INSTRUCTUR: Assistant Prof. Jose R. Buitrago

Description

The primary focus of this research is on zoo design, specifically developing the design criteria and master plan for the Giza Zoo in Cairo, Egypt. Currently the visitor experience is not as successful as in other top-ranked international zoos. The location and design of the zoo do not mostly comply with zoo design standards. These limitations are paralleled at the same time with much potential; represented in the richness of animal, plant and wildlife habitat. The study aims at proposing an alternative design for the current zoo, taking into account both the involved limitations and potentials.

Research Goals

The study will be centered on three main areas of interest:

1. Designing a zoo that is not just an exhibition for animals, but one that induces visitor interaction. Zoos must do more than "show" animals in a way that is analogous to museums. The zoo experience as a whole must rather be maximized in order to stimulate visitor perception and interaction within the zoo space. This should be reflected in a diverse set of design criteria, including site location, plantation, landscaping elements, circulation, visitor orientation, arrangement of animals, entertainment activities, and other elements.

2. Maximizing community participation in levels of zoo design, management and operation. This can come to effect through group surveys and questionnaires that inform the design process, as well as encouraging participation in activities and events during zoo operation, in order to guarantee continuous and sustainable development within the zoo environment.

3. Demonstrating the role of the zoo as a research center for specialists, such as veterinarians and wildlife researchers, as well as an educational center for young
students. This should be reflected in the types of equipment and highly advanced technology used in the different zoo venues.

**Learning Outcomes**

1. Learning the underlying theory and standards for zoo design. Getting familiar with zoo design criteria through literature and a variety of examples provides a rich and solid background, and a particularly new experience for my line of work; added to residential villa landscape designs and resorts.

2. Exploring how landscape elements can be integrated in the context of the zoo. The richness of elements implemented in zoo design provides a unique experience in landscape design.

3. Learning how to incorporate factors such as perception, visitor engagement, and human interaction in zoo design, and how landscaping elements can express and promote these factors.

4. Combining my architecture background with my landscape studies to have a better understanding for the design output product.

**Coursework**

**Objective 1: Understanding Zoo Design (30 hrs)**

This objective focuses on acquiring knowledge pertaining to zoo design. The broader scope and intent is to gain an overall understanding of zoo design. This will be done through conducting a literature review of design standards and documents related to zoo design. Finding the major components of a successful zoo design such as; children playground area, public education, research, endangered species protection, catch and release program, etcetera.

The research and data collection stage will include studying the Atlanta Zoo in Atlanta, GA. This will include an analysis of the circulation, visitor orientation, animal arrangement, fun and entertainment areas, and the children playground area.

**Deliverables (January 23th)**

- Site analysis for Zoo Atlanta.
- It will also include drafting a survey for visitor experience. (TBD)
Objective 2: Case Studies (45 hrs)

This objective will focus on different zoo typology (types or kinds of zoos) to get exposed to different understanding of zoos and the reason of their success.

Major Zoos in the world

- San Diego, California, USA
- Berlin Zoo, Germany, EU
- Pittsburg Zoo, Pennsylvania, USA
- Zoo Atlanta, Georgia, USA

Commercial-Entertainment Zoos

- Animal Kingdom, Walt Disney World, Orlando, Florida, USA
- Bush Gardens, Tampa, Florida, USA
- Sea World, Orlando, Florida, USA

Deliverables (February 9th)

- A document of about 15 pages describing briefly the main theme of every zoo and how successful was each zoo in addressing that theme.

Objective 3: Analyzing the Giza Zoo (20 hrs)

The primary focus of this objective is to understand and analyze the current situation of the Giza Zoo in Cairo, Egypt. This will take place in two steps. The first step includes a documentation of the existing design, site analysis (circulation, visitor orientation, animal arrangement, fun and entertainment areas, and the children playground area), wildlife habitat potential, and the current limitations. The second step involves community participation through conducting an online survey to identify visitor behavior, requirements and expectations for the existing Zoo. Special interest will be given to user suggestions and comments that will promote visitor attraction.

Deliverables (February 23rd)

- Site analysis for the Giza Zoo.
• Documentation of current status of the Giza Zoo.
• It will also include drafting a survey for visitor experience (TBD).

Objective 4: Re-developing Outline for Giza Zoo Redesign (35 hrs)

Using the site analysis, current status documentation, and results of the online survey, the focus of this objective will be the development of an outline for the redesign of the current Giza Zoo. Special attention will be given to the synthesis of all the potentials, limitations, current situation, survey results, in order to provide a comprehensive vision for this development.

Deliverables (March 16th)

• Document including recommendations for the development and redesign of the Giza Zoo.

Major components of the zoo design

Developing Master Plan for Detailed Zone: Children Playground (20 hrs)

This objective focuses on a detailed zone for development within the Giza Zoo; the children playground area. Being a significant and effective element in Zoo design and a strong factor in attracting children to interact with the Zoo, the objective here is to integrate the children playground area within the redesign proposal. In this stage, detailed design of the playground area will be provided, focusing on elements that enhance visitor experience.

Deliverables (March 30th)

• Master plan for the children playground area.

Grading:

Grading will be based on the submittal of a comprehensive written report to be evaluated by the course instructor at the end of the course term. Segments of the report will be submitted for pre-evaluation per student and instructors pre-set schedule. The segments of the report will be graded as pass or no pass. The content of the report must include the following:

• Abstract
• Research Methodology

A copies of the report will be given to the following entities; course instructor, UGA-CED Owens Library, Giza Library and Giza Zoo at Cairo – Egypt. Also, an informal poster
board public exhibition of the work will be schedule at the end of the course. Place, date, and time of the exhibition to be determined later.

**Schedule of Segments of Report**

**GRADING SYSTEM:**
Grading is based on the University System Percentage as follows:

- **A+ = 97%-99%**  
  Excellent: Work reflecting superior design and graphic ability

- **A  = 93%-96%**  
  logically thought out and presented. Changes or revisions

- **A-  = 90%-92%**  
  would be minimal.

- **B+ = 87%-89%**  
  Good: Work representing a good understanding of the theory and

- **B  = 83%-86%**  
  concepts involved in the project but should be slightly reworked.

- **B-  = 80%-82%**

- **C+ = 77%-79%**  
  Fair: Work which indicates a satisfactory understanding and

- **C  = 73%-76%**  
  execution of the project. Moderate revisions would be necessary.

- **C-  = 70%-72%**

- **D+ = 67%-69%**  
  Poor: Work which in incomplete and in the design process and

- **D  = 63%-66%**  
  project solution are poor or inconsistent. Work shows lack of

- **D-  = 60%-62%**  
  comprehension of subject matter and would require extensive

- **F  = 59%**  
  Unacceptable

Students who fall behind in class work are STRONGLY encouraged to withdraw from the class. A grade of incomplete will only be given in extenuating circumstances.

**Conclusions**

Recommendations:

- Results of online survey (TBD).
- It will also include drafting a survey for visitor experience (TBD).

**Contacts**

Zoo Atlanta, Giza Zoo.