



## Food Security, Nutrition, and Sustainable Development

IPBH 3000 (3 credits / 45 contact 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.

### Course Description

This seminar examines food security<sup>1</sup> in the perspective of sustainable development and social stability, looking into a broad range of aspects such as food cultures and nutrition, their links to global health in both developing and developed countries, global agri-business and food trade, land ownership, land grabbing and other factors affecting food security and food sovereignty, and broader but connected issues such as global health, climate change, and forced migration.

### Learning Outcomes

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

- Analyze goals for food security, sustainable development, public health, and food sovereignty;
- Examine issues of food security in the context of natural disasters, humanitarian emergencies, and increasing urbanization and rural development;
- Understand the effects of land grabbing, the use of GMOs, agro-business, and food markets on food security;
- Propose an independent research project on a theme discussed in this course.

### Language of Instruction

- 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 in a Framework of Sustainable Development**

This module introduces the issue of food security with a global perspective, 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

This session explores various dimensions of global food security challenges, highlighting their multiple dimensions, the links to nutrition, and the issue of food aid in the context of complex emergencies.

##### *Required Reading:*

“The State of Food Insecurity in the World: The Multiple Dimensions of Food Security”, Report by the Food and Agricultural Organization of the United Nations, Rome, 2013.

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

Prabhu Pingali, Luca Alinovi and Jacky Sutton, “Food Security in Complex Emergencies: Enhancing Food System Resilience”, *Disasters*, Vol. 29: Special Issue: Food Security in Complex Emergencies, June 2005, pp. 5- 24.

##### *Recommended Reading:*

“Food and Nutrition Security in the Post-2015 Development Agenda.”, Position Paper, World Health Assembly Side-Event Report (20 May, 2014),

[http://www.beyond2015.org/sites/default/files/Beyond2015\\_FNSPositionPaper\\_FINAL\\_0.pdf](http://www.beyond2015.org/sites/default/files/Beyond2015_FNSPositionPaper_FINAL_0.pdf)

World Food Programme (WFP): *Emergency Field Operations Pocketbook*, [http://www.unicef.org/emerg/files/WFP\\_manual.pdf](http://www.unicef.org/emerg/files/WFP_manual.pdf)

#### Session 2: Food Security and Socio-Political Stability

This module examines the relationship between food (in-)security and political (in-)stability, taking into account the human right to food and addressing opportunities and challenges of the liberalization of food markets, as well as the international trading of arable land and water.

##### *Required Reading:*

Christopher B. Barrett, “Food or Consequences: Food Security and Its Implications for Global Sociopolitical Stability”, in: Christopher B. Barrett (ed.): *Food Security and Sociopolitical Stability*, Oxford University Press, 2013, pp. 1-34.

Michael Carolan, “Chapter 1: Introduction”, in: Michael Carolan, *Reclaiming Food Security*, London / New York (Routledge / Earthscan), pp. 1-35.

Tim Dyson, "World Food Trends and Prospects", *PNAS*, Vol. 96 (1999): no. 11, pp. 5929-5936, <http://www.pnas.org/content/96/11/5929.full>

*Recommended Readings:*

Abbas El-Zein & al., Health and Ecological Sustainability in the Arab World: A Matter of Survival, *The Lancet*, Vol 383, February 1, 2014: 458-476.

Yvonne Rydin & al., Shaping Cities for Health: Complexity and the Planning of Urban Environments in the 21<sup>st</sup> Century, *The Lancet*, Vol. 379, June 2 2012: 2079-2099.

**Session 3: Towards the Post-2015 Sustainable Development Goals**

This session introduces the post-2015 sustainable development goals, taking into account environmental sustainability, equitable development, and sustainable development in both developing and developed economies.

