



GLOBAL ROAD SAFETY

Course Directors

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Class Meeting Times

**Tuesdays and Thursdays from
12:30 P.M. to 1:45 P.M.**

Course Web Site

To access the course web site, log into Iowa Courses Online (ICON) using your Hawk ID and password. <http://icon.uiowa.edu/index.shtml>

Academic Course Home

College of Public Health

Prerequisites

None

Course Description and Goals

Road traffic injuries are rising in the death ranks worldwide. Deaths from road traffic crashes are expected to rise to the 7th leading cause of death by 2030 for all ages and are currently the leading cause of death for 15-29 year olds. Road traffic crashes account for over 1.25 million deaths and 20 million non-fatal injuries annually around the globe. This course will introduce students to road safety problems, data sources, research methods used in the field, and how intervention and prevention programs are developed and evaluated. The course uses interactive lecture and hands-on teaching approaches.

At the end of the course, students will be able to:

1. Identify and access road injury data sources
 2. Describe and prioritize global road traffic safety problems in specific sub-populations and geographic areas
 3. Quantify and prioritize risk factors contributing to road traffic safety problems within specific geographic areas and sub-populations
 4. Identify strategies to prevent road traffic crashes and injuries within specific geographic areas and sub-populations
 5. Understand road safety research methods and how to evaluate injury and crash prevention methods globally
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Readings and Course Materials

There are no required textbooks to purchase as part of this course. The reading material for this course will can be found on the websites listed below. See the “Course Calendar” of this syllabus and/or the “Modules” page of the course site (ICON) for weekly reading assignments.

WHO Global Status Report on Road Safety, 2015

http://www.who.int/violence_injury_prevention/road_safety_status/2015/en/

WHO World Report on Road Traffic Injury Prevention, 2004

http://www.who.int/violence_injury_prevention/publications/road_traffic/world_report/en/

WHO Road Traffic Injury Prevention Training Manual, 2006

http://www.who.int/violence_injury_prevention/road_traffic/activities/training_manuals/en/

Transport for Health, Global Burden of Disease from Motorized Road Transport, 2014

https://issuu.com/ihme/docs/ihme_t4h_full_report/1?ff=true&e=2626063/7310705

Global Health Data Exchange- Global Burden of Disease Study, 2016

- Data visualizations: <http://www.healthdata.org/gbd/data-visualizations>
- GBD Results Tool: <http://ghdx.healthdata.org/gbd-results-tool>

Journal articles and other supplemental readings will be provided.

Grading Criteria

Final course grades will be assessed based on the student's performance in the following items:

	<u>Total Points</u>	<u>% of final grade</u>
Homework (4)	50	50%
Final Presentation (1)	40	40%
In-Class Participation	10	10%
Total Points:	100	100%

Final course grades will be assigned as follows:

Grade:	A to A-	B+ to B-	C+ to C-	D+ to D-	F
Points:	100 - 90	89-80	79-70	69-60	below 60

Course Structure

Students will need to **login to the course site** on ICON to access the course materials (assignment descriptions, assigned readings and media). Course content consists of web-accessible reports, some additional articles, and several Web sites.

Students are expected to:

- **Attend and participate** in the regularly scheduled bi-weekly class each Tuesday and Thursday from 12:30 to 1:45pm (Central Time), unless otherwise directed. Class discussion and participation is worth 10% of your grade. Missing more than one class session will result in a 10% deduction from your final grade, even if the absence is excused.
- **Access assigned course materials (posted on the “Modules” page)** such as pre-recorded lectures and journal articles on the ICON course web site.
- **Review the course homepage on ICON regularly** for any updates related to the course
- **Submit** assignments to the course instructor **via the ICON**.

Course Work

Expectations of course assignments

All assignments will be evaluated using the following criteria:

1. The extent to which the stated requirements of the assignment are met; students will receive an outline for each assignment that articulates the required components of the assignment;
2. Clarity of organization and writing; papers should be double-spaced, 1 inch margins, and proofread for typographical, spelling, and grammatical errors; and
3. Appropriate application, analysis, and synthesis of course content.
4. All written work must include citations in APA format, where appropriate, to avoid plagiarism. Papers without proper citations may be assigned a grade of “F”. If you are not sure how to properly cite material, please consult with the course instructor.

Homework Assignments (4):

There will be four homework assignments worth **12.5 points each**. Assignment details will be posted on ICON at least one week prior to assignment due date.

Final Presentation:

Another requirement of this course is the completion of a final presentation worth **40 points**. Final presentation instructions and details will be posted on ICON at least one month prior to the due date.

Course and University Policies:

Course policies:

Regular class attendance is required. Class discussion and participant (including attendance) is worth 10% of your grade. Missing more than one class session will result in a 10% deduction from your final grade, even if this absence is excused.

