A historic milestone was achieved in 2007 when the global population living in cities and towns reached the 50 per cent mark, making urban centres the dominant habitat for humankind. The rapidly increasing dominance of cities places the process of urbanization among the most significant global social trends of the 21st century. <From: Population Dynamics in the Post-2015 Development, Report of the Global Thematic Consultation on Population Dynamics, UNFPA, UNDESA, UN-HABITAT, IOM 2013>

In 2012 Rio de Janeiro hosted the United Nations Conference on Sustainable Development. This conference, titled “The Future We Want”, addressed many important issues including those around the increasing pressures on natural resources to support an increasingly urban world. Following that conference, the United Nations has sponsored task teams and reports focused on post-2015 development, including a report on “Realizing the Future We Want for All.” This course will foreground questions such as what is the role of design in relationship to the use of limited resources for an increasingly urban global population? What are the relationships of local and global needs to local and global resources in different urban environments? Sustainable development implies promoting the wellbeing of current and future generations, and this wellbeing requires economic growth that is intrinsically linked to environmental change. Looking briefly at NYC and primarily studying Istanbul, we will explore how these cities address growth and the utilization of their resources in their current development plans.

While urbanization has contributed much to the problems of sustainability, this studio looks to the opportunities that can arise from the density of industry and creativity that is located in cities. You will be asked to imagine and design for new forms of public engagement with the issues around resources that are necessary for urban development and growth. A resource is defined in the OED as “a means of supplying a deficiency or need” and resources as “stocks or reserves of money, materials, people, or some other asset, which can be drawn on when necessary,” and “the collective means possessed by a country or region for its own support, enrichment, or defense.” Generally we understand natural resources as those materials obtained from the environment that are utilized to meet the needs of human beings (or other living organisms). Natural resources as well as human resources such as economic and cultural resources all contribute to the specificity of inhabitation in any one place. Our understanding of “what is a resource” is also subject to change over time and relates to our particular culture. A critical resource today may not have been understood as critical 400 years ago.
As you have studied in New York City for the past three years, you have become familiar with its urban infrastructure and have proposed designs for local sites. All of your architectural propositions have imagined the use of a variety of resources that are locally and globally sourced and connected. In this studio, design decisions will be made in this context of limited resources for global development. Architectural Design III is an opportunity to look at the role of architecture and design in a parallel global context. Designing projects for Istanbul is an opportunity to research and innovate in a new context, to consider relationships between local and global conditions, and to look into some of the urgent challenges facing cities in general and Istanbul in particular.

In November 2014, Istanbul will open the 2nd Istanbul Design Biennial titled “The Future is Not What it Used To Be”. The Biennial asks “What is the future now?” The call for entries for the Design Biennial asked for manifestos that “…imagine a new future and instigate change…” Curator Zoe Ryan states “The Biennial invites designers to rethink the manifesto, harnessing this powerful and fertile genre as a platform for reconsidering where we have come from, where we are, and where we are going…In the new context of today, how can we reclaim the manifesto as a catalyst for critical thinking in design? Reinvented as an action, a service, a provocation, or an object, what new potentials might the manifesto have for generating inventive outcomes that address both positive and negative consequences?”

Our studio will consider the pressures on city futures that demand creative responses to limited resources, increased density, and sustainable growth in an increasingly urban world. Students will work in teams to research a resource important to Istanbul and its urbanization then design a public place of action, education, provocation, and engagement with contemporary issues around these resources. You will develop a small project for a site in Istanbul before we travel in November. After returning to NYC, students will transform the earlier projects into larger proposals, developing your own manifestos and imagining new futures.
Istanbul

Istanbul’s strategic location, where trade along the Bosphorus connected regions between the Mediterranean and the Black Sea, was a defining condition of its development. Straddling two continents, Europe and Asia, the city has a unique cultural history. A brief timeline of Istanbul begins with the 7th century BC when a Greek settlement, Byzantium, was founded there, followed by Lydian, Persian, Athenian, and Macedonian rule before a period of brief autonomy. It was folded into the Roman Empire in 64AD, and became known as Constantinople in 330AD. Over the years, Constantinople survived attacks by Slavs, Arabs, Avars, Blugars, Persians, and Russians, and ultimately the Byzantine imperial army was defeated by the Seljuk Turks in 1071 and again in 1176. Following a brief rule by the Venetians (1203-1261) Constantinople was returned to Byzantium. In 1453 the Ottomans conquered Constantinople (the Ottoman state was born in 1299) and the Ottoman empire thrived until the 19th and 20th centuries when it began to lose territories to nearby powers. After World War I, Istanbul was occupied by French and British troops. The development of modern Turkey evolves from the abolishment of the Ottoman sultanate in 1922, the relocation of the capital from Istanbul to Ankara in 1923, and the establishment of the Turkish Republic. More current history, including public demonstrations at Gezi Park and the first popularly elected president, hint to the many changes underway today.

