

# Transportation Human Factors

## Course Syllabus

### Psychology 710V: Special Topics

North Carolina State University  
Winter/Spring term, 2002

#### ***Instructor***

Michael S. Wogalter, Ph.D.  
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#### ***Class Meetings***

Tuesdays  
6:25 - 9:15 P.M.  
228 Poe Hall

Email: Wogalter@NCSU.edu,

#### ***Office Hours***

Tuesdays and Thursdays  
11:10 AM - 11:45 PM  
or by appointment

#### ***Course Objectives***

This course examines the relationships between people and various aspects of transportation. Among the topics discussed will be displays, controls, restraint systems, aggressive driving, driving aids, driver impairment, pedestrian safety, and signage. Virtually of the readings are recently-published primary-source empirical studies. The course will also serve as a "vehicle" to learn how research is carried out, data collected, results analyzed, and implications drawn. A final written paper of the same type is required.

The instructor will not be giving regular lectures. The class will run as a seminar in which the class participates in active discussion. Each student will be assigned three or four sets of half-class readings (depending on the number of students in the course) and will lead the class in discussion of the assigned articles. Leaders will summarize each article for a period of no more than 4 minutes, and then lead discussion of classmates' questions.

#### ***Readings***

All of the assigned readings are empirical research articles published in the last 2 years. A complete copy of all articles will be made available in the LRC (400 Poe Hall). Students wishing to use this resource should do so within 2 weeks of the first class meeting.

#### ***Course Requirements***

#### ***Class participation***

Because of the nature of the course, i.e., a seminar, your participation in class is essential. You should be prepared to speak up and add to each meeting's discussion.

Class participation will be worth 25% of the final course grade. Also, see “Attendance policy” below.

You are strongly encouraged to critically read the assigned readings twice: Once before making up questions (discussed below) and again before coming to class. It is recommended that you take handwritten notes (and comments) about the articles as you go through them. Review them before coming to class. Remember to bring the articles for that week to class.

### ***Leader assignments***

Students will be responsible for leading discussion of three or four sessions. Leaders will summarize the articles, organize questions submitted by class members, go through the questions in class, and request input from class members. If a question is not answered directly during the discussion the leader should sum up the most likely answer(s). Leaders should become “experts” regarding the articles in their assigned sections. Leaders might want to use visual aids (e.g., overheads and hand-outs) to assist in presentation or to search for other source materials to develop better, more informative discussions. The quality of the presentations and discussion leadership will account for 30% of the final course grade. Leaders are responsible in making sure that the discussion is fruitful and well paced. There will be a 10 minute break near the midpoint of each class meeting. The first leader should make judgments when to move the discussion along so that the first session does not overlap with the break or usurp time from the second session. The second leader should make sure that the class ends on time. The more important articles and questions should be given priority over the less important articles and questions.

### ***Discussion questions***

Each person is required to submit at least 1 to 2 discussion questions on each assigned reading to the leader of the upcoming session. These questions should deal with aspects of the articles that you do not understand and need clarification, or to stimulate discussion, etc. Questions are due to the week’s topic leaders by 8 PM on the Sunday before the next session. Questions should be sent as text in the body of an Email directly to the leaders of the two leaders (and a copy sent to the instructor’s email address). For every article, the text should include your name, the first author’s last name, and then the question(s)/issue(s). If you do not presently have an email account, please open one. All NCSU students are provided free email accounts. Leaders should edit and collate the questions in whatever fashion that they judge will facilitate class discussion, and then bring hard copies to class for fellow classmates to have. The quality and regularity of your questions will be worth 25% towards your final course grade. Late questions or failure to submit questions will result in penalty. The degree of penalty will depend on such things as how late they were submitted, the frequency of the problem, etc.

