



# GA MARRAKECH

AZIZA CHAOUNI - JOHN H. DANIELS FACULTY OF ARCHITECTUR, LANDSCAPE AND DESIGN

# DESERT LIVING UNDER THE PRESSURES OF CLIMATE CHANGE

## REIMAGINING MARRAKECH'S RURAL FRINGE, MOROCCO

This Global Architecture course in Marrakech Morocco, led in collaboration with rammed earth expert Professor Oussama Moukhamir, permaculture specialist Omar Hajji, social enterprise champion Faiza Hajji and Tourism and Storyteller specialist Mandy Sinclair will focus on the development of alternatives for integrated living in the urban fridge of the city of Marrakech through imaginary narratives of a farm of the future. Its goal is to introduce students not only to the integration of landscape, architecture and urbanism in a Global South context, but also to acting at different scales as designers, from masterplan to material testing with local craftswomen for a small design built-project.

A UNESCO world heritage site, the city of Marrakech has an incredible architectural and landscape heritage, which has been eroded by climate change, urban growth, massive influxes of new residents and tourists. Today, the rural fringes of the city, farmed in the past by low income farmers, are being replaced by suburban sprawl and vast tourism projects. These new built environment is often insensitive to its negative impacts on its arid ecosystem and dismissive towards traditional building, farming, and water management techniques. Using a cohesive multidisciplinary approach, this course will help rethink how the territory around Marrakech can be inhabited in harmony with its natural resources and population needs.

The course will survey key landscape and architecture projects in the old city of Marrakech, called the medina, and in the outskirts of the city, in order to extract from them innovative ideas. The permaculture farm Marrakech Organics, located outside of Marrakech, will serve as a case study and laboratory ground for students to deploy ideas and tests traditional building and landscape techniques through various optional workshops.

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The Majorelle Gardens is a two and half acre botanical garden and artist's landscape garden in Marrakech, Morocco. It was created by the French Orientalist artist, Jacques Majorelle over almost forty years, starting in 1923.

# GLOBAL ARCHITECTURE COURSE COLLABORATORS



## Omar Hajji

Founder & manager of  
Marrakech Organics

Omar is a Regenerative design specialist. He has an academic background in philosophy, sustainability and a special interest in ecovillages. At Marrakesh Organics, Omar aspires to weave together his inspirations and travels with a deep philosophy of life that seeks to heal the earth and the people; by growing nutrient-dense foods, organizing life-changing courses and bringing people together to dream of a future of abundance! He has traveled around the world learning about ecological restoration, design systems and intentional communities and was involved in numerous community empowerment programs notably in the US, Morocco, Senegal, Thailand, Kenya, Tunisia and Ethiopia. <https://marrakeshorganics.com>

## Faiza Hajji

Founder & director of  
Ifassen

Faiza Hajji (who is not related to Omar Hajji!) is turning environmental protection in Morocco into a driver for the local economy by helping local communities understand the issues surrounding plastic bags and the benefits of sorting waste. To do so, she has set up a business that creates income for local women by turning the plastic bags they collect into handbags. She has taught in the past several workshops on the themes of recycling and the circular economy and will be offering to Daniels students an optional craft workshop, whose results will be integrated in a small design-built project. [www.ifassen.org](http://www.ifassen.org)



## Oussama Moukmir

Professor, National  
School of Architecture of  
Marrakech

Owner of the consulting firm Argilex, Oussama is an engineer expert in rammed earth construction. He teaches undergraduate and graduate courses at the National School of Architecture of Marrakech. He has led numerous workshops on rammed earth construction and was a speaker in the CRATerre Conference on numerous occasions. Oussama is involved in several no-for profit initiatives including the revival and rehabilitation of Marrakech ancient water system the qanats.



## Mandy Sinclair

Writer, Travel expert  
Founder of Tasting Marrakech

Mandy is a Canadian living in Marrakech, Morocco since 2011. With travel, arts and culture in her DNA, she worked as a travel and public relations consultant to leading travel companies and publications including providing concierge services. She organizes cultural tours in Morocco and writes for magazines and newspapers such as Monocle magazine, Horizon Guides, Evening Standard, Independent, Lonely Planet and Brownbook among others. In 2018, she launched Why Morocco, conversations with the inspiring and creative personalities I meet while living in Marrakech. <https://mandyinmorocco.com/>



Dyed threads in the streets of the medina of Marrakech

# GLOBAL ARCHITECTURE COURSE IN MARRAKECH

Desert living under the pressures of climate change

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**F**ounded in 1062, the city of Marrakech is located in Southern Morocco at the foothills of the Atlas Mountains, in a semi-arid zone marking the start of the Sahara Desert. Originally built around a lush oasis fed by a sophisticated water system

channeling water from the nearby Atlas mountains, Marrakech has evolved from being a bustling caravan stop, the capital city of the Kingdom of Morocco, then a major French colonial town, to a sprawling metropolis in the late 20th century. Today, Marrakech covers 230 km<sup>2</sup> and has 1,329,850 inhabitants. A major cause for the city's remarkable growth is tourism, as it is one of the most popular tourist destination in Morocco. If tourism's income has enabled some major urban improvements, such as new leisure facilities (parks, museums, restaurants etc..) and urban upgrades of the city's UNESCO listed historic core, it has unfortunately contributed to offset the city's fragile balance between built environment productive landscape and natural resources.

