Proposal for Global Independent Study Project
(Please Type)

Last Name __________ First Name __________ Initial __________

Telephone # __________ Class Year __________
P.O. Box # __________ Student ID # __________
Concentration __________ Environmental Studies __________

Intended program of Study Abroad: __________ The Swedish Program __________

Country Destination: __________ Sweden __________

Descriptive title of Global Independent Study Project: __________ City Grown: The implementation of urban agricultural in Sweden __________

Abbreviation of title for entry on permanent record (limit 22 characters and spaces):

City Grown in Sweden __________

Name of Faculty Sponsor: __________

Center for Environmental Studies __________ 1943 __________

Department __________ Box # __________ Phone # __________

For Semester __________ Spring __________ of the academic year 2012 __________ - 2013 __________

All grades MUST be letter grades. S/NC marks are not an option.

Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.1
PROJECT DESCRIPTION

City Grown: The implementation of urban agricultural in Sweden
Spring Semester, 2013

Student/creator:  
Advisor: Dawn King

A. Course Description:

The purpose of my GLISP in Sweden is to further develop my understanding of international urban agriculture by examining the various methods utilized in Swedish cities. This research will allow me to create a comprehensive profile of the current state of urban agriculture in Sweden as well as expand upon my previous research in Havana, Cuba. I believe that urban agriculture in Sweden provides a particularly exceptional research opportunity given the progressiveness of the movement in conjunction with its unique, even atypical, Scandinavian location.

This research is very relevant to many international problems concerning topics from environmental protection to food security around the world. Many urban societies struggling with increasing populations and decreasing access to healthy food are trying to implement systems of localized, urban agriculture in order to improve food availability and quality to areas with dense populations. However, there are numerous and complex obstacles to implementing effective systems of urban agriculture such as resource scarcity, lack of available space, inefficient governmental support, city planning, and knowledge gaps. In order to resolve these problems cities such as Stockholm, which have achieved various successes in implementing systems of urban agriculture, should be examined and considered as important examples for future systems.

I believe that Swedish cities can serve as valuable models for various reasons. For example, the integration of agriculture into the urban landscape through innovative and progressive design and technological inventions, as well as the implementation of various educational and cultural programs to improve community development provides useful information for future urban agriculture systems. Furthermore, urban agriculture in Sweden has overcome many cumbersome problems such as arctic Scandinavian weather, a short three-month growth season, poor soil and air quality, and a lack of cultivable space, which should serve as inspiration in the face of apparently insurmountable obstacles. In my opinion, many Swedish cities demonstrate the potential that not only urban but also sustainable, and organic agriculture can have and thus should be further examined and for the development of universal urban agriculture.

First, I intend to utilize my GLISP in order to examine the specific nature of urban agriculture in Sweden by investigating where the demand for urban cultivation originates, its value to participants, and how it is influenced by the surrounding society. Furthermore, I will focus in on particular aspects, such as technological and traditional solutions, that characterize the Swedish system and allow it overcome obstacles and develop progressively. Overall, I hope that my research will illuminate urban agriculture’s function within Sweden as well as its potential within the future international movement.

Based on the existence of numerous projects focused on the integration and involvement of the community through educational programs, volunteer work, and neighborhood development I hypothesize that urban agriculture plays a prominent role within Swedish society and thus influence its particular value to Swedes. I believe that this is important because urban agriculture is often quantified in terms of practical benefits, such as dietary and environmental improvement, but its cultural benefits should be considered equally important. Furthermore, I am curious whether urban agriculture in Sweden is instigated from top-down, governmental influence, a bottom-up, citizen driven demand, or a combination of the two. It has been found that implementation of urban agricultural systems around the world is motivated by diverse reasons often depending on location. This distinction is important to the future of urban agriculture as it may illuminate better ways to integrate urban agriculture into different societies and improve the movement as a whole.

In addition to urban agriculture’s value to individual Swedes I would like to investigate the influence of Swedish culture and how this could affect urban agriculture’s role within distinct communities. I wonder if the influence of diverse cultures, and thus the tailoring of urban agriculture to specific locations, could be a key

Return the completed proposal to:  
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.1
aspect to the successful development of urban agriculture. In order to better understand the influence of Swedish culture I will utilize hands-on methods of research such as interview and field studies to initiate participation within the community urban agriculture primarily in Stockholm. Through this participation I will also be able to contribute my personal knowledge from previous experiences in Montana, Rhode Island, and Cuba, and perhaps instigate and inspire new ideas. Though a majority of this portion of my work will be hands-on I intend to supplement my work in the field by reviewing contemporary literature published about the relationship between urban cultures and urban agriculture. I will unite these two methods of research by writing personal reflections comparing written theories with the realities of the Swedish system.