### ***Written research project and oral presentation***

Students are required to complete a written research project on a topic that has the instructor's approval. The project can be focused on any area of scientific merit with respect to the human factors of transportation. Students are encouraged to include newly-collected or already-collected data in their paper. Papers should be word processed in the format directed by the *Human Factors Author's Guide* (downloadable at WWW.HFES.org) or the *Publication Manual of the American Psychological Association*. The written report should contain a title page, abstract, review of relevant literature (related to the problem being addressed, purpose of the research (and the reasoning behind it), method (description of the materials and procedure), results (expected or found), discussion/implications of the research, and references, i.e., comparable in form to the papers read in the class). The report should be no longer than 10-12 double-spaced pages of text (excluding supporting figures and tables). Other kinds of projects may be acceptable and will require approval of the instructor. A written proposal (only a half page to a page is necessary) should be submitted by **Feb 8**. The proposal is worth 5% of the course grade. The final written portion of the assignment will be worth 20% and is due on **April 26**.

### ***Attendance Policy***

Students will be expected to attend every class meeting. Missing a single class is like missing a week's worth of classes. Student attendance is important because seminar discussions are only as good as the people who attend and participate. Therefore, students should note that 20% of the course grade is allocated to class participation. Obviously, it is difficult to participate when you are not present. Additionally, with three unexcused absences there will be an automatic penalty of 5% subtracted from the percentage total of the course grade. Each additional missed meeting will result in further reductions of 5% from your final grade. Take the necessary precautions to avoid being in the position to miss a class without a really good excuse.

### ***Grading***

All students are expected to do and turn in their own work. Academic integrity is expected. Dishonorable behavior will not be tolerated and when necessary will be pursued through the University's judicial channels.

The grading scale is shown below:

98-100	A+	80-81.9	B-
92-97.9	A	78-79.9	C+
90-91.9	A-	72-77.9	C
88-89.9	B+	70-71.9	C-
82-87.9	B	Less than 70%	F

Plus and minus grades will not be given in this course. A summary of the percentage worth of each of the course components follows:

Class participation:	25%
Leadership of discussion	25%
Weekly questions	25%
Project proposal	5%
<u>Written research project</u>	<u>20%</u>
<b>TOTAL</b>	<b>100%</b>

# Calendar for

## Transportation Human Factors

**Jan 7** – *Course Introduction*

**Jan 14**

### **1st Half** – *Older Drivers I*

- Chrysler, S., Stackhouse, S., Tranchida, D., & Arthur, E. (2001). Improving street name sign legibility for older drivers. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1597-1601.
- Lee, W. E. III (2001). Young and old subject distance between vehicles estimation using linear distance and “car lengths.” *Proceedings of the Human Factors and Ergonomics Society, 45*, 256-259.
- Ohme, P. J., & Schnell, T. (2001). Is wider better? Enhancing pavement marking visibility for older drivers. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1617-1621.
- Bolstad, C. A. (2001). Situation awareness: Does it change with age? *Proceedings of the Human Factors and Ergonomics Society, 45*, 272-276.

### **2nd Half** – *Older Drivers II*

- Kennedy, R. S., Jentsch, F. & Smither, J. A. (2001). Looming detection among drivers of different ages. *Proceedings of the Human Factors and Ergonomics Society, 45*, 240-244.
- Chaparro, A., Alton, J. (2000). Age related difference in driving performance and target identification. *Proceedings of the IEA/HFES Congress, 44*, 4.56-4.59.
- Van Elslande, P., & Fleury, D. (2000). Elderly drivers: What errors do they commit on the road. *Proceedings of the IEA/HFES Congress, 44*, 3.259-3.262.
- Lyman, J. M., McGwin, G. Jr., & Sims, R. V. (2001). Factors related to driving difficulty and habits in older drivers. *Accident Analysis and Prevention, 33*, 413-421.

