New York City College of Technology The City University of New York Department of Architectural Technology

**ARCH 3609** Integrated Software in the Architectural Office

> 3 class hours, 3 credits Office Hour: Fridays 12.00pm -1.00pm or by appointment

## **Course Description**

The course is designed to introduce the student to the variety of software used in contemporary architectural practice through a conceptual design group project. The student will be provided with the guidelines for a better understanding of the integration of software into all aspects of the architectural profession as well as work collaborative.

The course focuses on:

- understanding the notion of design concepts,
- curating personal design and written work in a successful and straightforward way by creating a portfolio,
  - collaborating efficiently with other designers to accomplish a design project.

Prerequisites: ARCH 2491 and ARCH 3561

## **Learning Objectives**

- 1. Demonstrate basic proficiency with the software covered in class.
- 2. Understand the advantages of each software in relation to their use in the architectural office.
- 3. Generate a professional quality portfolio, resume, cover letter.
- 4. Demonstrate teamwork spirit and enhance collaborative skills.

#### **Course Structure**

The course will be a series of lectures, class discussions and desk-critiques followed by participation of students in weekly individual and group projects. There will be four (1/4 semester, Midterm, 3/4 semester and Finals) important presentations in which students will publicly present their work progress and get critique from invited guests from architecture and urban design fields.

#### Blackboard

The course material will be organized in folders on blackboard. All students should have Blackboard account and CityTech email account as the class will be communicating information through these digital platforms. All submissions will be electronically through Blackboard and students will receive weekly grades and comments through Blackboard as well.

#### Open Lab

This is City Tech's fairly new digital platform. The course will have its own page with relevant events and internships of interest to the class. This is also where you will post your blogs and discussionss but most importantly where you will create your eportfolio.

Selected students' work will be published online under **PLB Website** after the end of the semester.

#### **Attendance Policy**

As the class meets only once a week, only (2) absences are allowed. Two late arrivals (more than 10 minutes) are equal to one absence. If a student exceeds the absences he/she may fail the course.

#### **Grading**

Assignments & In Class Exercises
(On time electronic submittal or no grade will be awarded)
Group Project & Presentation
Portfolio
30%

Note: Projects will be graded on:

following instructions, composition, neatness & accuracy, lineweights & resolution and presentation.

All students will receive grade with comments for their weekly assignments on Blackboard.

## **Digital File submission**

All digital files must be named with the following convention:

example: tsafoulia\_F13\_peter-smith\_rectilinear form.pdf

Name all files before uploading to blackboard and/or submission to instructor.

#### **Grades**

You will be graded based on the following scale:

A Superior

A- Excellent

B+ Very Good

B Good

**B-** Competent

C+ Fair

C Satisfactory/Average

C- Marginal

D Unsatisfactory

F Failure

**I** Incomplete

#### **Respect Deadlines**

Projects are due at the beginning of class. Professional presentation and punctuality in meeting deadlines will be stressed, as one would also expect in a work environment. Assignments received after 15min after the beginning of class are considered late and receive a penalty of 1/3 grade for the assignment. If the project deserves an A-,but was delivered after two classes late, the grade will be reduced to a B [from A- to B+ to B] . This penalty will be enforced even if the student is absent from class on the day of the deadline. The student should not stay home from class if his/her project is not ready. Late assignments will not be accepted after 2 class sessions.

## **Course Requirements**

Each student is responsible for turning in a project even if he/she is absent on the day the assignment is due. Projects should be submitted in proper format, for example, hardy copy print-outs, uploaded on Blackboard as instructed. It is the student's responsibility to have the telephone numbers of a few members of the class to find out what was assigned for the following class.

#### **Academic Integrity**

Students and all others who work with information, ideas, texts, images, music, inventions and other intellectual property owe their audience and sources accuracy and honesty in using, crediting and citation of sources. As a community of intellectual and professional workers, the college recognizes its responsibility for providing instruction in information literacy and academic integrity, offering models of good practice, and responding vigilantly and appropriately to infractions of academic integrity. Accordingly, academic dishonesty is prohibited in The City University of New York and is punishable by penalties, including failing grades, suspension and expulsion.

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## **Group Project**

The course involves the creation of a project with multiple components that incorporates reading and thinking critically, demands organization and presentation skills and requires the ability to work corroboratively. It is a highly conceptual design project that is generated following rules of grammar, logic and mathematics. Students have to use data related to their city as their driver towards design. During this process students develop research and analytical skills. They conduct research related to NYC data using online resources such as https://nycopendata.socrata.com/ , http://nyc.pediacities.com/Nycpedia , http://wirednewyork.com/forum/ and learn how to properly cite sources. For this project the students are provided with guidelines for a better understanding of the integration of specialized software into all aspects of the architectural profession. They also work in groups, learning how to work collaborative, schedule and manage their time, be professional with timeframes, enhance their speech and rhetoric skills. The work environment demands that employees work together responsibly so learning in the classroom is initiated in a highly collaborative, interactive, and experiential way and the evaluation and feedback given in between them is encouraging, learning focused and transparent.

#### **Course Portfolio**

At the beginning of each week, students will prepare a digital portfolio with each assignment carefully documented and presented. Students will be required to make printouts of their portfolio at regular intervals for review and discussion.

#### **Assessment**

Students will demonstrate through homework assignments, group presentations, and web based presentations, their ability to:

- 1. Produce high quality design proposals working in groups with the use of advanced design and visualization software.
- 2. Conduct research related to NYC data on the internet and using online resources and properly cite sources.
- 3. Coordinate a visual presentation composed of photographs, text, line drawings, and computer generated media.
- 4. Utilize e-Portfolio to curate the work produced in class as well as other examples of the students' own architectural design work.
- 4. Produce professional quality documents using word processing software, spreadsheets, and project management software.

