The Environment and Sustainable Development Unit (ESDU)

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ESDU is an interdisciplinary research and development unit specializing in sustainable rural livelihoods. It was established at the Faculty of Agricultural and Food Sciences to promote collaboration on sustainable development initiatives among departments at AUB and with a wide variety of other institutions and organizations undertaking related activities.

ESDU activities, including research, capacity building, and outreach, aim at:

• Providing opportunities for faculty and students to work on real-life rural development projects.
• Fostering partnerships between research, private and public sectors, and local communities in order to develop community-based solutions.
• Networking with national, regional, and international centers and institutes in the areas of integrated natural resource management and sustainable development.

For more information, refer to www.aub.edu.lb/fafs/esdu.

MS in Rural Community Development

The Faculty of Agricultural and Food Sciences offers an interdepartmental graduate program, hosted by the Environment and Sustainable Development Unit, that leads to the degree of Master of Science (MS) in Rural Community Development (RCODE, thesis or non-thesis).

Graduates of the program will build their capacities in community development to better design, manage, follow up, evaluate, and monitor the projects either in the public or private sector locally, regionally, and internationally.

The program combines theoretical and experiential courses from the university at large. The core program emphasizes community and participatory development, gender issues, social analysis of communities, design and planning, program development and non-profit management, and community action research and skills for community change. Elective courses provide the desirable flexibility to enhance the breadth of the program and its multi-disciplined approach from registered programs at the FAFS and other faculties. Such courses allow specialization in environmental and natural resource management, community nutrition and food security, project planning, sustainable agriculture, communication and development, and community health.
Requirements

All relevant requirements and regulations of the University and the Faculty of Agricultural and Food Sciences for the master’s degree apply to the MS in RCODE.

Applicants must hold a bachelor's degree from AUB or its equivalent from a recognized institution of higher learning.

Eligibility for admission is the same for both the thesis MS and the non-thesis MS options. The students, for reasons commensurate with specific interests and required training, may change from the non-thesis to the thesis track and vice versa subject to approval by the department supervising the major chosen.

Thesis and Non-Thesis Options

The degree offers both thesis and non-thesis options. The program has six core courses. These cover issues related to the theory, methods and practice of rural community development and offer the opportunity for practical experience as well as research in rural community development. Two or three specialization electives can be selected from a list of approved courses to provide further insight into specific issues in rural community development from registered programs at the FAFS and other AUB faculties.

The successful completion of the degree will require 33 credit hours. At least 27 of the total 33 credits must be earned within the Faculty of Agricultural and Food Sciences (FAFS); among these are 21 credits (for thesis students), and 18 credits (for non-thesis students). Additional 9 credits (for non-thesis students) and 6 credits (for thesis students) must be selected from the list of approved electives within FAFS. The remaining 6 credits are free electives which may be earned from courses in FAFS or in AUB at large as per the below table:

<table>
<thead>
<tr>
<th></th>
<th>Core Courses</th>
<th>FAFS Elective</th>
<th>Free Elective</th>
<th>Project/Thesis</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thesis</td>
<td>15</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>33</td>
</tr>
<tr>
<td>Non Thesis</td>
<td>15</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>33</td>
</tr>
</tbody>
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Core Courses

**RCOD 341 Rural Community Development, Theory and Practice**  
3.0; 3 cr.
This course approaches rural community development from a multi-disciplinary perspective. It traces the evolution of theory and practice in the field of rural community development. Special attention will be given to integrating theory from various disciplines with the practice of community development. Students are introduced to the concepts of community and community development in general and in the specific context of the Middle East North Africa (MENA).

**RCOD 342 Qualitative Methods**  
3.3; 4 cr.
The course focuses on the concept of community based development and skills in community mobilization. It examines skills of community analysis, participatory action research, group facilitation, principles of intercultural communication, processes of collaborative planning, and promotion of local initiatives. The lab will offer hands-on experience within the Middle East North Africa (MENA) rural communities.
RCOD 343/ AGSC 301  
**Statistical Methods in Agriculture**  
2.3; 3 cr.

The course provides an investigation of the statistical techniques needed to design experiments and analyze and interpret agricultural research data. Topics include linear regression, analysis of variance, and analysis of covariance with both continuous and categorically coded variables. Introduction to logistic regression and some nonlinear models. Surveys will be analyzed using programs like SAS and SPSS. **Prerequisites:** STAT 210 or EDUC 227 and CMPS 209 or consent of instructor. Fall and spring.

RCOD 344  
**Practicum**  
3.3; 4 cr.

Practicum in rural community development settings such as projects, development agencies, governmental or non-governmental organizations. Through hands-on experience, this practicum prepares students to assume increasing levels of responsibility with competence in these settings. Students will work with the RCODE program director to find a placement in a development agency or organization in Lebanon or abroad. They will work on mutually agreed-upon projects under the supervision of a professional practitioner. Internships will be flexible both in duration and expected hours per week.

RCOD 304  
**Project/Tutorial**  
3.0; 3 cr.

This course provides the framework within which RCODE students develop their degree projects. During weekly class sessions, students will share elements of their projects (the problem or issue addressed, the procedures employed, outlines, drafts, etc.) for critiques by students and the professor before final presentation. The final project will involve in depth investigation of an issue.