**Jan 21** – *Official University Holiday*

**Jan 28**

### **1st Half** – *Child Safety and restraints I*

- Shaver, E. F., & Wogalter, M. S. (2001). Identifying what drivers know about the hazards of airbags to children. *Proceedings of the Human Factors and Ergonomics Society, 45*, 885-888.
- Leonard, S. D. (2001). Safety practices with children in autos: Observations of inadequate behaviors. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1497-1501.
- Leonard, S. D. (2001). Lack of knowledge about safety procedures for children in autos. *Proceedings of the Human Factors and Ergonomics Society, 45*, 893-896.
- Begg, D. J., & Langley, J. D. (2000). Seat-belt use and related behaviors among young adults. *Journal of Safety Research, 31*, 211-220.

## **2nd Half – Child Safety and restraints II**

- Stevens, S. L., & Dingus, T. A. (2001). Effects of information on risk perception regarding the use of booster seats. *Proceedings of the Human Factors and Ergonomics Society, 45*, 880-884.
- Kalsher, M. J., Williams, K. J., & Denio, S. M. (2001). Allocating blame for airbag deployment injuries: Separating manufacturers' blame from personal responsibility. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1458-1462.
- Sweeney, M. M., Weinstein, E. B., & Roberts, V. (2001). The effect of misuse of child restraint systems in accidents. *Proceedings of the Human Factors and Ergonomics Society, 45*, 889-892.
- Williams, A. F., Ferguson, S. A., & De Leonardis, D. M. (2001). Physician counseling about safe vehicle travel for children. *Journal of Safety Research, 32*, 149-156.

## **Feb 4**

### **1st Half – Safety Campaigns & Seat Belts I**

- Walton, D., & McKeown, P. C. (2001). Drivers' biased perceptions of speed and safety campaign messages. *Accident Analysis and Prevention, 33*, 629-640.
- Williams, A. F., Wells, J. K., McCartt, A. T., Preusser, D. F. (2000). "Buckle Up NOW!" An enforcement program to achieve high belt use. *Journal of Safety Research, 31*, 195-201.
- Wells, J. K., Malenfant, J. E. L., Williams, A. F., & Van Houten, R., (2000). Use of a community program to increase seat belt use among shopping center patrons in Charlotte, North Carolina. *Journal of Safety Research, 31*, 93-99.

### **2nd Half – Safety Campaigns & Seat Belts II**

- Walton, D., & McKeown, P. C. (2001). Drivers' biased perceptions of speed and safety campaign messages. *Accident Analysis and Prevention, 33*, 629-640.
- Williams, A. F., Wells, J. K., McCartt, A. T., Preusser, D. F. (2000). "Buckle Up NOW!" An enforcement program to achieve high belt use. *Journal of Safety Research, 31*, 195-201.

Wells, J. K., Malenfant, J. E. L., Willams, A. F., & Van Houten, R., (2000). Use of a community program to increase seat belt use among shopping center patrons in Charlotte, North Carolina. *Journal of Safety Research*, 31, 93-99.

## Feb 11

### 1st Half – *More on Restraints*

Reinhardt-Rutland, A. H., (2001). Seat-belts and behavioural adaptation: The loss of looming as a negative reinforcer. *Safety Science*, 39, 145-155.

Feignenson, N. R., & Bailis, D. S. (2001). Air bag safety: Media coverage, popular conceptions, and public policy. *Psychology, Public Policy, and Law*, 7, 444-481.

### 2nd Half – *Dark Vision*

Stanton, N. A., & Pinto, M. (2000). Behavioural compensation by drivers of a simulator when using a vision enhancement system. *Ergonomics*, 43, 1359-1370.

McCarley, J. S., & Krebs, W. K. (2000). Visibility of road hazards in thermal, visible and sensor-fused night-time imagery. *Applied Ergonomics*, 31, 523-530.

Blanco, M., Hankey, J. M., & Dingus, T. A. (2001). Evaluating new technologies to enhance night vision by looking at detection and recognition distance of non-motorists and objects. *Proceedings of the Human Factors and Ergonomics Society*, 45, 1612-1616.

Mortimer, R. G. (2001). The nighttime pedestrian collision: Human factors issues and a case study. *Proceedings of the Human Factors and Ergonomics Society*, 45, 833-837.