*Required Reading:*

"Towards a Framework of Universal Sustainability Goals as Part of a Post-2015 Agenda." Friedrich Ebert Stiftung: Civil Society Reflection Group on Global Development Perspectives, *Discussion Paper* (May 2013)

"Summary of the United Nations Conference on Sustainable Development (UNCSD)": 13-22 June 2012, International Institute for Sustainable Development (IISD), *Earth Negotiations Bulletin*, Vol. 27, No. 51, 25 June 2012. <http://www.iisd.ca/download/pdf/enb2751e.pdf>

"Sustainable Development: From Brundtland to Rio 2012", background paper prepared for consideration by the High Level Panel on Global Sustainability at its first meeting, 19 September 2010, September 2010, United Nations Headquarters, New York.

[http://www.un.org/wcm/webdav/site/climatechange/shared/gsp/docs/GSPI-6\\_Background%20on%20Sustainable%20Dev.pdf](http://www.un.org/wcm/webdav/site/climatechange/shared/gsp/docs/GSPI-6_Background%20on%20Sustainable%20Dev.pdf)

*Recommended Reading:*

"The Future We Want", United Nations Conference on Sustainable Development (Rio+20), Outcome Document, A/Conf.216/L.1, 19 June 2012,

[http://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/66/288&referer=/english/&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/66/288&referer=/english/&Lang=E)

United Nations Open Working Group Proposal for Sustainable Development Goals, <https://sustainabledevelopment.un.org/content/documents/1579SDGs%20Proposal.pdf>

United Nations Prototype Sustainable Development Report, Executive Summary, <https://sustainabledevelopment.un.org/content/documents/975GSDR%20Executive%20Summary.pdf>

"Our Common Future" (Brundtland Report), United Nations General Assembly, A/42/427, 4 August 1987, Report of the World Commission on Environment and Development ("Brundtland Report"), Note by the Secretary General.

Jessica Tuchman Mathews, "Redefining Security", *Foreign Affairs*, Vol. 68, No. 2, Spring 1989: 162-177. [http://www.jstor.org/stable/20043906?seq=1#page\\_scan\\_tab\\_contents](http://www.jstor.org/stable/20043906?seq=1#page_scan_tab_contents)

**Module 2: Land, Food Markets, and Technology**

This module examines the impact of international trade on global and local food markets, and it discusses opportunities and challenges of modern technology in the quest of feeding an ever growing world population.

**Session 1: Food Markets Dynamics and the Impact of the Financial Crisis**

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

*Required Reading:*

“When Food Markets do not Provide for Enough Food: Lessons from the Recent Price Crisis”, inforesources: *Focus*, No. 1/09, April 2009, [http://www.inforesources.ch/pdf/focus09\\_1\\_e.pdf](http://www.inforesources.ch/pdf/focus09_1_e.pdf)  
“Commodity Markets Speculation: The Risk to Food Security and Agriculture”, Institute for Agriculture and Trade Policy (IATP): Trade and Global Governance Program, 2008, [http://www.iatp.org/files/451\\_2\\_104414.pdf](http://www.iatp.org/files/451_2_104414.pdf)  
Joachim von Braun, “Food and Financial Crisis: Implications for Agriculture and the Poor”, International Food Policy Research Institute, *IFPRI Brief*, December 2008, <http://www.ifpri.org/sites/default/files/jvbagm2008.pdf>

*Recommended Reading:*

Justin Yifu Lin and William Martin, “The Financial Crisis and Its Impact on Global Agriculture”, *Agricultural Economics*, Vol. 4, Issue Supplement (Nov. 2010): pp. 133-144.  
T.S. Jayne, Ballard Zulu, J.J. Nijhoff, “Stabilizing food markets in eastern and southern Africa”, *Food Policy*, Volume 31, Issue 4 (August 2006): Managing Food Price Risks and Instability in a Liberalizing Market Environment, pp. 328–341.

