ARCH 212: Social and Behavioral Factors in Design (Fall, 2013)
Tuesday & Thursday, 2:20-3:35PM; Room 207, Langford Building C

INSTRUCTOR: Xuemei Zhu, Ph.D., Assistant Professor
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Office Hours: Wednesday 3:00PM-4:00PM and Thursday 1:00-2:00PM

TEACHING ASSISTANT: Xin (Lucy) Bai, Ph.D. Student
Office: Williams Administration Building Room 002
Email: baixin@tamu.edu; Office Hours: Monday 9:00-10:00AM

"We shape our buildings, and afterwards our buildings shape us." – Winston Churchill (1943)

A. COURSE DESCRIPTION

TOPIC: This course will examine the social and behavioral factors in environmental design through critical thinking, discussions, and case studies around two questions: (1) how the environment influences people's behaviors and societal outcomes, and (2) how people perceive, use, and adapt to their environment (Figure 1). A variety of built and natural environments will be discussed, ranging from room interiors and buildings to parks, communities, and cities. Human behavior will also be interpreted broadly to include issues such as human performance, social interaction, health, and well-being.

CATALOGUE DESCRIPTION: Social and behavioral factors in the built and natural environment; environmental perception and spatial cognition; social-environmental processes such as privacy and crowding; setting-oriented discussion on residences, education, and the workplace; the psychology of nature and natural resource management; social design and social science contribution to architectural design.

STRUCTURE: The lectures will be organized into three sections, including (1) why social and behavioral factors are important for environmental design, (2) what specific factors designers should consider, and (3) how to address these factors in the design process.

B. LEARNING OUTCOMES AND COURSE OBJECTIVES.

At the end of the semester, students should be able to
- interpret theories and knowledge from social and behavioral science as related to environmental design;
- use critical thinking to analyze and synthesize information with regards to the social and behavioral factors in specific design projects;
- use effective written, oral and visual communications to explain social and behavioral considerations in design;
• conduct applied research on environment-behavior relationships through the manipulation and analysis of numerical data or observable facts;
• interpret designers' social responsibility in addressing the impact of built environment on health, sustainability, equity and other societal issues;
• become a better designer with people and society in mind.

C. **PREREQUISITES:** None.

D. **REQUIRED READINGS**

The required readings are listed under “F. Class Date, Topic, and Schedule.” They will be made available through eLearning (http://elearning.tamu.edu/)

E. **OPTIONAL READINGS**

For you to choose from according to your interest and the topic of your class works.

**BOOKS:**


**JOURNALS:**

Environment and 3behavior. http://eab.sagepub.com/


**WEBSITE:**

F. CLASS DATE, TOPIC, AND SCHEDULE

Symbols: 
- ☑ Required readings to be finished before the class.
- ☑ Assignments to be given in the class.
- ☑ Digital copy of the assignment to be submitted in eLearning by 10am.
- ☑ Hard copy of the assignment to be submitted in the classroom before the start of the class.
- ☑ Field exercise.

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SECTION 1: WHY ARE SOCIAL AND BEHAVIORAL FACTORS IMPORTANT FOR DESIGN?

WEEK 1: OVERVIEW OF THE COURSE
08/27 Why are social and behavioral factors important?
✔ Assign "Treasure hunt" for "stupid" designs.
08/29 Video: The social life of small urban spaces.

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SECTION 2: WHAT SOCIAL AND BEHAVIORAL FACTORS SHALL WE CONSIDER?

WEEK 2: HUMAN AND NATURE
09/03 "Treasure hunt" due.
Why do we like nature? What kind of nature do we like?
09/05 Architecture and nature.
Selected students present the "treasure hunt."

WEEK 3: PERSONAL SPACE AND TERRITORIALITY
09/10 Personal space and design.
☑ Chapter X: Distances in man. In Hidden dimension.
✔ Assign field exercise #1: Behavioral observation of personal space and territoriality.
09/12 Territoriality and design.

WEEK 4: DESIGN RESEARCH ON ENVIRONMENT-BEHAVIOR RELATIONSHIPS
09/17 Measure and analyze environment, behavior, and their relationships.
09/09 Field exercise #1: Behavioral observation of personal space and territoriality.

WEEK 5: ENVIRONMENTAL PERCEPTION, COGNITION, AND WAYFINDING
09/24 How do we perceive and recognize the environment?
☑ Chapter 3: The city image and its elements. In Image of City.
09/26

6° Field exercise #1 due.
ément Assign field exercise #2: Wayfinding analysis.

WEEK 6: FIELD EXERCISES

10/01 Wayfinding in and around buildings.

10/03 Presentation of field exercise #1. Review of field exercise #2 drafts.

WEEK 7: QUIZ AND WARM-UP FOR FINAL PROJECT

10/08 Quiz #1.

10/10 Review of field exercise #2 drafts.

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SECTION 3: HOW TO ADDRESS SOCIAL AND BEHAVIORAL FACTORS IN DESIGN?

WEEK 8: DESIGN FOR THE ELDERLY

10/15 Exercise on wayfinding due.

• General issues in design for the elderly: What is different?

• Chapters 1-5. In Site Planning and Design for the Elderly: Issues, Guidelines, and Alternatives.

• Assign field exercise #3.

10/17 Housing for the elderly.

• Presentation of field exercise #2.

• Assign the final project.