In addition to researching the relationship of urban agriculture with Swedish culture, I intend to investigate the modern technical advances that many Swedish systems use. Given that urban agriculture has been criticized as a regression to traditional techniques, limiting its functionality within modern life, I believe that Sweden’s use of innovative technologies serves as an important counter example. Such technologies can help in resolving the increasingly complex problems facing large cities. In order to research technological advances I will begin by examining the various creations and projects of the Swedish environmental organization, Plantagon, which will serve as a starting point for my research of modern technology. Plantagon intends to build an 18-story tall vertical greenhouse in the spring of 2013 in Linköping, Sweden. This greenhouse represents the movement to utilize modern technology to mitigate urban-specific problems such as air and soil quality, available space, and growing season, all of which threaten Swedish urban agriculture. By studying this organization, I hope to familiarize myself with the current state of technological innovations and broaden my understanding of modern urban agriculture. This portion of my GLISP can develop in various manners, from written reports and assessments, to creative displays such as brochures and presentations.

By examining the demand, value, specific cultural influences and technical advances of Swedish urban agriculture I hope to better understand what specific factors have contributed to the development of this particular system and if they are location-specific or universally applicable. In this phase of my GLISP I will be able to integrate my previous knowledge of other systems of international urban agriculture especially that of Havana, Cuba.

As mentioned previously, I spent a semester in Cuba conducting a GLISP focused on the various “expressions of urban agriculture” in Havana. I studied urban agriculture’s development during the country’s recent recovery from the Special Period crisis as well as its role and functionality in current Cuban society. This GLISP not only taught me a great deal about the unique systems in Havana and its relationship within the international urban agriculture community, but also allowed me to familiarize myself with the techniques of conducting research in foreign countries, which I expect will benefit my future studies tremendously. This provides me with the perfect opportunity to expand my research of international systems of urban agriculture by cross examining how two distinct societies use urban agriculture as well as its different influence, meaning, and value to communities and urban environment.

My GLISP in Sweden will reflect and supplement my studies at Brown University perfectly. As an Environmental Studies concentrator I have focused on sustainable agriculture and food production by taking various classes from Katherine DeMaster as well as conducting individual research projects. I am very familiar with the urban agriculture in my hometown Missoula, Montana, as well as Providence, Rhode Island, and I believe that this plays an important role in my overall interest and knowledge of urban agriculture. I believe that by expanding my perspective to foreign cultures and countries I will be able to enrich and diversify my understanding of urban agriculture. Consequently, this research poses as a vital aspect of my education and concentration as I work towards my degree. Not only will this GLISP allow me to fulfill concentration requirements while abroad, but also it will allow me to develop an area of expertise within my interest of environmental studies. I foresee my knowledge gained in Sweden playing a prominent role in my senior thesis as well as my future research endeavors and professional career.

This GLISP allows me to pursue my particular interest of unique international systems of urban agriculture that have developed characteristics specific to their locations. I hypothesize that the success of urban agriculture may rely not only on its universality but also on its personalization and harmonization to societies in diverse locations. I believe that the best method of understanding how urban agriculture functions and benefits Swedish society is to participate within that society. My research will allow me to conduct fieldwork within various local urban agriculture organizations, personal gardens, and community projects, as well as utilize the abundant academic resources. By conducting this GLISP in Sweden I will be able to achieve my specific academic goals.

Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.1
pursue my research questions and enrich my previous international studies.

B. Bibliography and list of further recourses:

Books and Articles

*A review of Will Allen’s success in creating various educationally focused systems of urban agriculture. Allen’s model is famous for the incorporation of society and culture as well as the mutual community and environmental benefits.

*The influence that grassroots food movements have had on the diets and cuisines of those affected.

*A review of alternative urban food systems around the world that have succeeded in alleviating some of the most problematic hurdles facing urban cultivation.

*An argument on how to intertwine agriculture and urbanism to benefit both aspects of society.

*Is a review of the author's ideas behind vertical farming and how they might alleviate the problems facing urban agriculture, such as available space and clean air.

*An argument that geographical and environmental factors have shaped modern society by allowing some population to succeed in development, while leaving others with more diverse problems.

*Focuses on the development of communities, their relationships with government, and the potential of well-functioning communities. Diers promotes participatory democracy by including examples of successful communities and leaders throughout history.

*Threats and solutions of current obstacles facing the development of urban agriculture.

*Examines the role that community gardens have played in Seattle and focuses on issues such as planning, design, community participation, and governmental support.