Completion of readings and class participation. The readings and subsequent class discussion are essential to achieve the objectives of this course. Students are expected to complete all readings before class and actively participate in class discussions. Readings will be posted on Icon or emailed to you directly. All students are expected to access and read all assigned readings prior to class.

Class communication. Standard University of Iowa Email (@uiowa.edu) and ICON are the official methods of communication for this course. Students can expect to receive communications from the instructor (via email or posted on ICON) introducing assigned course work. University policy specifies that students are responsible for all correspondence sent to their standard UI (@uiowa.edu) email address. Students are expected to regularly check their email accounts and the course site on ICON for updates, schedule changes, and announcements.

Assignments must be turned in on time via ICON, unless otherwise negotiated with course instructors. The course instructors reserve the right to refuse late assignments or assign a score of zero.

University Policies:

Accommodations for Disabilities

The University of Iowa is committed to providing an educational experience that is accessible to all students. A student may request academic accommodations for a disability (which includes but is not limited to mental health, attention, learning, vision, and physical or health-related conditions). A student seeking academic accommodations should first register with Student Disability Services (SDS) and then meet with the course instructor privately in their office to make particular arrangements. Reasonable accommodations are established through an interactive process between the student, instructor, and SDS. See <http://sds.studentlife.uiowa.edu/> for more information.

Resources for obtaining additional help

The university provides support and assistance to students who, for a variety of reasons, may be experiencing academic problems. Such students should speak with the Undergraduate or Graduate Coordinator to arrange for special support services.

Academic Misconduct

Academic misconduct is defined by the University of Iowa in its Code of Student Conduct here: <https://dos.uiowa.edu/policies/academic-misconduct/> Please take the time to read this short description. Academic misconduct refers primarily to plagiarism or cheating. It is the student's

responsibility to seek clarification from the course instructor of any situation in which he/she is uncertain whether academic misconduct is/has been involved.

Plagiarism includes but is not limited to the following:

- presentation of ideas of others without credit to the source;
- use of direct quotations without quotation marks and without credit to the source; paraphrasing without credit to the source;
- participation in a group project which presents plagiarized materials;
- failure to provide adequate citation for material obtained through electronic research;
- downloading and submitting work from electronic databases without citation;
- submitting material created/written by someone else as one's own, including purchased term/research papers;

Cheating includes but is not limited to the following

- copying from someone else's exam, homework, or laboratory work
- allowing someone to copy or submit one's work as his/her own;
- accepting credit for a group project without doing one's share;
- submitting the same paper in more than one course without the knowledge and approval of the instructors involved;
- using notes or other materials during a test or exam without authorization;
- not following the guidelines specified by the instructor for a "take-home" test or exam.

Academic misconduct is a serious matter and is reported to the departmental DEO and to the Associate Dean for Education and Student Affairs. Instructors and DEOs decide on appropriate consequences at the departmental level while the Associate Dean enforces additional consequences at the collegiate level. For example, an incident involving plagiarism will result in consequences to the student ranging from a grade of 0 for that assignment to being terminated from his/her graduate program. Egregious acts of misconduct, such as cheating on a final exam, may result in the course grade being reduced to an F. Additional details concerning the consequences associated with acts of plagiarism, including a student appeals process, is provided in the Graduate College Manual section IV.F.

Concerns about Faculty Actions

If at any time you have concerns about this class or your performance in it, please do not hesitate to contact me. Students who have a concern about the course or a faculty action should first address the issue with the instructor, then the course supervisor (if there is one), and then the departmental DEO. Students may also contact the Associate Dean for Education and Student Affairs in the College of Public Health. Another resource for students is the Office of the University Ombudsperson. If a complaint cannot be resolved at the departmental and/or collegiate level, students may file a formal complaint utilizing the procedure specified in the [Operations Manual](#).

Sexual Harassment/Misconduct and Class Accommodations

Sexual harassment subverts the mission of the University and threatens the well-being of students, faculty, and staff. All members of the UI community have a responsibility to uphold this mission and to contribute to a safe environment that enhances learning. Incidents of sexual harassment should be reported to the UI Office of Sexual Misconduct Coordinator (OSMRC), or to the Office of Equal Opportunity and Diversity (EOD). Students impacted by a Title IX issue (sexual misconduct, dating/domestic violence, or stalking) may be eligible to request an academic accommodation. See the OSMRC for assistance, definitions, and the full University policy at [Office of the Sexual Misconduct Response Coordinator](#). Additional information about confidential resources for students subject to sexual harassment/misconduct is available at [Confidential Resources for Students](#).