Session 2: Biofuels and Implications of Land Grabbing

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

*Required Reading:*

Lorenzo Cotula & al., “Fuelling Exclusion? The Biofuels Boom and Poor People’s Access to Land”, FAO and IIED Report, <http://pubs.iied.org/pdfs/12551IIED.pdf>  
Lorenzo Cotula: “The International Political Economy of the Global Land Rush: A Critical Appraisal of Trends, Scale, Geography, and Drivers”, *The Journal of Peasant Studies*, Vol. 1, 39., Nos. 3-4 (July-October 2013), pp. 649-680.  
Ariane Goetz: “Private Governance and Land Grabbing: The Equator Principles and the Roundtable on Sustainable Biofuels”, In: Matias E. Margulis, Nora McKeon and Saturnino M. Borrás Jr. (eds.): *Land Grabbing and Global Governance*, London/New York (Routledge), 2014, pp. 199-204.

*Recommended Reading:*

“The State of Food and Agriculture: Biofuels: Prospects, Risks, and Opportunities”, Food and Agricultural Organization, 2008, <http://www.fao.org/3/a-i0100e.pdf>  
Lorenzo Cotula, Sonja Vermeulen, Rebeca Leonard, and James Keeley, *Land Grab or Development Opportunity: Agricultural Investment and International Land Deals in Africa*, FAO/IIED/IFED Report (2009).  
Saturnino M. Borrás Jr., Jennifer C. Franco, and Chunyu Wang, “The Challenge of Global Governance of Land Grabbing: Changing International Agricultural Context and Competing Political Views and Strategies”, In: Matias E. Margulis, Nora McKeon and Saturnino M. Borrás Jr. (eds.): *Land Grabbing and Global Governance*, London/New York (Routledge), 2014, pp. 161-179.

Session 3: GMOs, Food Systems, and Sustainable Agriculture

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 GMOs 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:*

David Tilman & al., “Global Food Demand and the Sustainable Intensification of Agriculture”, PNAS, Vol. 108, No. 50 (December 2011): 20260-20264,

<http://www.pnas.org/content/108/50/20260.full.pdf+html>

Pamela Ronald, “Plant Genetics, Sustainable Agriculture and Global Food Security”, *Genetics*, Vol. 188, May 2012, pp. 11-20.

Rick Coleman, “The Role of Permaculture in Attaining Global Food Security”, *Issues*, Vol. 69: No. (December 2004), pp. 45-48.

*Recommended Readings*

Mark Lynas and Colin Tudge (debate), “GMOS: A Solution or a Problem?”, *Journal of International Affairs*, Spring/Summer 2014, 67/2, pp. 131-139.

United Nations Secretary General Report (2012): Agricultural Development and Food Security:

[http://www.un.org/ga/search/view\\_doc.asp?symbol=A/67/294&Lang=E](http://www.un.org/ga/search/view_doc.asp?symbol=A/67/294&Lang=E)

Lou Pingoot, “Corporate Influence in the Post-2015 Process”, *Global Policy Forum*, Working Paper (January 2014).

### **Module 3: Food Security, Nutrition, and Public Health**

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: Global Challenges of Nutrition and Public Health

This session explores global challenges to nutrition and public health, including malnutrition, issues surrounding breastfeeding, and nutrition during crises.

*Required Reading:*

World Health Organization / Nutrition for Health and Development (NHD) / Sustainable Development and Healthy Environment, *Nutrition for Health and Development: A Global Agenda for Combating Malnutrition*,

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.385.768&rep=rep1&type=pdf>

United Nations Standing Committee on Nutrition, *Priority Nutrition Indicators for the Post-2015 Sustainable Development Goals*,

[http://www.unscn.org/files/Publications/Policy\\_brief\\_Priority\\_Nutrition\\_Indicators\\_for\\_the\\_Post-2015\\_SDGs.pdf](http://www.unscn.org/files/Publications/Policy_brief_Priority_Nutrition_Indicators_for_the_Post-2015_SDGs.pdf)

Ted Greiner (ed.), “The Advantages, Disadvantages and Risks of Ready-to-Use Foods”, *Breastfeeding Briefs*, No. 56757 (September 2014).