*Proposing the idea of nourishing urbanism to combine both the urban and non-urban aspects of human society through superior planning and design in order to create a more sustainable and functioning environment.


Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.
*Examines how urban agriculture developed in Sydney Australia and how it came to redefine the term “urban agriculture” to become part of the urban vocabulary.

*An examination of the theory of metabolic rift and the solutions that urban agriculture may have for cities struggling with changing societies.

*A presentation of a variety of research on systems of urban agriculture around the world illuminating their success and failures within the specific communities.

*Advocated for the involvement of government in the development of urban agriculture though productive and beneficial policy, planning and programs. Promoting the system of “municipal agriculture” where urban design utilizes the available resources to promote urban ag.

*Review research that has been conducted on the three dimensional use of urban agriculture; social economic and environmental.

*Profiles various existing local food projects while providing information and inspiration for future urban agricultural development.

*Address both the negative and positive ways that cities feed themselves. Thus illuminating the societal trends that have been produced due to the changing relationship that urban dwellers have with food.

Rene van Veenhuizen *Cities Farming for the Future: Urban Agriculture for Green and Productive Cities* IDRC, 2006
*How various cities are using urban farming techniques to solve urban problems and improve urban environment.

https://gupea.ub.gu.se/bitstream/2077/29590/1/gupea_2077_29590_1.pdf
*Explores motives behind Urban Agriculture in Community Gardens in Gothenburg, and how Urban Agriculture in Community Gardens may be described as counter-acts to globalization

*A case study on community-supported agriculture in Canada used as evidence to the potential of community supported systems.

*This book proposes a new design for urban agriculture, based on the “compact city" solution by reviewing innovative urban design proposals.

Organizations, Professionals, and Community Projects:

**Technology and Innovation:**
Expect; Integrated Sustainability

Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.
*An international cooperative of sustainability professionals working to discover and design innovative solutions for urban agriculture.
http://www.except.nl

Food and Agriculture Organization of the United Nations
*International organization that keeps track of and documents the progression of agriculture around the world. Numerous important works have been published concerning urban agriculture.
http://www.fao.org

International Journal of Agricultural Sustainability
*"An international cross-disciplinary, peer-reviewed journal dedicated to advancing the understanding of sustainability in agriculture and food systems."
Publisher's Web site: http://www.earthscan.co.uk/?tabid=503

Journal of Sustainable Agriculture
*"The journal offers national and international coverage the rapidly emerging fields of agroecology and sustainable agriculture."
Publisher's Web site: http://www.tandfonline.com/loi/wjsa20

MVRDV
*A Netherlands based company that tries to use that of the art innovation and design to solve urban problems and intersect creativity into urban planning. Especially interesting is the Glass Farm project.
http://www.mvrdv.nl

Plantagon
*The Swedish environmental company that works solve environmental problems through state of the art innovations and is currently building the 18 story greenhouse.
www.plantagon.com/

Stockholm Resilience Center
*The city’s research organization that works to develop social ecological systems and is currently investigating alternative methods of implementing urban agriculture.
http://www.stockholmresilience.org

Community and Society:
Barn I Stan
*Children in the City, is a community group that works to integrate urban agriculture through educational programs for children.
http://www.barnistan.info/

Edible City
*An up-to-date blog about urban agriculture throughout the world.
http://ediblecity.tumblr.com/archive

Hasta gard
*Stockholm’s closest “urban” farm is dedicated to organic, and traditional practices and is a leader in agroecology techniques.
http://Jarva.wordpress.com/

Odla I Stan
*An organization that works to inspire people to start city farming by providing resources, supplies, and a sense of community.
http://www.odlaistan.nu/en/contact/

People:
Christopher Hill
*Professor of Sustainable Development: Global to Local at the Swedish Program.

Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.1
Hanna Andersson
* Professor of Urban Agriculture; Permaculture and local food systems at Uppsala Centre for Sustainable Development
utbildning@csduppsala.uu.se

C. Weekly Course Schedule:
Weekly readings are intended to supplement field research by providing a broader, international perspective to the various research topics. They are intended to provide contextual reference and promote further engagement with the material and information gathered. Though scheduled weekly, the order of readings is flexible and can be changed to complement the schedule of onsite research.

Week 1 February 4th – 8th
A Modern Perspective; taking count of the current Swedish urban agriculture
This week’s reading will be taken from current Swedish blogs, and websites concerning urban agriculture. The student should conduct should a thorough investigation of the available online resources in order to develop a bank of references to follow throughout the semester. This will allow the student to familiarize themself within the urban agriculture and start to make connections with various organizations.
Plantagon
www.plantagon.com/

Odla I Stan
http://www.odlaistan.nu/en/contact/

Hasta gärd
http://jarva.wordpress.com/

Food and Agriculture Organization of the United Nations
http://www.fao.org

Week 2 February 11th – 15th
Problems Facing Urban Produce; a review of the most threatening obstacles to urban agriculture.

