safety manager can keep informed on changes in these regulations.

Unit VIII Selection/Maintenance/Inspection of Vehicles and Equipment (4 hrs)

A brief overview of the proper selection of vehicles and equipment is provided. Greater emphasis is placed on the maintenance and inspection of company owned equipment. Emphasis is also placed on the need for a maintenance shop safety program including maintenance schedules and record keeping.

Unit Objective: The design factors which contribute to vehicle safety will be understood by students as well as the importance of vehicle maintenance and inspection. Students must know how to develop and administer a fleet maintenance and inspection program.

Unit IX Accident Investigation: The State of the Art (5 hrs)

Accident investigation as it relates to highway accidents is covered in-depth. Key topics covered are reporting on-the-scene observations, techniques for gathering pertinent information, accident data analysis, and the use of gathered information for developing a model program for accident prevention.

Unit Objective: Students will know the proper techniques for the investigation of highway accidents, must be able to design a recordkeeping system, and must know how to analyze accident data in order to develop fleet accident prevention programs.

Unit X Transportation of Hazardous Materials (5 hrs)

Detailed information is provided to help the student understand the controls for hazardous materials involved in transit. Key topics covered are definitions, recognition/evaluation of hazardous materials incidents, reporting of hazardous materials incidents and the planning for emergencies.

Unit Objective: Students will be knowledgeable with all requirements governing the highway transport of hazardous materials. Furthermore, students must know how to develop emergency procedures for effectively reacting to and controlling hazardous material, spills, fires and other such incidents.

Appendix C: Catalog Description

SAFE 470 Fleet Safety

(3c-01-3cr)

Prerequisites: Junior Standing

Includes topics involved with the development and operation of fleet safety programs: driver selection and training, accident investigation and recordkeeping, equipment safety features, preventative maintenance, and driver incentive programs. Although all modes of transportation will initially be discussed the focus will be on motor fleet operations.