

Montana State University  
 School of Architecture  
*Project Director:* Cloe Erickson  
*Instructor:* Bill Rea

*Project website:* [igherm.wordpress.com](http://igherm.wordpress.com)

# Morocco; Sustainable Community Development

Summer 2010

## ■ Syllabuses for the following:

<b>ARCHITECTURE</b>	<b>471</b>	Special topics (total of 6 undergraduate credits)
<b>ARCHITECTURE</b>	<b>525</b>	Seminar/ Directed Research-Creative Activity (total of 6 graduate credits)

**Country:** Morocco  
**Dates:** May 13 – June 18, 2010  
**Language:** English, Arabic, French  
**Level(s):** Undergraduate,  
 Graduate

**Prerequisites:** 2.5 GPA undergraduate, 3.0 GPA graduate, Instructor consent  
 (interview process)

**Cost:** \$4,900 (excludes airfare)

**Project Website:** [www.igherm.wordpress.com](http://www.igherm.wordpress.com)

**Pre-departure classes:** Dates TBA, 5 classes

## Academic Program

Rural Morocco is unique in its architecture, history, landscape and way of life. Participants will have the opportunity to learn from and work with locals on sustainable development projects including women's cooperatives, microfinance projects and the Igherm Restoration and Library Project in the remote and geographically stunning region of Zawiya Ahansal. Working side by side with locals, documenting the people and culture and experiencing a subsistence way of life are only a few of the unmatched experiences of this study abroad - a true resume building experience.

## **Tentative Itinerary (subject to change)**

### **Day 1**

Depart for Marrakech, Morocco.

### **Day 2**

Arrive in Marrakech.

### **Day 3**

Tour Marrakech's architectural landmarks and medieval marketplace.

### **Day 4**

Travel to Sidi Ifni.

### **Day 5 - Day 8**

Sidi Ifni: Visit locally owned and operated cooperatives and microfinance projects.

### **Day 9**

Travel to Zawiya Ahansal.

### **Day 10-23**

Zawiya Ahansal.

### **Day 24-26**

Trek in Atlas Mountains.

### **Day 27-34**

Zawiya Ahansal.

### **Day 35**

Free Day and farewell party.

### **Day 36**

Depart Zawiya Ahansal for Marrakech.

### **Day 37**

Depart Marrakech or travel on your own.

## **What to Expect**

Zawiya Ahansal is a remote and mountainous region located between 6,000 and 9,000 feet in Morocco's Central High Atlas Mountains. It is a high desert region with temperatures extremes in May and June ranging between 32 and 100 F. Regional equivalents are the City of Rocks in Idaho and southern Utah. Students should be prepared and comfortable with working in all weather, including rain, wind, and heat and should be able to lift a minimum

of 50 pounds. Students will be living with local families in registered guest houses and should therefore be comfortable with and respectful of Muslim culture. Meals are prepared by your host family and are traditional Berber Moroccan cuisine. Sleeping rooms will be shared amongst students.

### Course acceptance policy

The course size is limited by the accommodations in Zawiya Ahansal so in addition to a cumulative 2.5 gpa all students applying for this program will be interviewed by the instructor, project director and possibly a staff member from the MSU Office of International Studies. In addition, all students will need to be physically able to work and hike at 6000 feet above sea level for an extended time.

### Contact Information:

<b>Project Website</b>	<b><a href="http://igherm.wordpress.com">igherm.wordpress.com</a></b>
<b>Cloe Medina Erickson</b> Project Director	<b><a href="mailto:medina@ericksoncreativegroup.com">medina@ericksoncreativegroup.com</a></b> 406-222-2071
<b>Bill Rea</b> Instructor	<b><a href="mailto:brea@montana.edu">brea@montana.edu</a></b> 406-994-7570
<b>Sally O'Neill</b> Office of International Programs OIP Corodinator Faculty-Led Programs	<b><a href="mailto:sallyo@montana.edu">sallyo@montana.edu</a></b> 406-994-7688

### Texts:

#### Required

Armstrong, Karen. Islam. Date. Publisher

Erickson, Cloe. "New Nomads of the High Atlas." Saudi Aramco World. March/April 2008: 24-29.