Administrative Home

This course is given by the College of Public Health. This means that class policies on matters such as requirements, grading, and sanctions for academic dishonesty are governed by the College of Public Health. Students wishing to add or drop this course after the official deadline must receive the approval of the Associate Dean for Academic and Student Affairs in the College of Public Health. Details of the University policy of cross enrollments may be found at: [Cross-Enrollment Policy](#)

Reacting Safely to Severe Weather

In severe weather, class members should seek appropriate shelter immediately, leaving the classroom if necessary. The class will continue if possible when the event is over. For more information on Hawk Alert and the siren warning system, visit <http://hawkalert.uiowa.edu/>

Course Calendar

Regular class attendance is required. Class discussion and participation (including attendance) is worth 10% of your grade. Missing more than one class session will result in a 10% deduction from your final grade, even if this absence is excused. This course is self-paced within a structure of scheduled course work (see weekly calendar below). You must manage your time effectively in order to complete the assigned course work by the firm due dates listed in the calendar below. To complete each module, review the module objectives, watch the weekly lecture and complete the assigned readings (when applicable), engage in the online discussions, and submit assignments and projects by their due dates.

The instructor reserves the right to make changes to the course calendar and other course components throughout the semester, as needed

Course Calendar follows.

UNIT 1: ROAD SAFETY TRENDS AND CULTURE			FACILITATOR	READINGS	ASSIGNMENTS
1	1/16/18	Course Introduction and Injury Prevention 101	Hamann & Peek-Asa	--	
2	1/18/18	Road safety: global public health & social equity issue	Hamann & Peek-Asa	WHO World Report, Chapter 1, pgs 8-10	
3	1/23/18	Global burden, regional distributions, and trends of road safety problems	Hamann	Wegman 2017 article; WHO Global Status, Section 1, pgs 2-9	
4	1/25/18	International perspectives on traffic safety culture	Peek-Asa	TBA	
5	1/30/18	Policy	Hamann	WHO Training Manual, Unit 7	HW 1. Summary report due
6	2/1/18	<u>Strategic planning</u> – Iowa SHSP, Decade of Action, World Bank	Sam Sturtz	SHSP Overview, pgs 1-3; Iowa SHSP; GRSF Strategic Plan, Decade of Action Global Plan	
UNIT 2: ROAD SAFETY RESEARCH					
7	2/6/18	Domestic and international road safety data sources & data collection	Peek-Asa	WHO Global Status, Section 1, pgs 11-12; WHO Training Manual, Unit 3, pgs 43-49	
8	2/8/18	Epidemiologic methods (incidence, prevalence, study designs: cross-sectional, case-control, cohort)	Hamann	WHO Training Manual, Unit 3, pgs 49-56	
9	2/13/18	Simulation	Dr. John Gaspar	Gaspar et al. (2014) article; Caird simulation chapter	
10	2/15/18	Field trip: Tour of the Hank Virtual Environments Lab Bicycle and pedestrian simulators <i>*CLASS WILL BE HELD ON 3rd floor, MacLean Hall*</i>	Elizabeth O'Neal	TBA	
11	2/20/18	Intervention and Prevention Approaches	Hamann	TBA	HW 2. Simulator scenarios due
12	2/22/18	Data Analysis Lab - Analyze global health data	Hamann	Read HW 3 instructions prior to class	
13	2/27/18	Data Analysis Lab	Hamann	TBA	
14	3/1/18	Mapping Lab - QGIS	Hamann	TBA	
15	3/6/18	Mapping Lab - QGIS	Hamann	TBA	

UNIT 3: HUMAN FACTORS					
16	3/8/18	Human factors 101: Demographics, experience, alcohol and drug impairment, & countermeasures	Hamann	Unit 4 WHO Training Manual	
No class 3/13/18 & 3/15/18 - Spring Break					
17	3/20/18	Naturalistic approaches	Michelle Reyes	Haddon 1995 article; Larsson & Tingvall 2013 article	HW 3. Descriptive analysis report due
18	3/22/18	Education: safety awareness, training, and licensing	Peek-Asa	TBA	
19	3/27/18	Driving across the lifespan	Peek-Asa		
UNIT 4: ENVIRONMENT					
20	3/29/18	Engineering, Urban Planning, and Road Safety	Dr. Steve Spears	TBA	
21	4/3/18	Post-crash care	Peek-Asa	WHO Training Manual, Unit 5	
22	4/5/18	Countermeasure selection based on human factors principles	TBA	TBA	
23	4/10/18	Roadway factors and safety, Complete streets	Hamann	Smart Growth Complete Streets Intro; National Complete Streets Coalition Policy Elements	
UNIT 5: VEHICLE/MODE					
24	4/12/18	The global vehicle fleet and rapid motorization	Hamann	TBA	
25	4/17/18	Vehicle design and automation	Chris Schwarz		HW 4. Comparison presentation due
26	4/19/18	Vulnerable Road users: mopeds, motorcycles, bicycles, pedestrians	Hamann	TBA	
27	4/24/18	Perspectives on global road safety	TBA		
28	4/26/18	Commercial vehicles and transit	Hamann	WHO Global Status, Section 3, pgs 29-36	
FINAL PRESENTATIONS					
29	5/1/18	Final Presentations	Students	--	
30	5/3/18	Final Presentations	Students	--	