Rene van Veenhuizen Cities Farming for the Future: Urban Agriculture for Green and Productive Cities IDRC, 2006 pg 1
Introduction, Cities Farming for the Future.

Week 3 February 18th – 22nd
Seeking Solutions; how cities are coping with various problems and urbanization the non-urban.


Week 4 February 25th – 1st
The Motivation for the Urbanization of Agriculture.
https://gupca.ub.gu.se/bitstream/2077/29590/1/gupca_2077_29590_1.pdf


Week 5 March 4th – 8th

Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.l
Community Cooperation; how urban agriculture has developed within communities in mutually beneficial ways.


**Week 6 March 11th – 15th**

**Technological Heights: how innovative technologies are going to new lengths to create solutions.**

Prain, Gordon *Participatory Technology Development for urban Agriculture; collaboration and adoption among the urban-rural transect*, pg 273-312 in Rene van Veenhuizen Cities Farming for the Future: Urban Agriculture for Green and Productive Cities IDRC, 2006

MVRDV
http://www.mvrdv.nl

Plantagon
www.plantagon.com/

**Week 7 March 18th – 22nd**

**Mutual Impacts; how food shapes society, and society shapes agriculture.**


**Week 8 March 25th – 29th**

**Mid Term Paper**

**Week 9 April 1st - 5th**

**Applying the Agriculture; how to implement theories, and realize ideas.**


**Week 10 April 8th – 12th**

**Governmental Guidance; how government can influence and assist urban agricultural development.**


**Week 11 April 15th – 19th**

**Superior Formation; how to better integrate urban agriculture though design and policy.**

Mubvami, Takawira. *Integration in Urban Land Use Planning and Adoption of City Regulations*. Pg 53-96. in Rene van Veenhuizen Cities Farming for the Future: Urban Agriculture for Green and Productive Cities IDRC, 2006

**Week 12 April 22nd – 26th**

Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.1
Physical and Metaphorical Dimensions: how far can the benefits of urban agriculture go?


**Week 13 April 29th – 3rd**

**Role Model By Design: cities surpass expectations and their recipe to success.**


**Week 14 May 6th – 10th**

**Setting the Stage: taking a step back and examining how the current environment of societies has developed, and where might it go.**

**Week 15 May 13th – 17th**

Final Project

D. **Specific Projects, Expectations, Grades, and Contact with the Advisor:**

**Readings, weekly written assignments**
Weekly readings are intended to supplement field research and on site resources. They will be assigned from relevant articles, books, and other literary resources in order to provide a sampling of the current literature. Responses to each week’s reading should be written as informal personal reflections to the information and knowledge gained. These reflections will be composed into a “journal” of work that will reflect not only the development and evolution of learning throughout the semester but useful and pertinent information. Responses will be organized and posted on the class blog. The advisor will be able to use these weekly readings in order to keep track of the progression of the class, provide direction or commentary, and assess the student’s overall performance at the end of the semester.

**Outside, field studies research and interviews**
Due to the location specific nature of this class, field studies and participation driven research plays a prominent role throughout the semester. Interviews will be one of the most important methods of research. They will not only provide current and accurate information but establish relationships within Swedish communities and personalize the research beyond literary investigation. Interviews should be conducted with a sampling of subjects, from citizens involved in urban agriculture, and city planners, academics and professors, to professionals and employees at organizations such as Plantagon. The interviews will be as formal as the situation requires and should be recorded (either electronically or written) and should be transcribed or summarized for documentation. Accompanying the journal of weekly reflections, interviews, field studies, and community participation should be regularly documented and posted on the blog. Reports should include personal observations, opinions and reflections in order to promote further engagement in the material. If, and when possible interviews and community participation should be conducted in Swedish, though this is not mandatory.

**Class Blog**
The class blog will serve as an important method of contact between the advisor and the student as well as a space for creative presentation of research and findings throughout the class. This is the opportunity to utilize different mediums of research such as visual, electronic, and audio documentation as well as various form of written prose. Because the blog is a public space, the information posted should also be professional and

---

| Return the completed proposal to: |
| Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.1 |
accurate, and detailed. The blog will help the student to organize information and display it in an imaginative and public fashion, which will help prepare for the final project.

