Bicycle and Pedestrian Planning Course for Graduate Students

Integration of pedestrian and bicycle planning into transportation planning is essential in creating sustainable, livable communities. This interdisciplinary course maps the issues and challenges that necessitate bicycle and pedestrian planning and explores the core concepts and strategies related to creating effective and comprehensive plans and programs. Students taking the course will gain an academic footing in pedestrian and bicycle research issues as well as build professional skills that will serve them in a wide variety of working environments.

The course is primarily for graduate students in City and Regional Planning programs. However, students from other disciplines (e.g., Engineering, Architecture/Design, Environment, and Public Health) may benefit from the material. The course materials can easily be modified to fit the needs of the students or the academic program.

Major Course Elements

• Classes and panels are interactive and discussion-oriented
• Wheelchair-use and data collection labs engage students with the local environment
• Topics cover a range of critical practitioner and academic issues
• Presentations include up-to-date images, content, and detailed speaker notes for other instructors to use or adapt
• Readings include current and landmark studies, journal articles, and practitioner-related guidance of which every pedestrian and bicycle planner should be aware
• Detailed assignments complement readings and provide opportunities for students to apply information, practice skills, and gather constructive feedback
• All assignments include grading keys to facilitate grading by a teaching assistant
• Materials have been pilot-tested and revised with input from students and content experts from around the US and abroad

Lecture Topics

• History of Non-Motorized Transportation
• Measuring the Benefits of Non-Motorized Transportation
• Health, Physical Activity, and the Built Environment
• Land Use/Connectivity Issues, Access, and Mobility
• Pedestrian and Bicycle Facility and Public Space Design Fundamentals
• Developing and Evaluating Pedestrian/Bicycle Master Plans
• Connection with Land Use and Transportation Plans, TDM, and Policies
• International Approaches to Pedestrian and Bicycle Planning and Facility Design
• Public Participation, Coalition Building, and Partner Buy-in
• Data Collection Needs, Sources, Methods, and Measures
• Pedestrian and Bicycle Facility Analysis Tools
• Safety and Crash Data Analysis
• Demand Estimation and Analysis
• Research Issues in Pedestrian and Bicycle Planning
• Programming, Promotion, and Advocacy
• Funding, Implementation, and Institutionalization

Sign Me Up!

If you’re an instructor interested in using the course materials to teach a course, all materials are provided at no cost. The materials include an executive summary, lectures with speaker notes, assignments with grading keys, a detailed syllabus, and a limited selection of readings. We ask that interested parties first register with the PBIC at www.walkinginfo.org/masterscourse to obtain the passcode for downloading the materials.

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