LaMotte, J., Rider, W. III, Yeung, K., & De Land, P. (2000). Effect of aftermarket automobile window tinting films on driver vision. *Human Factors*, 42, 327-336.

## Feb 18

### 1st Half – *Signs and markings*

Crundall, D., & Underwood, G. (2001). The priming function of road signs. *Transportation Research Part F*, 4, 187-200.

Garvey, P. M., Zineddin, A. Z., & Pietrucha, M. T. (2001). Letter legibility for signs and other large format applications. *Proceedings of the Human Factors and Ergonomics Society*, 45, 1443-1447.

Schieber, F., Larsen, J., Jurgensen, J., Werner, K. & Eich, G. (2001). Fluorescent colored highway signs don't 'grab' attention: They 'guide' it. *Proceedings of the Human Factors and Ergonomics Society*, 45, 1622-1626.

Uang, S.-T., Hwang, S.-L., & Liu, C.-L. (2000). A study on driving detection performance by virtual-environment technologies. *Proceedings of the IEA/HFES Congress*, 44, 3.328-3.331.

## 2nd Half – *Visual warnings*

- Ho, G., Scialfa, C. T., Caird, J. K., & Graw, T. (2001). Visual search for traffic signs: The effects of clutter, luminance, and aging. *Human Factors, 43*, 194-207.
- Dorris, A. L., & Dorris, N. T. (2001). Supporting the warning designer: An automotive case study. *Proceedings of the Human Factors and Ergonomics Society, 45*, 865-869.
- Motz, F., & Widdel, H. (2001). Graphical presentation of AIS information on ships. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1661-1665.
- Mazzae, E. N., & Ranney, T. A. (2001). Development of an automotive icon for indication of significant tire underinflation. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1641-1645.
- Rhoades, T. P., Frantz, J. P., Young, S. L., & Wisniewski, E. C. (2001). Revisions of labeling for personal watercraft: Part 1 — Label development. *Injury Control and Safety Promotion, 8*, 71-81.

## Feb 25

### 1st Half – *Variable message signs*

- Anttila, V., Luoma, J., & Rama, P. (2000). Visual demand of bilingual message signs displaying alternating text messages. *Transportation Research Part F, 3*, 65-74.
- Luoma, J., Rama, P., Penttinen, M., & Anttila, V. (2000). Effects of variable message signs for slippery road conditions on reported driver behaviour. *Transportation Research Part F, 3*, 75-84.
- Rama, P., & Kulmala, R. (2000). Effects of variable message signs for slippery road conditions on driving speed and headways. *Transportation Research Part F, 3*, 85-94

### 2nd Half – *Auditory alerts I*

- Wiese, E., & Lee, J. D. (2001). Effects of multiple auditory alerts for in-vehicle information systems on driver attitudes and performance. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1632-1636.
- Bliss, J. P., & Acton, S. A. (2001). An evaluation of the safety, utility, and reliability of three-dimension alarm systems for automotive use. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1689-1693.
- Bruce, D., Boehm-Davis, D. A., & Messiah, K. (2000). In-vehicle auditory display of symbolic information. *Proceedings of the IEA/HFES Congress, 44*, 3.230-3.233.
- Gupta, N., Bisantz, A. M., & Singh, T. (2001). Investigation of factors affecting driver performance using adverse condition warning systems. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1699-1603.

## Mar 4

### 1st Half – *Auditory alerts II*



- Liu, Y.-C. (2001). Comparative study of the effects of auditory, visual and multimodality displays on drivers' performance in advanced traveler information systems. *Ergonomics*, 44, 425-442.
- Liu, Y.-C., Schreiner, C. S., & Dingus, T. A. (2000). The effect of advanced traveler information display modality on driver performance. *Proceedings of the IEA/HFES Congress*, 44, 3.234-3.237.
- Carter, C., & Graham, R. (2000). Experimental comparison of manual and voice controls for the operation of in-vehicle systems. *Proceedings of the IEA/HFES Congress*, 44, 3.286-3.289.
- Marshall, D., Lee, J. D., & Austria, A. (2001). Annoyance and urgency of auditory alerts for in-vehicle information systems. *Proceedings of the Human Factors and Ergonomics Society*, 45, 1627-1631.