In fact, rapid urban growth led to the overtaking agricultural land, the destruction of the ancestral water systems and the depletion of the water table. As a result, the oasis of Marrakech, which used to be a productive landscape, is today a pale shadow of its past. In addition, the city's expansion, with cinder block construction with no insulation and asphalt paving galore has increased heat island effect, diminishing the overall comfort of public spaces and pedestrian systems. As a consequence, more and more people are moving to farmlands in the urban fringe of the city, which remain a relatively unaltered area.

With climate change effects worsening in the years to come, and Marrakech's climate likely shift to arid, with more frequent water shortages and higher temperatures, just like other metropolises such as Los Angeles, can the urban/rural fringe of Marrakech become a platform for alternative form of living? How can the nefarious effects of western suburban models be avoided? How can the local, low

income farmer population be accounted for in this new alternative desert living?

The course will focus on developing models for 'rurban' desert living, taking a real case study as a starting point: the permaculture farm Marrakech Organics, where students will be based for the last part of the trip. The goal of the studio is to introduce students to a holistic approach to design, that integrates sustainable food production, landscape, architecture, natural resource management and local craft.

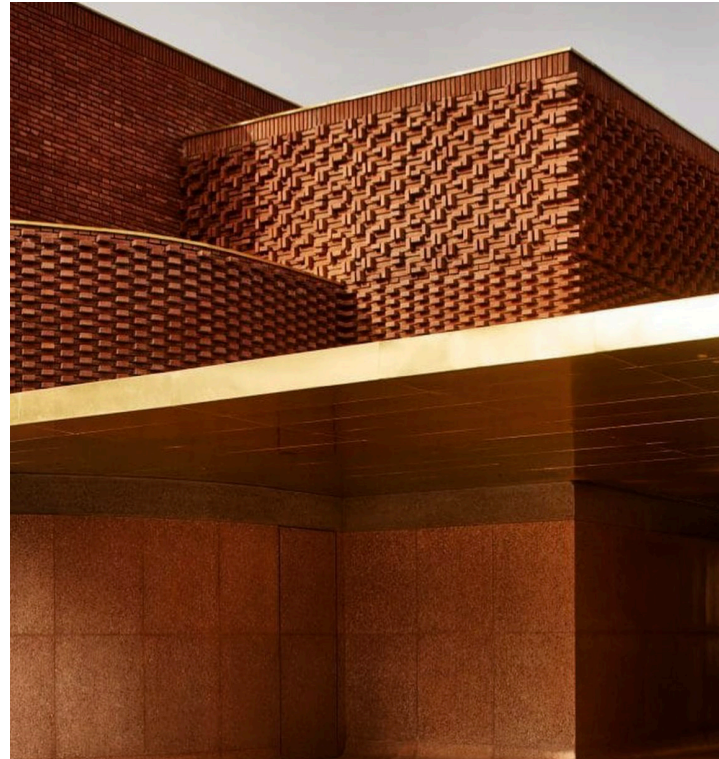
In the first part of the course students will do research on relevant topics in Toronto, then will visit with experts several case studies in the medina of Marrakech, the outskirts of town. The case studies will include: the Jardins de Majorelle, le Jardin Secret, le Musée Yves Saint Laurent, the Museum of Water, a modular rammed earth classroom, le jardin Bio Aromatique de l'Ourika, Jardin D'Amina, Villa Janna, ethnobotanical garden at Taliba boarding house, le Carrefour des Initiatives et des Pratiques Agroécologiques (CIPA) by Pierre Rabhi, and a mountain village comprising several community projects (week end trip).

Aside from a masterplan developed in pairs or groups, students will be given the opportunity to partake in optional workshops depending on their interest:

- 1- Permaculture principles and in situ application
- 2- Food and tourism narratives
- 3- Rammed earth construction
- 4- A craft/ design-built workshop on the farm, in which students can help design and build a canopy system in collaboration with local craftswomen. The canopy will shelter an educational space for local female farmers.



