**USC** School of Architecture

**DDR 793b Thesis Design Studio: Vertical Urbanism**

**Units: 6**

**Spring 2017, M-W-F, 2-6 pm:**

**Location: TBD**

**Instructor: Clifford Pearson**

**Office Hours:** Mondays, 12 noon – 2 pm

**Contact Info:** cliff.pearson@gmail.com.

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**Program Description**

Part of a semester-long program that will be embedded in a large architecture firm in New York City, this thesis studio will take advantage of the firm’s partners and associates for discussions, crits, and lectures. This integrated approach to learning will expose students to all facets of high-rise projects, from planning and designing them to building them. The program will include a design studio, as well as courses on the history and theory of skyscraper design, the structural design of tall buildings, and green urbanism. Each student will focus on a particular high-rise precedent in the New York metropolitan area and develop his/her own design that engages ideas generated by it and improves on it.

**Course Description**

Looking at projects around the globe—especially in Asia—the students will explore innovative notions of vertical urbanism and apply them to their thesis projects. They will examine how most new skyscrapers in Asia combine more uses together than those in the US and how buildings, pedestrian circulation, and transportation are woven together there. They will research passive and active green design strategies and how they can be applied to tall buildings. Their final project will be to develop a high-rise building in the New York metropolitan area that incorporates the most innovative ideas of vertical urbanism.

Tours of landmark buildings and new ones under construction will give students first-hand knowledge of the topic and will be supplemented by visits to the offices of architects designing key projects in New York and cities around the world. Guest lectures by the president of the Skyscraper Museum, writers, critics, and consultants working on tall buildings will expose students to a broad range of perspectives. Students will take advantage of lectures and exhibitions at institutions such as The Architectural League, the Van Alen Institute, the Center for Architecture, the Museum of Modern Art, the Cooper-Hewitt Design Museum, the Skyscraper Museum, and local architecture schools.

**Learning Objectives**

Students will work on developing and completing their thesis projects, using the skills and research done the previous semester in DDR 793a. The goal is for each student to take the precedent he or she selected in the previous semester and develop a design that rethinks, reworks, and improves it. In doing so, the student will apply his or her own critical perspective to the existing building, frame the key issues raised by it, and then create a comprehensive design project that furthers our understanding of vertical urbanism.

**Prerequisite(s):** DDR 793a

**Co-Requisite (s):** Arch 544, Arch 518, and Arch 519

**Concurrent Enrollment:** None

**Recommended Preparation**: Read as much as you can about high-rise architecture, New York City, and vertical urbanism—in newspapers, magazines, books, and online. Watch films and TV shows shot in NY. Explore models of high-rise development in other parts of the world with an eye to adapting them to the U.S. Complete work for DDR 793a.

**Course Notes**

Grading will be done on an A, B, C, D, F basis.

**Technological Proficiency and Hardware/Software Required**

Basic computer skills plus proficiency with the latest software modeling programs.

**Description and Assessment of Assignments**

Students’ main focus will be to complete their thesis projects, but they will also attend periodic lectures by guest speakers, tour important buildings in NYC and the surrounding area, and visit the offices of architects, consultants, and developers working on high-rise projects.

**Grading Breakdown**

Thesis project: 85%

Presentations and class participation: 15%

**Assignment Submission Policy**

Assignments will be submitted by email or USB drive to the instructor. Assignments handed in 1-3 days late will have their grades reduced by half a grade; those handed in 4-7 days late will be reduced by a full grade. Each week late will reduce the assessment by another full grade.

**Additional Policies**

Students are expected to attend each class and must notify the instructor before class if they are unable to attend on a particular day.

**Required Readings and Supplementary Materials**

“The Tall Office Building Artistically Considered,” by Louis Sullivan, in *Lippincott’s Magazine*, 1896

*Towards a New Architecture*, by Le Corbusier, 1923

Various articles on skyscrapers by Lewis Mumford in the 1920s, ‘30s, ‘40s, and ‘50s

Chapter on The Mile High Illinois in *A Testament*, by Frank Lloyd Wright, 1956.

*Design of High-Rise Buildings*, by Fazlur Khan, 1965, http://www.som.com/ideas/research/design\_of\_high-rise\_buildings

*Delirious New York: A Retroactive Manifesto for Manhattan*, by Rem Koolhaas, 1978

*The Skyscraper*, by Paul Goldberger, 1981

*The Tall Building Artistically Reconsidered,* by Ada Louise Huxtable, 1984.