## **2nd Half – Collision avoidance systems**

- Shinar, D. (2000). Fleet study evaluation of an advance brake warning system. *Human Factors*, 42, 482-489.
- Ben-Yaacov, A., Maltz, M., & Shinar, D. (2000). Driver performance with a collision avoidance system. *Proceedings of the IEA/HFES Congress*, 44, 3.312-3.314.
- Brown, T. L., Lee, J. D., & Hoffman, J. (2001). The effect of rear-end collision warnings on on-going response. *Proceedings of the Human Factors and Ergonomics Society*, 45, 1646-1650.
- Cotte, N., Meyer, J., Coughlin, J. F. (2001). Older and younger drivers' reliance on collision warning systems. *Proceedings of the Human Factors and Ergonomics Society*, 45, 277-280.

## **Mar 18**

### **1st Half – Headway**

- Hurwitz, J. J., & Wheatley, D. J. (2001). Driver choice of headway with auditory warnings. *Proceedings of the Human Factors and Ergonomics Society*, 45, 1637-1640.
- McLaughlin, S., & Serafin, C. (2000). On-road investigation of driver following and deceleration on surface streets. *Proceedings of the IEA/HFES Congress*, 44, 3.294-3.297.
- Park, K. S., Lee, A. J., & Koh, B. K. (2001). Drivers' characteristics in the perception of a lead vehicle's deceleration level. *International Journal of Cognitive Ergonomics*, 5, 125-136.
- Taib-Maimon, M., & Shinar, D. (2001). Minimum and comfortable driving headways: Reality versus perception. *Human Factors*, 43, 159-172.
- Michael, P. G., Leeming, F. C., & Dwyer, W. O. (2000). Headway on urban streets: Observational data and an intervention to decrease tailgating. *Transportation Research Part F*, 3, 55-64.

## 2nd Half – *Navigation Systems*

- Tijerina, L., Parmer, E., & Goodman, M. J. (2000). Preliminary evaluation of the proposed SAE J2364 15-second rule for accessibility of route navigation system functions while driving. *Proceedings of the IEA/HFES Congress, 44*, 3.278-3.281.
- Cuevas, H. M., Huthmann, A., Knudsen, A., & Wei, C. (2001). Performance difference in a navigation task among users presented with a North-up versus track-up orientation map display. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1666-1670.
- Eby, D. W., & Kostyniuk, L. P. (1999). An on-the-road comparison of in-vehicle navigation assistance systems. *Human Factors, 41*, 295-311.
- Steinfeld, A., Tan, H.-S., & Bougler, B. (2001). Naturalistic findings for assisted snowplow operation. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1651-1655.
- Karder, K. A., Bloomfield, J. R., & Chihak, B. J. (2001). Investigating HUDs in specialty vehicles. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1602-1606.

## Mar 25

### 1st Half – *Distraction and Cognitive Loading I*

- Gellatly, A. W., & Kleiss, J. A. (2001). Visual attention demand and evaluation of conventional and multifunction in-vehicle information systems. *Proceedings of the IEA/HFES Congress, 44*, 3.282-3.285.
- Stevens, A., & Minton, R. (2001). In-vehicle distraction and fatal accidents in England and Wales. *Accident Analysis and Prevention, 33*, 539-545.
- Ranney, T. A., Mazzae, E. N., Garrott, W. R., & Barickman, F. S. (2001). Development of a test protocol to demonstrate the effects of secondary tasks on closed-course driving performance. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1581-1585.
- Tsimhoni, O., & Green, P. (2001). Visual demand of driving and the execution of display-intensive in-vehicle tasks. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1586-1590.
- Katsikopoulos, K. V., Duse-Anthony, Y., & Fisher, D. L., & Duffy, S. A. (2000). The framing of drivers' route choices when travel time information is provided under varying degrees of cognitive load. *Human Factors, 42*, 470-481.