# **General Education Learning Goals**

- Show curiosity and the desire to learn.
- Acquire tools for lifelong learning—how to learn, knowledge of resources.
- Resolve difficult issues creatively by employing multiple systems and tools.
- Gather, Interpret, evaluate, and apply information discerningly from a variety of sources.
- Understand and employ both quantitative and qualitative analysis to describe and solve problems, both independently and cooperatively.
- Use creativity to solve problems.
- Apply knowledge and analyze social, political, economic, and historical issues.

## **High Impact Educational Practices**

The course is developed in such a way that addresses high impact educational practises. Specifically it belongs to the Capstone Courses. Students are asked to develop a portfolio of 'selected work'. It also requires the development of a group project that integrates and applies what they've learned throughout their college years so far.

Very important aspect of the course is that also involves a collaborative project. Collaborative learning combines two key goals: learning to work and solve problems in the company of others, and sharpening one's own understanding by listening seriously to the insights of others. (Kuh\'s High Impact Practices, AAC&U, Full Report)

## **Readings and References**

All required and recommended readings are uploaded on Blackboard. Students will be notified weekly on the specific text, tutorial, reference they should study for the following class meeting.

#### Readings List:

Branzi, Andrea. (c2006). No-stop city: Archizoom associati. Orléans: HYX.

Castells, Manuel. (1998). End of millennium. Malden, Mass.: Blackwell Publishers.

Henri Lefebvre, (1991). The production of space. Cambridge, Mass.: Blackwell.

Hughes, J, & Sadler, S. (Eds.) (2000). Non-plan: Essays on freedom participation and change in modern architecture and urbanism. Boston, Mass: Architectural Press.

Isozaki, Arata. (2009). Arata Isozaki. (K.T. Oshima, Ed.). New York, NY: Phaidon.

Jacobs, Jane. (1961). The death and life of great American cities. New York: Random House.

Martin, Reinhold, & Baxi, Kadambari. (2007). Multi-national City: architectural itineraries. Barcelona: Actar.

Mike Davis. (2006). Planet of Slums: Urban Involution and the Informal Working Class. New York: Verso.

Mostafavi, Mohsen & Doherty, Gareth & Harvard University Graduate School of Design. (Eds.). (2010). Ecological Urbanism (1st ed.). Baden: Lars Müller Publishers.

Rossi, Aldo. (1982). The Architecture of the City. Cambridge: The MIT Press.

Saskia Sassen. (c2001). The global city: New York, London, Tokyo. Princeton, N.J.: Princeton University Press.

Simmel, Georg. (1903), The Metropolis and Mental Life. Dresden: Petermann.

Wirth, Louis."Urbanism as a way life" The American Journal of Sociology. Chicago: The University of Chicago Press, 1938. Vol. 44, No. 1, pp. 1-2.

Wolch, Jennifer, & Dear, Michael (1993). Malign Neglect: Homelessness in an American City. San Francisco: Jossey-Bass.

Zardini, Mirko. & the Canadian Centre of Architecture. (Eds.). (2006). Sense of the City, An Alternate Approach to Urbanism. Baden: Lars Müller Publishers.

## **Course Meeting Dates & Draft Thematics** (subjected to changes throughout the semester)

WEEK 01 | January 31, 2013

Course introduction, Cover letter & Resume Guidelines | InDesign pt.1

WEEK 02 | February 07, 2013

**Rhino Basics & Integration Project Introduction** 

WEEK 03 | February 14, 2013

Rhino Surface Creation & Adobe Illustrator pt.1 | Architectural Elements Cartography

WEEK 04 | February 21, 2013

Adobe InDesign pt.2 & Portfolio Introduction, Vray for Rhino.

WEEK 05 | February 28, 2013

## 1/4 PIN UP OF PORTFOLIOS

WEEK 06 | March 07, 2013

Rhino 2D Paneling Tools & 3D Paneling Tools

WEEK 07 | March 14, 2013

Adobe Illustrator pt.2 | Integration Project, City Data Analysis

WEEK 08 | March 21, 2013

MIDTERMS PRESENTATIONS | Integration Project & Portfolios Presentations

WEEK 09 | March 28, 2013

GIS\_Integrated Software Project, Syntax

WEEK 10 | April 04, 2013

Integrated Software Project, Syntax

WEEK 11 | April 11, 2013

Photoshop | Integrated Software Project, Concept Diagrams & Design

WEEK 12 | April 25, 2013

#### 3/4 PIN UP FOR THE INTEGRATED SOFTWARE PROJECT

WEEK 13 | May 02, 2013

Photoshop | Integrated Software Update | Conceptual Collages

WEEK 14 | May 09, 2013

Portfolio & online portfolio\_ePortfolio

WEEK 15 | May 16, 2013

Final Project & Portfolio Presentations Overview

WEEK 16 | May 23, 2013

### FINAL PROJECT & PORTFOLIO PRESENTATIONS (WITH GUESTS)

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Please use the following format for all assignments posted to blackboard:

professorlastname\_semester\_studentfirstname-studentlastname\_assignmentname.filetype

If you have more than one files per assignment then name accordingly:

professorlastname\_semester\_studentfirstname-studentlastname\_assignmentname 01.filetype

## **Example:**

tsafoulia\_F13\_peter-smith\_cover letter.pdf

or

tsafoulia\_F13\_peter-smith\_cover letter 01.pdf

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READ!!!!!

COMPREHEND

**PRODUCE** 

ASK | reEVALUATE

**UPDATE** 

**PRESENT**