

Food Security, Nutrition and Sustainable Development

IBPH 3000 (3 credits / 45 hours)

SIT Study Abroad Program:
Switzerland: Food Security and Nutrition

PLEASE NOTE: This syllabus represents a recent semester. Because courses develop and change over time to take advantage of unique learning opportunities, actual course content varies from semester to semester.

Description

This seminar examines food security¹ and nutrition in the perspective of sustainable development and social stability, taking into account the role of financial markets, agri-business industries and international food-, land-, and commodity trading, while connecting these factors to broader global challenges such as food sovereignty, public health, climate change, complex emergencies, and forced migration.

Learning Outcomes

The Food Security and Sustainable Development course comprises 45 hours of instruction (3 credits). Upon completion of the course, students will be able to:

- Analyze strategic goals of food security and nutrition, alongside the post-2015 sustainable development agenda and global health;
- Examine issues of food security in the context of complex emergencies, fast urbanization, and dynamic changes in people's lifestyles in both developed and developing countries;
- Understand the impact of financial and commodity markets on food, nutrition, water, and arable land, and explain ways of sustainable agricultural development for current and future generations;
- Produce an independent research project on a theme discussed in this course.

Language of Instruction

¹ The World Food Summit of 1996 defined food security as existing “when all people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life.” (Source: WHO website).

This course is taught in English, but students will be exposed to vocabulary related to course content through in-country expert lectures and field visits in a wide range of venues and regional locales.

Course Schedule

*Please be aware that topics and excursions may vary to take advantage of any emerging events, to accommodate changes in our lecturers' availability, and to respect any changes that would affect student safety. Students will be notified if this occurs.

Module 1: Food Security and Nutrition in a Framework of Sustainable Development

This module introduces the issue of food security in a global perspectives, taking into account nutrition, development, and agricultural policies, and the role of modern and alternative technologies as a means to contributing to the alleviation of hunger and food insecurity.

Session 1: Global Challenges to Food Security and Nutrition

This session takes stock of the Second International Conference on Nutrition of 2014 in Rome and explores ways of achieving food and nutrition security in the post-2015 development framework.

Required Reading:

Second International Conference on Nutrition. (2014). Outcome Document, *Rome Declaration on Nutrition*. Rome, 19-21. Retrieved from: <http://www.fao.org/3/a-ml542e.pdf>

World Health Assesmbly. (2014). Food and Nutrition Security in the Post-2015 Development Agenda. Retrieved from: http://www.beyond2015.org/sites/default/files/Beyond2015_FNSPositionPaper_FINAL_0.pdf

Recommended Readings:

Pingali, P., Alinovi, L., & Sutton, J. (2005). Food security in complex emergencies: enhancing food system resilience. *Disasters*, 29(s1), 5-24.

World Food Programme (WFP): *Emergency Field Operations Pocketbook*, Retrieved from: http://www.unicef.org/emerg/files/WFP_manual.pdf

Session 2: 'Food Sovereignty' and Socio-Political Stability

This module elaborates on the multifaceted meaning of 'food security', how the term has evolved over the 20th century, how it was linked to the so-called green revolution, and examines how the liberalization of food markets and international trading has affected both food sovereignty and socio-political stability, with special attention to developing countries.

Required Readings:

Barrett, C. B. (Ed.). (2013). *Food security and sociopolitical stability*. OUP Oxford, 1-34.

Carolan, M. (2013). *Reclaiming Food Security*. Routledge / Earthscan: London / New York, 1-35.

Recommended Readings:

El-Zein, A., Jabbour, S., Tekce, B., Zurayk, H., Nuwayhid, I., Khawaja, M., ... & Hogan, D. (2014). Health and ecological sustainability in the Arab world: a matter of survival. *The Lancet*, 383(9915), 458-476.

Rydin, Y., Bleahu, A., Davies, M., Dávila, J. D., Friel, S., De Grandis, G., ... & Lai, K. M. (2012). Shaping cities for health: complexity and the planning of urban environments in the 21st century. *Lancet*, 379(9831), 2079.

Session 3: Sustainable Development and the 'Right to Food'

This session critically evaluates the post-2015 sustainable development goals, taking into account environmental sustainability, equitable development, and further elaborating on the human right to food and adequate nutrition.