### 2nd Half – *Distraction and Cognitive Loading II*

- Smyth, C. C. (2001). Modeling mental workload and task performance for indirect vision driving. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1694-1698.
- Endsley, M. R. (2001). Disruptions, interruptions and information attack: Impact on situation awareness and decision making. *Proceedings of the Human Factors and Ergonomics Society, 45*, 63-67.

- Cnossen, F., Rothengatter, T., & Meijman, T. (2000). Strategic changes in task performance in simulated car driving as an adaptive response to task demands. *Transportation Research Part F*, 3, 123-140.
- Almen, L. (2001). Using the cocktail party effect as driver attention control. *Proceedings of the Human Factors and Ergonomics Society*, 45, 1559-1562.

## Apr 1

### 1st Half .— *Cell phones as a distraction I*

- Horberry, T., Bubnich, C., Hartley, L., Lambie, D. (2001). Drivers' use of hand-held mobile phones in Western Australia. *Transportation Research Part F*, 4, 213-218.
- Wagh, J. D., Glumm, M. M., Kilduff, P. W., Tauson, R. A., Smyth, C. C., & Pilalamarri, R. S. (2000). Cognitive workload while driving and talking on a cellular phone or to a passenger. *Proceedings of the IEA/HFES Congress*, 44, 6.276-6.279.
- Strayer, D. L., & Johnston, W. A. (2001). Driven to distraction: Dual-task studies of simulated driving and conversing on a cellular telephone. *Psychological Science*, 12, 462-466.

### 2nd Half— *Cell phones as a distraction II*

- Haigney, D., & Westerman, S. J. (2001). Mobile (cellular) phone use and driving: A critical review of research methodology. *Ergonomics*, 44, 132-143.
- Curry, D. G. (2001). In-vehicle cell phones: Fatal distraction—yes or no? *Proceedings of the Human Factors and Ergonomics Society*, 45, 562-566.
- Haigney, D. E., Taylor, R.G., & Westerman, S. J. (2000). Concurrent mobile (cellular) phone use and driving performance: Task demand characteristics and compensatory processes. *Transportation Research Part F*, 3, 113-121.

## Apr 8

### 1st Half — *Road rage*

- DePasquale, J. P., Geller, E. S., Clarke, S. W., & Littleton, L. C. (2001). Measuring road rage: Development of the Propensity for Angry Driving scale. *Journal of Safety Research*, 32, 1-16.
- McGarva, A. R., & Steiner, M. (2000). Provoked driver aggression and status, A Field study. *Transportation Research Part F*, 3, 167-179.
- Yagil, D. (2001). Interpersonal antecedents of drivers' aggression. *Transportation Research Part F*, 4, 119-131.
- Jonah, B. A., Thiessen, R., Au-Yeung, E. (2001). Sensation seeking, risky driving and behavioral adaption. *Accident Analysis and Prevention*, 33, 679-684.
- Boyce, T. E., & Geller, E. S. (2002). An instrumented vehicle assessment of problem behavior and driving style: Do younger males rally take more risks? *Accident Analysis and Prevention*, 34, 51-64.

## **2nd Half – Awareness of others.**

- Dusire, S., & Munduteguy, C. (2000). Intent recognition and situation awareness in transport activities. *Proceedings of the IEA/HFES Congress, 44*, 1.173-1-176.
- Renge, K. (2000). Effect of driving experience on drivers' decoding process of roadway interpersonal communication. *Ergonomics, 43*, 27-39.
- Haglund, M., & Aberg, L. (2000). Speed choice in relation to speed limit and influence from other drivers. *Transportation Research Part F, 3*, 39-51.
- Burke, C. S., Salas, E., & Kincaid, J. P. (2001). Emergency vehicles that become accident statistics: Understanding and limiting accidents involving emergency vehicles. *Proceedings of the Human Factors and Ergonomics Society, 45*, 508-512.