Clammer, Paul et al. Lonely Planet: Morocco 9<sup>th</sup> edition, February 2009 (specific readings)

Boussalh, Mohamed. Conservation manual for earth architecture heritage in the pre-Saharan valleys of Morocco. UNESCO, 2005. (will copy & hand out specific chapters during pre-trip meetings)

Gellner, Ernest. Saints of the Atlas. Weidenfeld and Nicolson, 1969 (selected chapters)

Brett, Michael, and Elizabeth Fentress. The Berbers. Malden, MA: Blackwell Publishing, 2007. (selected chapters) (will copy & hand out specific chapters during pre-trip meetings)

## **Recommended**

Easton, David. *The Rammed Earth House*. Chelsea Green Publishing Company, Vermont 1996

Armstrong, Karen. *Muhammad: A Prophet for Our Time* Date. Publisher

### **Dress code**

Out of cultural respect; men cannot show their shoulders and knees and women cannot show their elbows and knees. This means NO shorts for men or women. Capris or long pants/skirts only. No tank tops for men and no short sleeve shirts for women (3/4 length or long sleeve only). Nothing tight fitting for women; don't expose your feminine figure. All clothes should be lightweight because it will be warm. Everyone needs to bring at least two button up shirts (these will be worn during our meetings with the locals). For everyday work on the igherm nice t-shirts or polo shirts are fine (I suggest long sleeve because it is very dusty and dirty in the igherm). Also remember that everything you bring will be used and abused, so don't bring your most favorite and expensive items.

You will see other foreigners wearing less culturally aware clothing both in Marrakech and the mountains. However, they are 'tourists' rather than guests of the locals. We must maintain a high level of respect at all times because we are there as professionals. Please be conscious of this while packing.

### **Health & Safety:**

Morocco welcomes many visitors with a good case of intestinal problems. This is not because the bacteria is bad, it is just different than what our bodies are used to I travel with acidophilus and grapefruit seed extract, both found at the health food store. These are great ways to combat bacteria on a natural level. If it worsens we have antibiotics to administer. Zawiya Ahansal is a day's travel from the nearest medical facility. There are NO doctors in the region. This is important to keep in mind while working and recreating in the area. Be careful at all times; do not take extreme risks to your physical health and safety. Compare the remoteness to being on a backpacking trip in the wilderness, help is hours away. We will have a satellite phone for emergency contact.

### **Food and Water:**

Don't drink that water! Water purification of some kind is necessary. Bottled water is available in Marrakech. The houses where you will be staying in the mountains serve breakfast and dinner. Although the food lacks in protein and variety so we will do some supplementary shopping in Marrakesh before leaving for the mountains. I suggest bringing your favorite protein bar or jerky from home (remember this adds weight to your luggage). Candy bars, dried fruit, nuts, and cheese can all be bought in Marrakech.

**Language:**

Arabic is the official language of Morocco. French is widespread in metropolitan areas and with men and teenagers in rural regions. Berber is the language of the mountains. English is very rare, with the exception of Marrakesh where it is more and more apparent, but still not everywhere. A little Arabic goes a long way, we will be learning some basic phrases prior to departure

**Alcohol and drugs:**

Alcohol is forbidden in Islam and Morocco is a Muslim monarchy. In addition, drinking alcohol in front of locals and their families is considered disgraceful. Therefore, our trip is an alcohol free trip. In addition, Morocco may be famous for its marijuana and hash but it is still illegal.

Because Morocco is famous for its drugs it is important that you understand they will not be tolerated at any time during this course, including during your free time. It is also considered extremely disrespectful to do this in front of locals! Our trip follows MSU's no tolerance drug policy. Since you are already covered by the Montana State University Student Conduct Policy there is no need for any additional paperwork. If you're not familiar with the University policy I copied parts of it here.

**610.00 CONDUCT EXPECTATIONS** Montana State University expects all students to conduct themselves as honest, responsible and law-abiding members of the academic community and to respect the rights of other students, members of the faculty and staff and the public to use, enjoy and participate in the University programs and facilities. Student conduct that disrupts, invades or violates the personal and property rights of others is prohibited and may be subject to disciplinary action.