Required Reading:

Friedrich-Ebert-Stiftung and the Civil Society Reflection Group on Global Perspectives. (2013). Towards a Framework of Universal Sustainability Goals as Part of a Post-2015 Agenda.
De Schutter, O. (2014). UN Special Rapporteur on the right to food. *Report on agroecology and the right to food*.

Recommended Readings:

International Institute for Sustainable Development (IISD). (2012). Summary of the United Nations Conference on Sustainable Development (UNCSD). Negotiations Bulletin, Vol. 27, No. 51, 25. Retrieved from: <http://www.iisd.ca/download/pdf/enb2751e.pdf>
United Nations Conference on Sustainable Development (Rio+20). (2012). The Future We Want. Outcome Document, A/Conf.216/L.1, 19. Retrieved from: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&referer=/english/&Lang=E

Module 2: Agriculture, International Trade, and Food Markets

This module examines the impact of international trade and financial- and commodity markets on global and local food systems, as well as the role of modern technology in agricultural development and in the perspective of the need to feed an ever growing world population.

Session 1: Impact of the Financial Crisis on Food Security

This session examines the impact of the liberalization of international food and agricultural markets to food security.

Required Readings:

Infosources. (2009). When Food Markets do not Provide for Enough Food: Lessons from the Recent Price Crisis. *Focus*, No. 1/09, Retrieved from: http://www.inforesources.ch/pdf/focus09_1_e.pdf
Margulis, M. E. (2014). Trading out of the global food crisis? The World Trade Organization and the geopolitics of food security. *Geopolitics*, 19(2), 322-350.

Recommended Readings:

Institute for Agriculture and Trade Policy (IATP): Trade and Global Governance Program. (2008). Commodity Markets Speculation: The Risk to Food Security and Agriculture. Retrieved from: http://www.iatp.org/files/451_2_104414.pdf
Von Braun, J. (2008). *Food and financial crises: Implications for agriculture and the poor* (Vol. 20). Intl Food Policy Res Inst. Retrieved from: <http://www.ifpri.org/sites/default/files/jvbagm2008.pdf>

Session 2: Impact of Land Grabbing on Food Security

This session evaluates the complex interconnection between agriculture, land, and renewable energy such as biofuels and its implication on food security.

Required Reading:

Cotula, L. (2012). The international political economy of the global land rush: A critical appraisal of trends, scale, geography and drivers. *The journal of peasant studies*, 39(3-4), 649-680.

Recommended Readings:

Cotula, L., Dyer, N., & Vermeulen, S. (2008). *Fuelling Exclusion?: The Biofuels Boom and Poor People's Access to Land*. Retrieved from: <http://pubs.iied.org/pdfs/12551IIED.pdf>

Cotula, L. (2009). *Land grab or development opportunity?: agricultural investment and international land deals in Africa*.

FAO. (2008). The State of Food and Agriculture–Biofuels: Prospects, Risks and Opportunities. Retrieved from: <http://www.fao.org/3/a-i0100e.pdf>

Session 3: Towards Sustainable Agriculture Development

This session examines the role of public and private investments as well as research and development in the promotion of fortified food products and the use of pesticides within agricultural and food production supply chains. At the same time, it discusses alternative, ecological ways of addressing sustainable agriculture- and food systems and –land use.

Required Reading:

United Nations Secretary General Report. (2012). Agricultural Development and Food Security. Retrieved from: http://www.un.org/ga/search/view_doc.asp?symbol=A/67/294&Lang=E

Swiss Agency for Development Cooperation SDC. (2013). Strategic Framework 2013-2017: Global Program Food Security. Retrieved from: https://www.eda.admin.ch/.../strategic-framework-food-security-2013-2017_EN.pdf

Elver, H. (2017). UN Special Rapporteur on the Right to Food, Report on the impact of pesticides. United Nations General Assembly, A/HRC/34/48.

Recommended Readings:

Tilman, D., Balzer, C., Hill, J., & Befort, B. L. (2011). Global food demand and the sustainable intensification of agriculture. *Proceedings of the National Academy of Sciences*, 108(50), 20260-20264. Retrieved from: <http://www.pnas.org/content/108/50/20260.full.pdf+html>

Ronald, P. (2011). Plant genetics, sustainable agriculture and global food security. *Genetics*, 188(1), 11-20.

Module 3: Nutrition for Human Health and Sustainable Development

This module examines the relationship between nutrition and health and studies how addressing food security and diet could be used as means of achieving global health targets.