Yves Saint-Laurent Museum, Studio KO



Yves Saint-Laurent Museum by Studio KO



Abandoned rammed earth village outside of Marrakech



Ethnobotanical garden at Taliba boarding house, Marrakech

## SCHEDULE

This four weeks course will be structured around seminars, fields trips to visit case study projects in Marrakech and in its region, lectures by experts, independent studio work and participation workshops at Marrakech Organics (MO).

**Week 1:** May 15th- May 22d: Introduction, case study research, site analysis and mapping, trip preparation

**Week 2:** May 25th - May 29th: Seminars on tourism narratives + water systems and architecture in arid climates, case study visits in the medina of Marrakech, case study analysis, independent studio work, presentation of case studies

**Week 3:** June 1st - June 5th  
Seminars on permaculture, rammed

earth construction and local craft, case study visits in the rural region of Marrakech (village week end trip), first design charrette for farm masterplan, independent studio work, and participation in MO workshops

**Week 4:** June 8th - June 12th  
Second design charrette for the farm masterplan + building and landscape proposals, independent studio work, participation in MO workshops, final presentation

**Optional:** June 13th - June 16th trip in the Atlas Mountains and Sahara Desert (for students wishing to stay longer in Morocco, the course instructor can put together this trip, costs are additional to the estimated budget)



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## APPLICATION

In one pdf, include a CV, 5 work samples from studios taken at Daniels, 1 work sample from internships if available, 1 research sample if available, and a paragraph describing your interest in this course. Please be sure to include your full name and student number.

### Deadline: February 18th 2020

Please apply via email to [aziza.chaouni@daniels.utoronto.ca](mailto:aziza.chaouni@daniels.utoronto.ca) and [registrar@daniels.utoronto.ca](mailto:registrar@daniels.utoronto.ca) with the heading: Global Architecture Application.

Students will be informed via email of their acceptance to the program in by March 2nd 2020. A Course Description, Syllabus and References for the Course will be made available online soon.

## BUDGET

Please find below an estimate of the costs per student. Meals during 2 Sundays and one Saturday are not accounted for (please count around 25\$ a day for your meals during week-ends):

### Transportation

Airfare Toronto-Casablanca + Train  
Casablanca-Marrakech: 1,300 \$CAN

One day field trip 1: Water Museum- Yves Saint Laurent Museum + Jardin de Majorelle – Jardin Secret: 20\$

One day field trip 2: Pierre Rabhi project: 30\$

Two days field trip in Atlas Mountain Village: 35\$

### Accommodation

Double rooms from May 24th to May 31st in a ryad in the medina of Marrakech: 60\$/person/night (total for 8 nights: 480\$)

Double or triple room from May 24th to June 12th: 28\$/night (total for 11 nights: \$308)

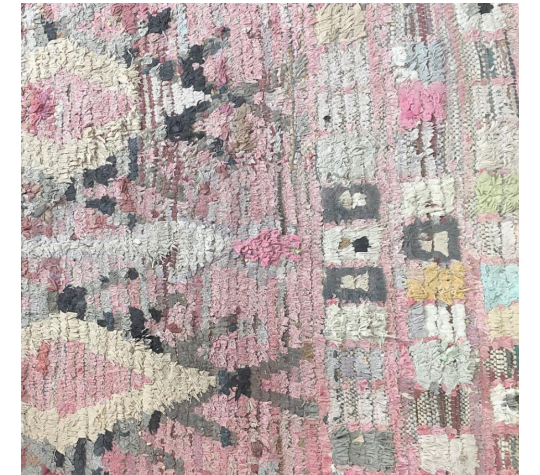
One night at mountain village (all meals included): 41\$

### Meals

Meals during the week at the hotel in the Medina of Marrakech (not including week end): 25\$/day for 3 meals a day, 125\$

Meals at Marrakech Organics: 3 meals a day for 10 days at MO (aside from one lunch and dinner during field the mountain village + week-ends) : 20\$/ day for 3 meals, 200\$

Lunch in Marrakech during field trip 1: 10\$



Carpet made with recycled clothing, Boucherwet

Lunch at Pierre Rabhi's project during field trip 2: 10\$

### Tickets for site visits

Jardins de Majorelle : 15\$

Jardin Secret : 10\$

Water Museum : 6\$

YSL Museum: 10\$

All other museums and gardens are free

### Workshops (optional)

Rammed earth workshop: 60\$

Craft workshop: 30\$

### Tours (optional)

Medina tour: 15\$

Oasis tour: 25\$

**TOTAL: 2,769\$**

# SEE YOU IN MARRAKECH!

Photos show the projects that we will visit and analyze in and around the city of Marrakech. The owners and/or designers of the projects will give us tours during most of our visits.