WEEK 9: DESIGN FOR CHILDREN

10/22 Design considerations for children.

• Chapter 3: Streets as playgrounds. in Public Streets for Public Use.

10/24 Design for children's safety and development.

WEEK 10: HOUSING DESIGN

10/29 Field exercise #3 due.

• Design for family housing.

• Chapter 3: Basic considerations of the design program. In Housing as if People Mattered: Site Design Guidelines for Medium-Density Family Housing.

10/31 Housing design against crime.

• Chapter 1: Defensible space principles. in Creating Defensible Space.

WEEK 11: SOCIAL AND BEHAVIORAL LOGIC OF DESIGN

11/05 Final project: Draft due.

• Decode the social and behavioral logic of built environment.
11/07  Presentation of filed exercise #3 and review of final project drafts.

WEEK 12:  DESIGN FOR HEALTH
11/12  Healthy buildings: Architecture, health, and healing.
               ☐ When buildings don't work: The role of architecture in human health.
11/14  Healthy communities.
               ☐ The active design guidelines of New York City.

WEEK 13:  ARCHITECTURE, COMMUNITIES, AND CITIES
11/19  Livable communities and cities by design.
               ☐ What makes a community livable – Livability 101.
11/21  Review of final project drafts.
               ☐ Quiz #2.

WEEK 14:  REVIEW OF THE FINAL PROJECT
11/26  Presentation of the final project – Part 1.
11/28  No class. Thanksgiving holiday!

12/03  Presentation of the final project – Part 2.
               ☐ Report for final project due at 5pm.

G. PERFORMANCE EVALUATION

Your performance will be evaluated based on the following components:

<table>
<thead>
<tr>
<th>Item</th>
<th>Assignment Due/Quiz date</th>
<th>Percentage (Points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treasure hunt</td>
<td>09/03</td>
<td>10% (10 points)</td>
</tr>
<tr>
<td>Field exercise #1</td>
<td>09/26</td>
<td>10% (10 points)</td>
</tr>
<tr>
<td>Quiz #1</td>
<td>10/08</td>
<td>10% (10 points)</td>
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<tr>
<td>Field exercise #2</td>
<td>10/15</td>
<td>10% (10 points)</td>
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<tr>
<td>Field exercise #3</td>
<td>10/29</td>
<td>10% (10 points)</td>
</tr>
<tr>
<td>Quiz #2</td>
<td>11/21</td>
<td>10% (10 points)</td>
</tr>
<tr>
<td>Final project</td>
<td>12/03</td>
<td>30% (30 points)</td>
</tr>
<tr>
<td>Class attendance and participation*</td>
<td>N/A</td>
<td>10% (10 points)</td>
</tr>
</tbody>
</table>

TOTAL: 100% (100 points)

The assignments and quizzes will involve reading, observation, and analyses related to social and behavioral factors in design. The evaluation of the field exercises and the final project will include a component of your individual performance, which will be evaluated by your team members.

The final semester grade will reflect all of your work through the course of the semester and will use the following standards.
A: 90-100 points;  B: 80-89 points;  C: 70-79 points;  D: 60-69 points;  F: 0-59 points

Late work without prior approval will receive a 20% grade deduction for a one to five-day delay, or a 50% grade deduction for a six to 10-day delay. Late work without prior approval and with more than 10 days of delay will not be accepted. Students should contact the instructor in advance if work will be turned in late due to an absence that is excused under the University’s attendance policy. In such cases the instructor will either provide the student an opportunity to make up the work or provide a satisfactory alternative to be completed within 20 calendar days from the last day of the absence.

There will be NO opportunity for students to make up assignments or quizzes missed because of an unexcused absence.

Earning an “A” is not automatic, nor is it based upon turning in required work on time or working hard. These are expected of every student. To earn an “A”, you must show an extraordinary devotion to your work and a willingness to push yourself to a new level of comprehension.

*Class attendance and participation: The University views class attendance as the responsibility of an individual student. Attendance is essential to complete the course successfully. You are expected to be present each class day and to fully participate in all discussions and class activities. Students who are requesting an excused absence are expected to uphold the Aggie Honor Code and Student Conduct Code. University rules related to excused and unexcused absences are located on-line at http://student.rules.tamu.edu/rule07. To qualify for an excused absence, you must present an official note explaining the absence, either from a doctor, university official, or other appropriate authority. Each unexcused absence will lead to ten point (1%) deduction out of the total maximum points of 1000 for the whole semester. More than five unexcused absences will lead to a failure in this course.

H. COURSE COST

Please budget a printing expense of about $10-$30.

I. AMERICANS WITH DISABILITIES ACT (ADA) POLICY STATEMENT

The Americans with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact Disability Services, In Cain Hall, Room B118, or call 845-1637. For additional information visit http://disability.tamu.edu.

J. ACADEMIC INTEGRITY STATEMENT AND POLICY

AGGIE HONOR CODE: “An Aggie does not lie, cheat, or steal or tolerate those who do.”

Upon accepting admission to Texas A&M University, a student immediately assumes a commitment to uphold the Honor Code, to accept responsibility for learning, and to follow the philosophy and rules of the Honor System. Students will be required to state their commitment on examinations, research papers, and other academic work. Ignorance of the rules does not excuse any member of the TAMU community from the requirements or the processes of the Honor System. For additional information please visit: http://www.tamu.edu/aggiehonor.