

Tamkang University Academic Year 110, 1st Semester Course Syllabus

| | | | |
|--|---|------------|---|
| Course Title | SUSTAINABLE TRANSPORTATION | Instructor | HSIN-PING HSU |
| Course Class | TLTXB1P DEPARTMENT OF TRANSPORTATION MANAGEMENT, 1P | Details | <ul style="list-style-type: none"> ◆ General Course ◆ Selective ◆ One Semester |
| Relevance to SDGs | SDG3 Good health and well-being for people SDG10 Reducing inequalities SDG11 Sustainable cities and communities SDG13 Climate action | | |
| D e p a r t m e n t a l A i m o f E d u c a t i o n | | | |
| I. To obtain professional transportation knowledge. II. To familiarize with execution of transportation practices. III. To master oral expression and teamwork. IV. To capture basic skills of system analysis. V. To emphasize professional transportation ethics. | | | |
| Subject Departmental core competences | | | |
| A. To obtain basic knowledge of transportation management.(ratio:25.00) B. To familiarize with practice-oriented professional skills.(ratio:25.00) D. To obtain basic ability of system analysis.(ratio:25.00) E. To build transportation ethics, care for humanity, and global visions.(ratio:25.00) | | | |
| Subject Schoolwide essential virtues | | | |
| 1. A global perspective. (ratio:25.00) 3. A vision for the future. (ratio:25.00) 4. Moral integrity. (ratio:25.00) 5. Independent thinking. (ratio:25.00) | | | |

| | |
|----------------------------|---|
| Course Introduction | The purpose of the course is to familiarize students with the basic concepts of sustainable development, the key issues in sustainable transportation (the balance among environmental protection, social equity, and economic prosperity), various strategies for promoting sustainable transportation worldwide, and current status and future challenges of sustainable transportation in Taiwan. Students will acquire relevant knowledge through lectures, examinations, discussions, and assignments. |
|----------------------------|---|

The correspondences between the course's instructional objectives and the cognitive, affective, and psychomotor objectives.

Differentiate the various objective methods among the cognitive, affective and psychomotor domains of the course's instructional objectives.

- I. Cognitive : Emphasis upon the study of various kinds of knowledge in the cognition of the course's veracity, conception, procedures, outcomes, etc.
- II. Affective : Emphasis upon the study of various kinds of knowledge in the course's appeal, morals, attitude, conviction, values, etc.
- III. Psychomotor: Emphasis upon the study of the course's physical activity and technical manipulation.

| No. | Teaching Objectives | objective methods |
|-----|---|-------------------|
| 1 | To familiarize students with the basic concepts, key issues, various strategies, and future challenges of sustainable transportation. | Cognitive |

The correspondences of teaching objectives : core competences, essential virtues, teaching methods, and assessment

| No. | Core Competences | Essential Virtues | Teaching Methods | Assessment |
|-----|------------------|-------------------|---------------------|----------------------------|
| 1 | ABDE | 1345 | Lecture, Discussion | Testing, Study Assignments |

Course Schedule

| Week | Date | Course Contents | Note |
|------|--------------------------|--|------|
| 1 | 110/09/22 ~ 110/09/28 | Course Introduction | |
| 2 | 110/09/29 ~ 110/10/05 | Basic Concepts of Sustainable Development | |
| 3 | 110/10/06 ~ 110/10/12 | Key Issues in Sustainable Transportation | |
| 4 | 110/10/13 ~ 110/10/19 | Sustainable Transportation and Environmental Protection I | |
| 5 | 110/10/20 ~ 110/10/26 | Sustainable Transportation and Environmental Protection II | |

| | | | |
|----------------------------------|--|--|---------------------|
| 6 | 110/10/27 ~ 110/11/02 | Sustainable Transportation and Social Equity I | |
| 7 | 110/11/03 ~ 110/11/09 | Sustainable Transportation and Social Equity II | |
| 8 | 110/11/10 ~ 110/11/16 | Sustainable Transportation and Economic Prosperity I | |
| 9 | 110/11/17 ~ 110/11/23 | Midterm Exam Week | |
| 10 | 110/11/24 ~ 110/11/30 | Sustainable Transportation and Economic Prosperity II | |
| 11 | 110/12/01 ~ 110/12/07 | Solutions: Transportation Planning I | |
| 12 | 110/12/08 ~ 110/12/14 | Solutions: Transportation Planning II | |
| 13 | 110/12/15 ~ 110/12/21 | Solutions: Land Use Planning I | |
| 14 | 110/12/22 ~ 110/12/28 | Solutions: Land Use Planning II | |
| 15 | 110/12/29 ~ 111/01/04 | Solutions: New Energy Technology | |
| 16 | 111/01/05 ~ 111/01/11 | Solutions: Social Policy | Assignment Due: 1/5 |
| 17 | 111/01/12 ~ 111/01/18 | Final Exam Week | |
| 18 | 111/01/19 ~ 111/01/25 | Supplementary Teaching: Extracurricular Reading and Watching Materials | |
| Requirement | No background in transportation is needed. Students interested in sustainability and transportation are welcomed! (永續運輸屬於基礎的概念性課程·旨在說明人類當前運輸方式對於經濟、社會與環境三個層面的各種影響與改善方式。本課程內容將根據大一新生之程度進行適當的調整簡化·不需任何專業背景或先修課程·歡迎對永續發展與交通運輸有興趣的各系同學選修!) | | |
| Teaching Facility | Computer, Projector | | |
| Textbooks and Teaching Materials | Lecture slides, course handouts, and assigned readings. | | |
| References | 1) Black, W. R. (2010). Sustainable Transportation: Problems and Solutions. The Guilford Press. 2) Tumlin, J. (2012). Sustainable Transportation Planning: Tools for Creating Vibrant, Healthy, and Resilient Communities. Wiley. 3) Schiller, P. L. and Kenworthy, J. R. (2017). An Introduction to Sustainable Transportation: Policy, Planning and Implementation. Routledge. | | |
| Number of Assignment(s) | 1 (Filled in by assignment instructor only) | | |
| Grading Policy | ◆ Attendance : 10.0 % ◆ Mark of Usual : 20.0 % ◆ Midterm Exam : 35.0 % ◆ Final Exam : 35.0 % ◆ Other () : % | | |

| | |
|------|---|
| Note | <p>This syllabus may be uploaded at the website of Course Syllabus Management System at http://info.ais.tku.edu.tw/csp or through the link of Course Syllabus Upload posted on the home page of TKU Office of Academic Affairs at http://www.acad.tku.edu.tw/CS/main.php .</p> <p>※ Unauthorized photocopying is illegal. Using original textbooks is advised. It is a crime to improperly photocopy others' publications.</p> |
|------|---|