Swiss Development Cooperation Agency: “Strategic Framework 2013-2017: Global Programme Food Security”,

[https://www.eda.admin.ch/content/dam/deza/en/documents/Themen/Landwirtschaft-Ernaehrungssicherheit/Strategic-Framework-2013-2017-Food-Security\\_EN.pdf](https://www.eda.admin.ch/content/dam/deza/en/documents/Themen/Landwirtschaft-Ernaehrungssicherheit/Strategic-Framework-2013-2017-Food-Security_EN.pdf)

*Recommended Reading:*

*Scaling Up Nutrition: A Framework for Action (September 2010)*, Public Report,

[http://www.unscn.org/files/Annual\\_Sessions/2009\\_Brussels/SUNframework\\_sept2010.pdf](http://www.unscn.org/files/Annual_Sessions/2009_Brussels/SUNframework_sept2010.pdf)

Lida Lhotska, "Whatever Happened to Health for All? Ups and Downs of Protection of Breastfeeding, Regulation of Transnational Corporations and Health for All", IBFAN- GIFA, 2008. United Nations Standing Committee on Nutrition, *Nutrition Information in Crisis Situations*, Report No. XXIII (May 2011),

[http://www.unscn.org/layout/modules/resources/files/NICS\\_No\\_23.pdf](http://www.unscn.org/layout/modules/resources/files/NICS_No_23.pdf)

SDC: *Global Program Food Security (GPFs): Strategic Framework 2010-2015* (October 2010).

### 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:*

I Darnton-Hill, C. Hishida, and WPT James: "A Life Course Approach to Diet, Nutrition, and the Prevention of Chronic Diseases", *Public Health Nutrition*, 7(1A), 101-121.

Barry M. Popkin, Linda S. Adair, and Shu Wen Ng, "Now and Then: The Global Nutrition Transition: The Pandemic of Obesity in the Developing Countries", *Nutrition Review*, Vol. 70: No. 1 (January 2012), pp. 3-21.

R. Beaglehole & al., "Global cancer prevention: An important pathway to global health and development", *Public Health*, Vol. 125, Issue 12 (December 2012): 821-831);

<http://www.sciencedirect.com/science/article/pii/S0033350611002848>

#### *Recommended Reading:*

*The Global Economic Burden of Non-Communicable Diseases*, A Report by the World Economic Forum and the Harvard School of Public Health, September 2011.

K. El Rhazi & al., "Prevalence of Obesity and Associated Sociodemographic and Lifestyle Factors in Morocco", *Public Health Nutrition*, Vol 14: No. 1 (2010), pp. 160-167.

Juliana Kain & al., "Obesity Prevention in Latin America", *Current Obesity Reports*, Vol 3 (2014), pp. 150-155.

### Session 3: Nutrition and Infectious Disease

This session evaluates the interplays between malnutrition and infectious disease.

#### *Required Reading:*

Peter Katona and Judid Katona-Apte, "The Interaction Between Nutrition and Infection", *CID*, Vol. 46 (15 May, 2008): Clinical Practice, pp. 1582-1588.

Ambrus JL, Sr and Ambrus JL, Jr., "Nutrition and Infectious Diseases in Developing Countries and Problems of Acquired Immunodeficiency Syndrome", *Exp Biol Med (Maywood)*, Vol. 226:6 (2004), pp. 464-472.

#### *Recommended Reading:*

Val H. Smith, Tyrees P. Jones, and Marilyn S. Smith, "Host Nutrition and Infectious Disease: An Ecological View", *Frontiers in Ecology and Environment*, Vol. 3, No. 5 (June 2005), pp. 268-274.

Carlos Dora & al., "Indicators linking Health and Sustainability in the Post-2015 Development Agenda", *The Lancet*, 10 June 2014; [http://dx.doi.org/10.1016/S0140-6736\(14\)60605-X](http://dx.doi.org/10.1016/S0140-6736(14)60605-X)

Theodore H. Tulchinsky and Elena A. Varaviokova, "What is the 'New Public Health'?", *Public Health Reviews*, Vol 32: No. 1, pp. 25-53.

#### **Module 4: Food Security and Food Cultures 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 the Austro-Hungarian period) and will discuss the role of organic and slow food as a means of addressing nutrition and public health.

