**Course Description Form**

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| 1. Course Name:
 |
| Design and Construction of Agricultural Buildings |
| 1. Course Code:
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|  |
| 1. Semester / Year:
 |
| 2023-2024 |
| 1. Description Preparation Date:
 |
| 5-2-2024 |
| 1. Available Attendance Forms:
 |
| Official attendance  |
| 1. Number of Credit Hours (Total) / Number of Units (Total)
 |
| 75h \ 3.5  |
| 1. Course administrator's name (mention all, if more than one name)
 |
| Name: Dr. Samir B.Salman Email: samir.albadri@coagri.uobaghdad.edu.iq |
| 1. Course Objectives
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| **Course Objectives** |  This course is designed to prepare students for the design and construction of agricultural buildings by learning about the types of agricultural buildings, their functions, and the construction method, as well as the ability to organize a suitable environment for farm animals to increase agricultural production. |
| 1. Teaching and Learning Strategies
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| **Strategy** | 1- Daily quizzes and continuous weekly tests.2- Exercises and activities in the classroom.3- Directing students to some websites to benefit from them |
| 1. Course Structure
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| **Week**  | **Hours**  | **Required Learning Outcomes**  | **Unit or subject name**  | **Learning method**  | **Evaluation method**  |
| 1 | 2th+3p  | Depending on the environmental conditions prevailing in the area chosen for construction | How to determine the best location to build the farm  | Theoretical and practical | General questions and discussion |
| 2 | 2th+3p  |  | Types of agricultural building designs and how to choose the most suitable for farms. | Theoretical and practical | General questions and discussion |
| 3 | 2th+3p  | Methods and equipment used | Psychometric chart | Theoretical and practical | General questions and discussion |
| 4 | 2th+3p  | Methods and equipment used | Requirements that go into the design of agricultural buildings | Theoretical and practical | General questions and discussion |
| 5 | 2th+3p  | Methods and equipment used | Benefits of thermal insulation | Theoretical and practical | General questions and discussion |
| 6 | 2th+3p  | What are the factors that affect it? How is the temperature found on the wall? | Walls of agricultural buildings?  | Theoretical and practical | General questions and discussion |
| 7 | 2th+3p  | Methods and equipment used | Total heat transfer coefficient | Theoretical and practical | General questions and discussion |
| 8 | Exam  |  |  |  | exam |
| 9 | 2th+3p  | Methods and equipment used | Ventilation and its role in the amount of air flowing in agricultural buildings | Theoretical and practical | General questions and discussion |
| 10 | 2th+3p  | Methods and equipment used | Calculating temperature lost or gained through building components. | Theoretical and practical | General questions and discussion |
| 11 | 2th+3p  | Methods and equipment used | Conditions in the design of open and open-sided poultry houses | Theoretical and practical | General questions and discussion |
| 12 | 2th+3p  | Methods and equipment used | Requirements for designing sheep barns. | Theoretical and practical | General questions and discussion |
| 13 | 2th+3p  | Methods and equipment used | Engineering requirements in storage buildings | Theoretical and practical | General questions and discussion |
| 14 | 2th+3p  | Methods and equipment used |  | Theoretical and practical | General questions and discussion |
| 15 | exam  |  |  |  | exam |
| 1. Course Evaluation
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| 1- Daily preparation in the classroom.2- Scientific activities and reports.3- Semester and final tests. |
| 1. Learning and Teaching Resources
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| Required textbooks (curricular books, if any) |  |
| Main references (sources) | Mechanization of animal production book,1988, by Prof. Lutfi H.MD, Universityof Baghdadd - Iraq.  |
| Recommended books and references (scientific journals, reports...) | [Iraqi Journal of Agricultural Sciences](https://iasj.net/iasj/issue/1420) |
| Electronic References, Websites | <https://web.utk.edu/~ggrandle/Programs/PlanList97.htm> |