Istanbul has a population of almost 15 million people, approximately 20% of Turkey’s population. As a city undergoing rapid transformation, Istanbul will be our lens for exploring natural and cultural resources that support urban development and will be the site of our projects that engage the public in these issues.
B+C | A  
Barnard and Columbia Architecture Program  

Fall 2014 ARCH V3211 Architectural Design III: Resources for an Urban World

| Week 1 | Wed 09/03/14 | Resources for an Urban World - Class Introduction  
|        |             | Project 1.0 Local>Global>Local introduction  

| Week 2 | Mon 09/08/14  
|        | Wed 09/10/14 | Project 1.1 NYC and Its Resources Due  

| Week 3 | Mon 09/15/14  
|        | Wed 09/17/14  

| Week 4 | Mon 09/22/14  
|        | Wed 09/24/14 | Project 1.2 Istanbul and Its Resources Due  
|        |              | Local>Global>Local Final Review  

| Week 5 | Mon 09/29/14  
|        | Wed 10/01/14 | Project 2.0 Reframing Resources - Introduction  

| Week 6 | Mon 10/06/14  
|        | Wed 10/08/14

| Week 7 | Mon 10/13/14  
|        | Wed 10/15/14 | Project 2.1 Reframing Resources: Designing for Urban Action and Engagement - Pin-Up  

| Week 8 | Mon 10/20/14  
|        | Wed 10/22/14

| Week 9 | Mon 10/27/14  
|        | Wed 10/27/14 | Project 2.1 Reframing Resources: Designing for Urban Action and Engagement - Mid-Project Review  
|        | Thu/Fri 10/31-11/14 | Prepare Istanbul Presentation Materials  
|        | Thu/Fri 10/31-11/14 | Fly to Istanbul; Project 2.2 Reframing Resources: Expanded Engagement Introduction  

| Week 10 | all week 11/1 -11/17/12 | On-Site Intensive Research and Work in Istanbul  
|         | Sat/Sun 11/8-11/9/12 | Return to NYC

| Week 11 | Mon 11/10/14  
|        | Wed 11/12/14

| Week 12 | Mon 11/17/14  
|        | Wed 11/19/14

| Week 13 | Mon 11/24/14  
|        | Wed 11/26/14 | Project 2.2 Reframing Resources: Expanded Engagement - 3/4 Review  
|         | Thu 11/27/14 | Thanksgiving Vacation

| Week 14 | Mon 12/01/14  
|        | Wed 12/03/14

| Week 15 | Mon 12/08/14 | Reframing Resources Final Review - Last Day of Classes  
|         | Wed 12/10/14 | Reframing Resources Final Review - Optional Date


Project 1.0  Local>Global>Local
Duration: 3.0 weeks
Wednesday, September 3 – Wednesday, September 24

Project 1.1  NYC and its Resources
Assigned: Wednesday, September 3
Due: Wednesday, September 10

With a partner, select a resource important to any aspect of the infrastructure and development of NYC and study it’s relationship to local and global networks. You can select a local resource and track it’s connections to global systems or a globally sourced resource and track it’s connections to NYC. Utilize existing documentation as a starting point for developing your own diagrams and information about your resource. You will need to work quickly and decisively to uncover and explore your resource.

Documentation:
1) Time line of the general history of the resource development and integration into NYC; especially in relationship to urban growth and political, social, and/or economic forces that affect it’s use
2) Case study/examples of at least three unique interfaces between people and the resource in NYC; documentation of these interfaces through measurable and perceptual techniques
3) Maps of your resource in NYC; consider it’s complete cycle of it’s source, it’s use and the disposal/reuse of the resource

Presentation Requirements:
11”x17” sheets, landscape format
Project 1.2   Istanbul and its Resources

Assigned: Wednesday, September 3
Due: Wednesday, September 24

With your partner, simultaneously study a resource that is important to any aspect of the infrastructure of Istanbul – this should be the same resource or one related to the resource you are looking at for NYC. Document the presence of that resource in Istanbul through maps, diagrams, images, and other visual methods. Consider it’s relationship to local growth and global networks.