## **Apr 15**

### **1st Half – Red-light running**

- Porter, b, E., & England, K. J. (2000). Predicting red-light running behavior: A traffic safety study in three urban settings. *Journal of Safety Research, 31*, 1-8.
- Keall, M. D., Povey, L. J., & Frith, W. J. (2001). The relative effectiveness of a hidden versus a visible speed camera programme. *Accident Analysis and Prevention, 33*, 277-284.
- Porter, B. E., & Berry, T. D. (2001). A nationwide survey of self-reported red light running: Measuring prevalence, predictors, and perceived consequences. *Accident Analysis and Prevention, 33*, 735-741.

### **2nd Half – Pedestrian safety**

- Zeedyk, M. S., Wallace, L., & Spry, L. (2002). Stop, look, listen, and think? What young children really do when crossing the road. *Accident Analysis and Prevention, 34*, 43-50.
- Creaser, J. I., Edwards, C. J., Uggerslev, K. L., & Caird, J. K. (2001). Detection of cars and pedestrians while making left turn decisions. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1607-1611.
- Wogalter, M. S., Ornan, R. N., Lim, R. W., & Chipley, M. R. (2001). On the risk of quiet vehicles to pedestrians and drivers. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1685-1688.
- Larouch, C., Leroux, T., Giguere, C., & Poirer, P. (2000). Field evaluation of audible traffic signal for blind pedestrians. *Proceedings of the IEA/HFES Congress, 44*, 3.730-3.733.
- Smith, T. J., & Harney, R. (2001). Effects of advanced warning flashers on driver interaction with signalized intersections. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1680-1684.

## Apr 22

### 1st Half – *Fatigue/stress/sickness*

- Mourant, R. R., & Thattacherry, T. R. (2000). Simulator sickness in a virtual environments driving simulator. *Proceedings of the IEA/HFES Congress, 44*, 1.534-1.537.
- Belz, S. M., Robinson, G. S., & Casali, J. G. (2001). An on-road investigation of commercial motor vehicle operator self assessment of fatigue as an indicator of driver fatigue. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1576-1580.
- Desmond, P. A., Mathews, G., & Bush, J. (2001). Individual difference in fatigue and stress states in two field studies of driving. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1571-1575.

### 2nd Half – *Physical Ergonomics*

- Reed, M. P., Manary, M. A., Flannagan, C. A. C., & Schneider, L. W. (2001). New tools for vehicle interior design. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1138-1140.
- Young, D. E., Schmidt, R. A., Ayres, T. J., & Tractman, D. (2001). Risk and driver behavior with adjustable pedals. *Proceedings of the Human Factors and Ergonomics Society, 45*, 1656-1660.
- McFadden, M., Powers, J., Brown, W. & Walker, M. (2000). Vehicle and driver attributes affecting distance from the steering wheel in motor vehicles. *Human Factors, 42*, 676-682.

## Apr 29

### 1st Half – *Accidents and systems*

- Farmer, C. M., & Lund, A. K. (2002). Rollover risk of cars and light trucks after accounting for driver and environmental factors. *Accident analysis and Prevention, 34*, 163-173.
- Arthur, W. Jr., Tubre, T., Day, E. A., Sheehan, M. K., Sanchez-Ku, M. L., Paul, D., Paulus, L., & Archuletta, K. (2001). Motor vehicle crash involvement and moving violations: Convergence of self-report and archival data. *Human Factors, 43*, 1-11.
- Farmer, C. M. (2001). New evidence concerning fatal crashes of passenger vehicles before and after adding antilock braking systems. *Accident Analysis and Prevention, 33*, 361-369.
- Comte, S. L. (2000). New system: New behaviour? *Transportation Research Part F, 3*, 95-111.

### 2nd Half – TBA