If you buy or use drugs on this trip you are off the school sponsored program immediately! This means you are no longer allowed to travel or stay with our group. You forfeit all of your school sponsored privileges, including, but not limited to, housing, travel and fees paid. You will receive a failing grade for all classes that are associated with our travels.

If you are "busted" in Morocco I will, out of courtesy, make one call to your emergency contact and one call to the US embassy on your behalf, beyond these two calls you will need to make all of your own arrangements, legal, financial and otherwise.. It may take several days to arrange these two calls as there is no phone service in the immediate region.

You will be responsible for reimbursement to the group if our trip is in anyway disrupted by your actions.

## For Undergraduate Students

**ARCH 471** Undergraduate Directed Research-Creative Activity  
6 credits, minimum 80 contact hours.

**Restoration:** This is the heart of the course. All students and faculty will be actively involved in the restoration of the Igherm. This work will entail various types of construction labor and will be physically demanding. You can expect to be doing anything from demolition to final re-plastering. You should be capable of lifting 50 pounds and comfortable working in a construction site. You do not need previous construction experience.

**Documentation:** In addition to the physical requirements of the restoration there will be required documentation to be done. You will be evaluated on your ability to record and document the work being done and organize it in a way that is useful to future students who will come after you. Student strengths, interests and areas of study will be matched to appropriate methods by the instructor and project director.

Undergraduate students will be required to complete the distance to detail project and one or more of the following topics.

Each student will work on aspects of one or all of the following topics. Collaboration with the other undergraduate and graduate students will be necessary and mandatory. Collaboration sessions will be held daily on work days. Students must identify their topic choices by the second mandatory meeting. Each student must complete preliminary research and investigation into their chosen topic before departing for Morocco.

**Distance to Detail:** This is a required project of all students; to document and dissect elements of their choice photographically. It is a focused study of the cultural influences on all aspects of a place and to better understand how a place influences the physicality of design. Your task is to arrive in Morocco having picked 3 manmade details that personally interest you. Photograph the same detail from a distance down to the full size object. You can do this anywhere but each item should be represented once in Morocco and once somewhere else (Spain, USA, etc.). This is intended to be a fun project that will engage the student in a level of observation that they otherwise would not have. These photos will be used to exhibit and promote the project in the United States.

<sup>1</sup> Please refer to Lonely Planet when it comes to photographing people, especially in Muslim cultures.

<sup>2</sup> Be respectful when photographing religious places.

<sup>3</sup> DO NOT photograph any governmental or royal building/place until you are ABSOLUTELY (I.E. ask someone official) sure it's OK. This can land you to jail in most African countries.

**Programming:** This will be the opportunity to really immerse yourself into the culture. For this project you will go into the surrounding villages that will be using the library and assess their needs. Accompanied by a MEPI (Middle East Partnership Initiative) student interpreter you might help determine the books and materials that will be housed in the library or more mundane issues of hours of operation (conflict or coincide with market days or school days) and the best approach to “checking out” materials. This work has already begun and the region is aware of the project so you will be welcomed by the region’s inhabitants. In addition to the formal aspects of programming you will be overwhelmed by the hospitality and kindness of the Berber people. In fact, this is true of all Moroccans. Through these interactions you will help the project cater to the real needs of the region and not simply the preconceptions.

**Mapping:** Formal maps exist of the region so this is not traditional surveying. The mapping that needs to be done is likened to something more akin to a regional circulation study. The villages that will be served by the region are scattered about in a 10 minute to 3 hour radius. The existing trails and geography will help in the understanding of how the distribution to the populations that will be using the library will be achieved.

**Village map and study:** This will be a subset to the larger mapping effort. The library will have many more visitors than the building currently. A master plan, of sorts, will need to be done to assist later students in the establishment of paths and approaches to the project. You could liken this to an urban design project but on a very small scale.

**Community Workshops:** Meet with representatives from the four villages of Zawiya Ahansal (Amzrai, Aguddim, Taghia, Tighanimin/Toud) to discuss and listen to their wants and needs from the library/community center. Topics will include types of books, management, operation and check out procedures, hours of operation and user groups. Meet with the current igherm user group and discuss solutions for their future storage needs and where and how they can combine grain storage space to accommodate the library. The workshops will be conducted via a Berber/Arabic and English translator.