Session 1: Breast Feeding, Public Health and Human Development

This session introduces the relevance of breastfeeding in the field of nutrition and health.

Required Reading:

Rollins, N. C., Bhandari, N., Hajeebhoy, N., Horton, S., Lutter, C. K., Martines, J. C., ... & Group, T. L. B. S. (2016). Why invest, and what it will take to improve breastfeeding practices?. *The Lancet*, 387(10017), 491-504.

Recommended Readings:

- World Health Organization. (2000). Nutrition for health and development: a global agenda for combating malnutrition. Retrieved from:
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.385.768&rep=rep1&type=pdf>
- Greiner, T (ed.). (2014). The Advantages, Disadvantages and Risks of Ready-to-Use Foods. Breastfeeding Briefs, No. 56757.
- Lhotska, L. (2008). Whatever happened to Health for All? Ups and downs of protection of breastfeeding, regulation of transnational corporations and Health for All. *Whatever happened to Health for All? Ups and downs of protection of breastfeeding, regulation of transnational corporations and Health for All*.

Session 2: Nutrition and Non-Communicable Diseases (NCDs)

This session examines the relationship between nutrition, diet, lifestyle, and the growing global problems constituted by non-communicable diseases. It addresses opportunities and challenges of nutrition and food preferences as a means of preventing the spread of chronic and non-infectious diseases.

Required Reading:

- Darnton-Hill, I., Nishida, C., & James, W. P. T. (2004). A life course approach to diet, nutrition and the prevention of chronic diseases. *Public health nutrition*, 7(1A; SPI), 101-122.
- Popkin, B. M., Adair, L. S., & Ng, S. W. (2012). Global nutrition transition and the pandemic of obesity in developing countries. *Nutrition reviews*, 70(1), 3-21.

Recommended Readings:

- Bloom, D., Cafiero, E., Jané-Llopis, E., Abrahams-Gessel, S., Bloom, L., Fathima, S., ... & O'Farrell, D. (2012). *The global economic burden of noncommunicable diseases*. Program on the Global Demography of Aging.
- El Rhazi, K., Nejjari, C., Zidouh, A., Bakkali, R., Berraho, M., & Gateau, P. B. (2011). Prevalence of obesity and associated sociodemographic and lifestyle factors in Morocco. *Public health nutrition*, 14(01), 160-167.
- Kain, J., Cordero, S. H., Pineda, D., de Moraes, A. F., Antiporta, D., Collese, T., ... & Rivera, J. (2014). Obesity prevention in Latin America. *Current obesity reports*, 3(2), 150-155.

Session 3: Nutrition and Infectious Disease

This session evaluates the interplays between malnutrition and infectious disease.

Required Reading:

- Katona, P., & Katona-Apte, J. (2008). The interaction between nutrition and infection. *Clinical Infectious Diseases*, 46(10), 1582-1588.
- Dora, C., Haines, A., Balbus, J., Fletcher, E., Adair-Rohani, H., Alabaster, G., ... & Neira, M. (2015). Indicators linking health and sustainability in the post-2015 development agenda. *The Lancet*, 385(9965), 380-391. Retrieved from:
[http://dx.doi.org/10.1016/S0140-6736\(14\)60605-X](http://dx.doi.org/10.1016/S0140-6736(14)60605-X)

Recommended Readings:

- Tulchinsky, T. H., & Varavikova, E. A. (2010). What is the "new public health"? *Public Health Reviews*, 32(1), 25-53.

Module 4: Food Security and Culture in the Mediterranean Region

This module examines the complex relationships between agriculture and agri-trade, nutrition and food culture, and influencing global issues such as migration and security in the Mediterranean Region. Students will visit the Croatian Peninsula of Istria, exploring its cultural

diversity and rich culinary traditions (drawing from the Balkans, from Italian cuisine and retaining elements from Austro-Hungarian period) and will discuss the role of organic and slow food as a means of addressing nutrition and public health.

Session 1: European Agricultural Policy: Impact of Croatia's Accession to the European Union

This session contextualizes food security in the regional contexts of Europe and the Mediterranean region.

Required Readings:

Croatia Integration into the EU: Q&A. Retrieved from: http://europa.eu/rapid/press-release_MEMO-13-629_fr.htm

Milano EXPO. (2015). Call for Best Sustainable Development Practices for Food Security.