**Mid-Term Project**

The mid-term project should be a formal paper, 10 to 20 pages, analyzing the research conducted thus far. It is intended to be a midway examination and what has been learned, particularly interesting findings, and areas of research that should have more attention. Thus the paper should include sections referring to each "theme" of the class; innovative technological solutions, community involvement, the influence of Swedish culture, and the overall value of urban agriculture to Swedish citizens. The paper should attempt to contextualize information gathered in Sweden with international urban agriculture. The style of the paper should be formal, catering to an academic audience as well as the general public who are interested in current Swedish urban agriculture. This paper allows the student to not only present their finding but also critically think about the future direction of the class and areas of research that will require more attention.

**Final Project**

The final project will be to create a detailed proposal for an ideal urban agriculture system. This proposal should be thorough enough to be theoretically applicable for other cities wishing to implement systems of urban agriculture as well as representative of the specific Swedish system. Through this framework I will be able to utilize all my information and knowledge gained throughout the semester as well as my personal creativity and imagination.

The proposal should include profiles of the most recent and effective technologies and innovations that I have studied in Sweden as well as how these inventions can be used to improve city planning and the urban environment. Similarly, there should be a section devoted to farming practices specific to the urban setting. The proposal should suggest various methods of community integration and involvement by providing concrete examples of existing projects and programs. It is important that the proposal also convey why and how urban agriculture is beneficial to urban communities. Here information gained through interviews and fieldwork can be included as evidence to the various ways and reasons Swedes participate in urban agriculture.

The goal of this project is to effectively display the semester’s research while also providing a creative challenge to apply the knowledge gained in a hypothetical, yet realistic, situation. Parts of this proposal, such as technological profiles, will be formally written, while others can be displayed visually, or electronically, such as interviews. Information, photographs, visual aids, interviews, and contacts used as evidence to support the proposal should be accurately documented and cited in a bibliography of resources. In addition to this proposal the class blog should be submitted as documentation of the entire semester’s work, such as weekly responses, and fieldwork reflections.

**Contact with Advisor**

Contact with the advisor is a key aspect of this class as feedback, commentary, and professional direction are important to the success of the research. Communication can be maintained through various methods such as email and skype. Response and fieldwork journals will be submitted along with the final project at the end of the semester and should also be posted regularly on the class blog. Other information such as photos and interviews (when appropriate) that has been collected throughout the semester should also be displayed on the blog.

**Grading and Scale**

The course grade will be determined according to the quality, accuracy, and timeliness of the work. Regular communication between the advisor and the student throughout the semester will allow comments, critique, and improvements if necessary.

Weekly responses to reading & research journals: 15%
Blog posts: 15%
Fieldwork documentation: 10%
Midterm Paper: 20%

Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.1
Final Project: 40%

Signature

Date 11-18-12

Faculty Sponsor Statement

To be Completed by the Faculty Sponsor

To assist the Screening Committee of CCC in the evaluation of this Global Independent Study Abroad proposal, please complete the following two items:

1. In view of the responsibility of the Faculty Sponsor for Assessing a proposed study, providing advice during the work, and evaluating the student's work, the committee charged with reviewing Global Independent Study Project proposals would appreciate an indication of how you see the relationship of your own thought and interests to the topic of this study.
   a. Urban agriculture is one of my foci in environmental studies. I am currently working on a somewhat similar GLISP in Cuba and I have worked with her on this project to help shape her research questions and compile her reading list. Since my next research project will investigate different models of urban sustainability, I am very interested to work with Gretchen on her urban agriculture project in Sweden.
   b. We plan on keeping in touch via email as well as through @’s blog. I will monitor her progress throughout the semester.

2. What do you think are the chief educational benefits of this study project abroad, and how likely do you think it is that the student will derive these benefits from the project as envisaged?
   a. The United States has done very little in the realm of urban agriculture compared to many European cities. I will have an incredible opportunity to experience the most progressive attempt to create an urban agriculture center. Currently, vertical farms of this magnitude only exist on paper. Sweden is working on making this a reality with the Plantagon, and @’s research will benefit significantly by collecting interview data from those who helped design and implement the project. I think she will benefit by experiencing a unique Swedish culture that views local food very differently than many in the U.S.

Statement of Faculty Sponsor

This is to certify that I am willing to serve as Faculty Sponsor for the Global Independent Study as described. I understand that my responsibilities as a sponsor include the following:

1. To assist in the planning of the project, to evaluate the proposal and to affirm my satisfaction with the academic content and promise of the study.

2. To have a continuing awareness of the progress of the study.

Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.1
3. To have final responsibility for evaluation of the study.

Signature of Sponsor!

Department: Center for Environmental Studies

Return the completed proposal to:
Kendall Brostuen, Director of International Programs, J. Walter Wilson Bldg., Ste. 420.1