**Soil Sampling:** Perform in-field soil sampling of the rammed earth blocks of the igherm and collect soil samples for lab testing. This data will be used to replicate the original rammed earth formula for all repair work and block construction.

**Solar System Design and Installation:** Aid in the design and installation of a solar power system for the renovation phase of the project. This includes load calculations of the system, required battery storage, and on-site installation. This system will power the team's computers, cameras and the interior of the igherm.

**Clean-up/Deconstruction:** Work with locals on the clean-up of the interior and exterior of the igherm creating and designating construction staging grounds.

**Schematic Design – Programming:** Using information discussed in the community workshops design micro and macro circulation programming and interior layout. The circulation

programming must accommodate weekly circulation patterns of the entire region and privacy needs of the locals in Amzrai.

Library interior programming is to include:

- community/reading room with future potential of internet access
- stacks (weather and animal proof)
- restroom
- tea house
- barn
- exterior courtyard/patio

**Design Development - Foundation & Roof Restoration Design:** Assess damage to foundation and roof. Brainstorm and develop a number of potential solutions to remedy the damage and prevent it from recurring to the same extent in the future. Include calculations of amount and type of stone, wood, and rammed earth needed and research locals in the surrounding region to acquire the materials.

**Water Line & Access Road Installation:** Work with locals on the completion of the water line and cistern installation and the access road construction.

Undergraduate Directed Research-Creative Activity performance guidelines;

You will be evaluated using a traditional 4.0 A-F scale broken down as follows.

80% of your grade will be based upon your work on the topical areas.

10% of your grade will be based upon your effectiveness at collaboration.

10% of your grade will be based upon your satisfactory Distance to Detail project.

## For Graduate Students

### ARCHITECTURE 525

Seminar/ Directed Research-Creative Activity  
(total of 6 graduate credits)

**Restoration:** This is the heart of the course. All students and faculty will be actively involved in the restoration of the Igherm. This work will entail various types of construction labor and will be physically demanding. You can expect to be doing anything from demolition to final re-plastering. You should be capable of lifting 50 pounds and comfortable working in a construction site. You do not need previous construction experience.

**Documentation:** In addition to the physical requirements of the restoration there will be required documentation to be done. You will be evaluated on your ability to record and document the work being done and organize it in a way that is useful to future students who will come after you. Student strengths, interests and areas of study will be matched to appropriate methods by the instructor and project director.

Graduate students will be required to complete the Distance to Detail project and one or more of the following topics.

Each student will work on aspects of one or all of the following topics. Collaboration with the other undergraduate and graduate students will be necessary and mandatory. Collaboration sessions will be held daily on work days. Students must identify their topic choices by the second mandatory meeting. Each student must complete preliminary research and investigation into their chosen topic before departing for Morocco. Graduate students will also be required to submit an in depth account of their experience. This aspect of the course is meant to promote the Igherm project, promote diversity promote understanding, and detail building techniques issues of culture, geography or other student interest areas may be included as well. The result of this assignment might take the form of a poster session, film, paper or other student approach approved by the faculty member. Other ideas include a graduate film maker's documentary of the project or a graphic student's thesis to promote the library.

**Distance to Detail:** This is a required project of all students; to document and dissect elements of their choice photographically. It is a focused study of the cultural influences on all aspects of a place and to better understand how a place influences the physicality of design. Your task is to arrive in Morocco having picked 3 manmade details that personally interest you. Photograph the same detail from a distance down to the full size object. You can do this anywhere but each item should be represented once in Morocco and once somewhere else (Spain, USA, etc.). This is intended to be a fun project that will engage the student in a level of observation that they otherwise would not have. These photos will be used to exhibit and promote the project in the United States.

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Graduate Directed Research-Creative Activity performance guidelines;  
You will be evaluated using a traditional 4.0 A-F scale broken down as follows.  
65% of your grade will be based upon your work on the topical areas.  
10% of your grade will be based upon your effectiveness at collaboration.  
20% of your grade will be based upon your final documentation and promotion.  
5% of your grade will be based upon your Distance to Detail project.

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