Retrieved from:

http://download.feedingknowledge.net/EXPO%202015_Call_EN.pdf?oct=true

Recommended Readings:

European Union Overview Over Common Agricultural Policy Reform 2014-2020. Retrieved from: http://ec.europa.eu/agriculture/policy-perspectives/policy-briefs/05_en.pdf

Boulanger, P., Ferrari, E., Michalek, J., & Vinyes, C. (2013). *Analysis of the impact of Croatia's accession to the EU on the agri-food sectors. A focus on trade and agricultural policies* (No. JRC77246). Institute for Prospective and Technological Studies, Joint Research Centre. Retrieved from:

http://knjiznica.sabor.hr/pdf/E_publikacije/Analysis_of_the_impact_of_Croatia's_accession.pdf

Session 2: Organic Food Culture and Nutritional Diet in Local Contexts

This session examines food security and nutrition in the context of a typical local slow food cultures in the Mediterranean, examined within the multi-cultural context of the Istrian Peninsula with its rich olive oil and truffles dietary traditions and their nutritional values chains for human health.

Required Readings:

Psaltopoulou, T., Naska, A., Orfanos, P., Trichopoulos, D., Mountokalakis, T., & Trichopoulou, A. (2004). Olive oil, the Mediterranean diet, and arterial blood pressure: the Greek European Prospective Investigation into Cancer and Nutrition (EPIC) study. *The American journal of clinical nutrition*, 80(4), 1012-1018. Retrieved from:

<http://ajcn.nutrition.org/content/80/4/1012.full.pdf+html>

Recommended Readings:

Oplanić, M., Radinović, S., & Radinović, I. (2010). Economic analysis of viticulture and wine production in Croatia. *Journal of Food, Agriculture & Environment*, 8(2), 494-497.

Retrieved from: http://world-food.net/download/journals/2010-issue_2/a38.pdf

Kaselj, A. P. (2010). Local democratic governance in Istria County. Retrieved from:

<http://www.cespi.it/SEENET/Istria.pdf>

Module 5: Individual Research Project

Students will complete an individual research project addressing the themes discussed in this course and building on site visits, class discussions, and course readings.

Potential field visits and partners include:

1. Food and Agricultural Organization (FAO)
2. World Food Program (WFP)
3. United Nations Environmental Program (UNEP)
4. International Institute of Sustainable Development (IISD)
5. Swiss Agency for Development Cooperation (SDC)
6. Foundation for Ecological Development (Biovision)

Evaluation and Grading Criteria

Papers will be graded on style and structure, depth of analysis, and synthesis of secondary and primary sources.

Description of Assignments:

Individual Research Paper (6-8 pages): Students will complete research papers on the theme discussed in this course.

Quizzes: There will be three quizzes, one for each of the first three modules.

Participation: Participation will be graded by timely arrival, active involvement in class discussions, and culturally appropriate behavior on excursions.

Assessment:

Individual Research Paper	60%
Three Quizzes	30%
Participation	10%

Grading Scale:

94-100%	A
90-93%	A-
87-89%	B+
84-86%	B
80-83%	B-
77-79%	C+
74-76%	C
70-73%	C-
67-69%	D+
64-66%	D
below 64%	F

Expectations and Policies

- Show up prepared. Be on time, have your readings completed and points in mind for discussion or clarification. Complying with these elements raises the level of class discussion for everyone.
- Have assignments completed on schedule, printed, and done according to the specified requirements. This will help ensure that your assignments are returned in a timely manner.
- Ask questions in class. Engage the lecturer. These are often very busy professionals who are doing us an honor by coming to speak.
- Comply with academic integrity policies (no plagiarism or cheating, nothing unethical).
- Respect differences of opinion (classmates, lecturers, local constituents we engage with on site visits). You are not expected to agree with everything you hear, but you are expected to listen across difference and consider other perspectives with respect.

Please refer to the SIT Study Abroad Student Handbook for policies on academic integrity, ethics, warning and probation, diversity and disability, sexual harassment, and the academic appeals process.

Disability Services: Students with disabilities are encouraged to contact Disability Services at disabilityservices@sit.edu for information and support in facilitating an accessible educational experience. Additional information regarding SIT Disability Services, including a link to the online request form, can be found on the Disability Services website at <http://studyabroad.sit.edu/disabilityservices>.