Presentation Requirements:
11”x17” sheets, landscape format

Ongoing research
Throughout the first month of this studio everyone will work together to develop a digital reference manual of materials on Istanbul. Organize this research by resource or other topics. This can be: maps, articles, movies, books, etc.

Local>Global>Local Final Presentation: Wednesday, September 24
11”x17” sheets, landscape format – quantity and organization to be discussed (we will be bringing our research materials and projects to Istanbul for a review while we are there, and doing many digital presentations, so we need to plan accordingly and make materials in formats that travel well and are easily presented)
Studio Matter

Student Learning Objectives:

Students in Design 3 should be able, at an advanced level, to:
1. Visually communicate architectural concepts and design intent using discipline-specific techniques including:
   • orthographic projections (plans, elevations, sections),
   • paraline projections (axonometrics, isometrics),
   • physical models using various techniques and materials,
   • multiple media and/or combined representational strategies
2. Verbally communicate architectural research methods and spatial concepts
3. Demonstrate an understanding of precedent and site analysis
4. Demonstrate an understanding of design method as a step-by-step, iterative and incremental process of research, synthesis and feedback
5. Demonstrate an understanding of design thinking as responsive to and shaper of social and cultural context
6. Demonstrate the ability to work independently and collaboratively
7. Demonstrate an understanding of the historical and theoretical contexts for architectural representational conventions
8. Utilize both analog and digital techniques in the design process
9. Demonstrate an understanding of program, use and activity
10. Demonstrate an understanding of material and fabrication
11. Utilize a range of analog and digital techniques in the design process
12. Develop a research project with independently articulated design objectives.

Format: The course is based on the studio method, in which students are expected to work independently to develop their thinking and making, under specific challenges, criticisms and provocations of a critic. Class time will be divided into individual dialogues or critiques (desk crits) between student and critic, open discussions, student presentations, and/or informal lectures. Presentations of work will be public – either informal (pin-up) or formal (review with guest critics). In both, students are required to intelligently (visually and verbally) present their work in order to instigate a discussion about the ideas in their work.

Prerequisites: This is an advanced elective course for students in their senior year majoring in Architecture. Students must have completed Architectural Design I. Admission to the course is selective and based on portfolio submitted to the Department.

Requirements: Attendance is mandatory at all scheduled classes. Students are encouraged to work in studio, and to review one another’s work together. Studio is held Monday and Wednesday beginning promptly at 9:00am. Any student arriving after 9:20am will be considered ‘late’. Arrivals after 10am will be considered ‘absent from class’. All absences must be reported to your critic. The only excused absences are those for health or crisis. Unexcused absences will reduce your course grade, as will late arrivals or early departures from class. Three consecutive absences or four non-consecutive absences will mean that you have dropped the course, whether or not you have filed the appropriate ‘drop’ form. Three non-consecutive absences from class will result in a grade reduction by one-half (1/2) of one letter grade. You may not leave class early or after a desk crit unless you have received specific permission from your critic.
for the purpose of research or site visit or class related work. Please use the hours you spend in class productively; you are not simply waiting for you critic to see you.

Travel: This studio has a special foreign travel component. Students will travel to Istanbul the first week of November, and are advised to consult all their instructors in advance to clear any classes they will miss.

Grading: Each project will be graded with a letter grade and a verbal or written evaluation. Your work will be evaluated by the following criteria:
(1) idea/concept;
(2) conceptual development and design process;
(3) final execution/presentation.
Project 1 will count for 25% of your final grade.
Project 2 will count for 75% of your final grade.

Room Rules and Security:
1. You must provide your own lock for the locker.
2. Room 404 should remain locked at all times. This is for you and your belongings’ safety (things have been stolen before). Security will let you in the room 24 hours a day as needed.
3. Use the spray hood in the model building room for spray paint or fixative.
4. No stools should leave the room.
5. Students with disabilities and who may need disability-related classroom accommodations are encouraged to make an appointment to see their critic as soon as possible.
6. Headphones must be used when listening to music.
7. You are responsible for keeping your desk and your storage area clean and organized. If you are using an empty desk adjacent to your assigned seat, it is also your responsibility to keep this area free of debris.
8. 100% of the work surface of your desk space should be covered with 3-ply chipboard or vinyl board cover.