*S, M, L, XL,* by OMA, Rem Koolhaas and Bruce Mau, 1995

*Rise of the New York Skyscraper: 1865-1913*, by Sarah Bradford Landau and Carl W. Condit, 1996

*Skyscrapers: The New Millennium*, by John Zukowsky and Martha Thorne, 2000

*Why Buildings Stand Up: The Strength of Architecture*, by Mario Salvadori, 2002

*Why Buildings Fall Down: How Structures Fail*, by Mario Salvadori and Matthys Levy, 2002

*Tall Buildings*, by Guy Nordenson and Terence Riley, 2003

*An Introduction to High-Rise Design*, by John Zils and John Viise, in Structure magazine, November 2003

*Building the Empire State*, edited by Carol Willis, 2007

*Eco Skyscrapers*, by Ken Yeang, 2007

*How the City Moved to Mr. Sun: China’s New Megacities*, by Michiel Hulshof and Daan Roggeveen, 2011.

*Cities Without Ground: A Hong Kong Guidebook*, by Adam Frampton and Jonathan D. Solomon, 2012

*The Vertical Village: Individual, Informal, Intense*, edited by Winy Maas, 2012

*Skyscrapers: A History of the World’s Most Extraordinary Buildings*, by Judith Dupre, 2013

*The Chinese Dream: A Society Under Construction*, by Neville Mars, 2013

*Design of High-Rise Buildings: Past, Present, and Future*, by K. Kayvani, Southern Cross University, ePublication, http://epubs.scu.edu.au/cgi/viewcontent.cgi?article=1002&context=acmsm23

*Mall City: Hong Kong’s Dreamworlds of Consumption*, Stefan Al, editor, University of Hawaii Press, 2016

*Designing Tall Buildings: Structure as Architecture*, by Mark Sarkisian, 2016

**Course Schedule: A Weekly Breakdown**

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|  | **Topics/Daily Activities** | **Readings and Homework** | **Deliverable/ Due Dates** |
| Week 1 Dates | Welcome to NYC | Read “The Tall Office Building Artistically Considered” and *Delirious New York*. Apply ideas from these readings to your precedent. | Write a one-page description of how Sullivan and Koolhaas’s ideas  apply to your precedent. |
| Week2 - 4 Dates | First-hand research on your precedent. | Visit your precedent and do primary-source research, such as interviewing the architects and consultants involved in it, people using it, and neighbors experiencing it. | Provide summaries of your interviews, develop diagrams and drawings  that map the way the building is used, create your own renderings and  sketches of the building and photograph it. |
| Week 5 Dates | First review | Customized readings. | Prepare drawings, models, and text on your precedent and present  them to a jury of USC and outside critics. |
| Week 6 - 8 Dates | Rethinking your precedent. | Customized readings. | Develop diagrams, drawings, models, and texts that explain how you  plan to re-conceptualize your precedent. Mid-semester review. |
| Week 9 - 12 Dates | Transforming your precedent. | Customized readings. | Develop diagrams, drawings, models, and texts that show how you  plan to rethink and improve your precedent. |
| Week 13 - 14 Dates | Finalizing your thesis | Customized readings. | Prepare final materials for your thesis. |
| Week 15 Dates | Final review | Get some rest. | Present and defend your thesis to a jury of USC and outside critics. |
| Week Dates |  |  |  |
| Week Dates |  |  |  |
| Week Dates |  |  |  |
| Week Dates |  |  |  |
| FINAL Date |  |  |  |

**Statement on Academic Conduct and Support Systems**

**Academic Conduct**

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences.  Please familiarize yourself with the discussion of plagiarism in *SCampus* in Section 11, *Behavior Violating University Standards* [https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions](https://scampus.usc.edu/1100-behavior-violating-university-standards-and-appropriate-sanctions/).  Other forms of academic dishonesty are equally unacceptable.  See additional information in *SCampus* and university policies on scientific misconduct, [http://policy.usc.edu/scientific-misconduct](http://policy.usc.edu/scientific-misconduct/).

Discrimination, sexual assault, and harassment are not tolerated by the university.  You are encouraged to report any incidents to the *Office of Equity and Diversity* <http://equity.usc.edu> or to the *Department of Public Safety* <http://adminopsnet.usc.edu/department/department-public-safety>.  This is important for the safety of the whole USC community.  Another member of the university community – such as a friend, classmate, advisor, or faculty member – can help initiate the report, or can initiate the report on behalf of another person.  *The Center for Women and Men* http://www.usc.edu/student-affairs/cwm/ provides 24/7 confidential support, and the sexual assault resource center webpage <http://sarc.usc.edu> describes reporting options and other resources.

## **Support Systems**

A number of USC’s schools provide support for students who need help with scholarly writing.  Check with your advisor or program staff to find out more.  Students whose primary language is not English should check with the *American Language Institute* <http://dornsife.usc.edu/ali>, which sponsors courses and workshops specifically for international graduate students.  *The Office of Disability Services and Programs* <http://sait.usc.edu/academicsupport/centerprograms/dsp/home_index.html> provides certification for students with disabilities and helps arrange the relevant accommodations.  If an officially  declared emergency makes travel to campus infeasible, *USC Emergency Information* [*http://emergency.usc.edu*](http://emergency.usc.edu)will provide safety and other updates, including ways in which instruction will be continued by means of blackboard, teleconferencing, and other technology.