RCOD 305  
**Seminar**  
0.0; 1 cr.

The course provides a forum for experience exchange and knowledge sharing. Students will present and discuss relevant issues with active and prominent figures in the community development scene in the Middle East North Africa (MENA).

RCOD 395  
**Comprehensive Exam**  
0 cr.

RCOD 399  
**MS Thesis**  
6 cr.

**Specialization electives, 9 credits for non-thesis option and 6 credits for thesis option:**

A minimum of three courses need to be selected from the following list for the non-thesis option and two courses for the thesis option.

**ENSC 630/ LDEM 630**  
**Natural Resource Management**  
3.0; 3 cr.

Ecosystem approach to NRM. Data sources and interpretation for NRM. Physical and, socio-economic, cultural, political, and geographic specificity of NRM. Principles and processes of NRM. Case studies and practical examples in contrasting situations.

**NFSC 306**  
**Community Nutrition: Research and Intervention**  
3.0; 3 cr.

The role of nutrition in improving the health and well-being of communities. Population nutritional status and needs assessment; planning, implementing and evaluating community
nutrition and emergency nutrition programs and policies. Identification and assessment of nutritional status in the community, nutritional surveys, program development, nutritional education planning policies, and nutritional ecology. **Prerequisites: NFSC 221 and NFSC 222.**

**AGSC 376 Resource and Environmental Economics 3.0; 3 cr.**
This course that addresses and analyzes resource and environmental problems facing today's society, with an emphasis on providing the student with an intensive introduction to the qualitative theory necessary for an effective analysis of resource problems.

**AGSC 384 Political Economic of Middle East Development 3.0; 3 cr.**
This course that provides an understanding of economic development and underdevelopment as it relates to environmental degradation and demographic, social and cultural change; with special application to the economies of the Middle East.

**Free electives, 6 credits:**
AUB faculties and departments offer a wide variety of courses which may serve as electives. A minimum of two courses may be selected from among the following courses or others upon approval of the advisory committee.

**AGSC 389 Research Methods in Applied Economics 3.0; 3 cr.**
A course that provides an overview of theoretical and applied research methods for the study of agricultural, resource and development economics issues. **Prerequisite: AGSC 301.**

**NFSC 351 Food Safety: Contaminants and Toxins 3.0; 3 cr.**
General principles of food toxicology with emphasis on toxic constituents in plant, animal, marine, and fungal origin, contaminants and food processing induced toxins. Risk characterization and laws and regulations of food safety. **Prerequisite: NFSC 277.**

**PSPA 343/ENSC 658 Environmental Conflict Resolution 3.0; 3 cr.**
An introduction to contemporary approaches to global environmental negotiation and conflict resolution including the efforts of international organizations at risk communication, mediation and facilitation. This course focuses on procedures to manage negotiations of environmental conflicts and disputes between governments, corporations, ecologists, the media and the general population. Information is also provided on environmental dispute cases successfully resolved. **Alternate years.**

**EPHD 331 Population Change and Health 3.0; 3 cr.**
Population change is central to public health. This course provides a broad introduction to the field of population. It identifies core topics in population, discusses their relation to development and health, and emphasizes measurement issues. Topics covered include population size and growth as they relate to resources and to population health; components of population change including fertility and mortality, their links to development and consequences for health; population composition by age and gender and by socioeconomic status, and related inequalities; and population movements including forced, internal and international migration as factors of population change and health. Special focus is given to the Arab World and the Middle East Region.
HPCH 332  **Community Health and Development**  2.0; 2 cr.
A course in which students learn concepts and acquire skills that are necessary for successful community health promotion and development programs. Students look critically at current trends of community development practices using relevant literature on development and community organization. Students also investigate alternative approaches necessary to improve community development practices through applications in the field. *Prerequisite: HPCH 310 or consent of instructor.*

FSEC 300  **Food Security: Challenges and Contemporary Debate**  3 cr.
This course introduces concepts and principles of food security, namely availability, accessibility, utilization, and stability of food supply. Students are familiarized with the history of thought on food security, from Malthus to the Green Revolution to Sen and the inclusion of political and social factors in considering food security.

FSEC 305  **Agriculture: Technology, Supply Chains, Sustainability**  3 cr.
This course provides an understanding of sustainable agricultural production through a value chain approach as it relates to production and productivity, water and soil management, technology and post-harvest practices; with special application to the dry lands of the Middle East North Africa region.

FSEC 310  **Nutrition Security: Assessment and Intervention Strategies**  3 cr.
This course introduces students to basic principles of nutrition security, community nutrition, and nutritional ecology; and highlights the role that nutrition plays in improving the health and wellbeing of communities. The course aims to equip students with the knowledge and skills required to conduct population-based nutrition research, assess the nutrition needs of a population, to plan, implement and evaluate community nutrition programs and policies based on evidence-based practice and taking into consideration cultural, social, and contextual dimensions.

FSEC 315  **Food Policies and their Planning Process**  3 cr.
This course builds knowledge of the food system from local planning and policy and applied economic perspectives. The course familiarizes students with key players and issues related to the practice of food system planning (the process and practice of creating and implementing food policies), how this practice interfaces with the economy, and how to place these issues in a global context.