##### Session 1: Food Security and Sustainable Development in the context of European Integration

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

###### *Required Reading:*

Jacqueline Karas, “Climate Change in the Mediterranean Region”, Greenpeace Report;

<http://www.greenpeace.org/international/Global/international/planet-2/report/2006/3/climate-change-and-the-mediter.pdf>

“Changing Migration Patterns and Migration Governance in the Mediterranean”, Documenti IAI, January 2015, <http://www.osce.org/networks/139586?download=true>

Call for Best Sustainable Development Practices for Food Security, Milano EXPO2015: “Feeding the Planet”; [http://download.feedingknowledge.net/EXPO%202015\\_Call\\_EN.pdf?oct=true](http://download.feedingknowledge.net/EXPO%202015_Call_EN.pdf?oct=true)

###### *Recommended Reading:*

European Union Overview Over Common Agricultural Policy Reform 2014-2020;

[http://ec.europa.eu/agriculture/policy-perspectives/policy-briefs/05\\_en.pdf](http://ec.europa.eu/agriculture/policy-perspectives/policy-briefs/05_en.pdf)

Croatia Integration into the EU: Q&A, [http://europa.eu/rapid/press-release\\_MEMO-13-629\\_fr.htm](http://europa.eu/rapid/press-release_MEMO-13-629_fr.htm)

Pierre Boulanger & al.; “Analysis of the Impact of Croatia’s Accession to the EU on the Agri-Food Sector: A Focus on Trade and Agricultural Policy”, 2013

[http://knjiznica.sabor.hr/pdf/E\\_publicacije/Analysis\\_of\\_the\\_impact\\_of\\_Croatia's\\_accession.pdf](http://knjiznica.sabor.hr/pdf/E_publicacije/Analysis_of_the_impact_of_Croatia's_accession.pdf)  
European Commission: Joint Research Center, Institute for Prospective Technological Studies

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

This session examines food security and nutrition in the context of 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 Reading:*

Teodotra Psalpotoulou & al., “Olive Oil, the Mediterranean Diet, and Arterial Blood Pressure: the Greek Prospective into Cancer and Nutrition”, *The American Journal of Clinical Nutrition*, Vol. 80, No. 4 (2004): 1012-1018,

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

Andrew W. Gilg and Andrew Buttershill, “Quality farm food in Europe: a possible alternative to the industrialised food market and to current agri-environmental policies: lessons from France”, *Food Policy*, Vol. 23, Issue, February 1998: 25-40.

<http://www.sciencedirect.com/science/article/pii/S0306919298000207>

Milan Oplanic & al., "Economic Analysis of Viticulture and Wine Production in Croatia", *Journal of Food, Agriculture, and Environment*, Vol. 8: 2 (2010): 494-497. [http://world-food.net/download/journals/2010-issue\\_2/a38.pdf](http://world-food.net/download/journals/2010-issue_2/a38.pdf)

*Recommended Reading:*

Jasmina Grcinic, Sustainable Development of Highly Touristic Region of Istria, Croatia 2010,

<http://www.mnmk.ro/documents/2010/6JasminaGrzanicFFF.pdf>

Barbara Sladonja & al., "Introduction of Participatory Conservation: Participants Perceptions: A Case Study from the Istrian Peninsula", *Environmental Management*, Vol. 49, Issue 6 (June 2012): 1115-1129. <http://link.springer.com/article/10.1007/s00267-012-9851-4>

Local Democratic Governance in Istria Country, CeSTI-IMO Report, 2010,

<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 (preliminary list):**

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.

**Academic Policies:** SIT prides itself on providing students with an experientially based program; we hold ourselves, and our students, to the highest of academic standards. Students are asked to refer to the **SIT Study Abroad Handbook** for policies on academic integrity, ethics, academic 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](mailto: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>.

**Please note that the syllabus,** course content, lecturers, and readings may be **modified by the academic director in order to better suit the needs of the course and its participants.** Should any change of class topics or lecturers be necessary, students will be promptly notified.