Course Description Form

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| 1. Course Name: Scientific Research Methodology |
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| 1. Course Code: |
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| 1. Semester / Year: Spring semester / 2023-2024 |
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| 1. Description Preparation Date: Sep. 15th, 2023 |
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| 1. Available Attendance Forms: Mandatory / Attendance |
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| 1. Number of Credit Hours (Total) / Number of Units (Total): 16 / 2 |
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| 1. Course administrator's name (mention all, if more than one name) |
| Name: Jalal Hameed Hamza  Email: [j.hamza@coagri.uobaghdad.edu.iq](mailto:j.hamza@coagri.uobaghdad.edu.iq) |
| 1. Course Objectives |
| Learning postgraduate students how to write a thesis, dissertation, and scientific research. And all related subjects like plagiarism etc. |
| 1. Teaching and Learning Strategies |
| \* Using the direct descriptive teaching method and providing the lectures and references related to the subject.  \* Urging students to visit the library and assigning them to prepare reports on topics related to the subject’s vocabulary and presenting them using PowerPoint and displaying them using Data Show, while holding a discussion in the presence of all students to ensure general interest. |

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| 1. Course Structure | | | | | |
| Week | Hours | Required Learning Outcomes | Unit or subject name | Learning method | Evaluation method |
| 1 | 2 | Knowledge, intellectual skills and practical | Research ethics | Lecture/practices | Quiz |
| 2 | 2 | = | Stages of the scientific research process  *(Starting from topic selection, reviewing the literature, identifying the research problem, aims, objectives, and generating the hypothesis, till study dissemination)* | Lecture/practices | Quiz |
| 3 | 2 | = | Research/Experiment designs (Methodologies) | Lecture/practices | Quiz |
| 4 | 2 | = | Sampling methods | Lecture/practices | Quiz |
| 5 | 2 | = | Types of data, data management and analysis | Lecture/practices | 1st Exam |
| 6 | 2 | = | Interpreting the results and discussing their significance | Lecture/practices | Quiz |
| 7 | 2 | = | Avoiding common bias/errors in research | Lecture/practices | Quiz |
| 8 | 2 | = | Writing a research protocol | Lecture/practices | Quiz |
| 9 | 2 | = | Skills of research/manuscript writing  *(Including different parts of the research)* | Lecture/practices | Quiz |
| 10 | 2 | = | Publication and submission process  *(Including selecting journal, publication ethics, and open/subscribed access)* | Lecture/practices | 2nd Exam |
| 11 | 2 | = | Thesis/Dissertation writing  Plagiarism, paraphrasing, summarizing, and referencing  Elements of writing  *(Including generalizations, problems and solutions, styles, arguments, cause and effects, cohesion, comparison, clarity, conciseness, and logical flow of writing)*  Accuracy in writing  *(Including abbreviations, academic vocabulary, articles, caution, conjunction, prefixes and suffixes, preposition and punctuation)* | Lecture/practices | Quiz |
| 12 | 2 | = | Skills of writing the followings:  Abstract  Introduction  Review of literature  Aim, objectives, and hypothesis  Methodology  Results  Discussion  Conclusions and recommendations  References (including referencing styles/methods) | Lecture/practices | Quiz |
| 13 | 2 | = | Editing your thesis | Lecture/practices | Quiz |
| 14 | 2 | = | Effective presentation techniques  *(How to prepare and present your research)* | Lecture/practices | Quiz |
| 15 | 2 | = | Practical part  *Supplying each student with a research title and virtual data and asking them to write a scientific article and prepare a presentation of 15 minutes.* | Lecture/practices | Quiz |
| 16 | 2 | = | Report about any subject related with the course | Report | Discussion |

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| 1. Course Evaluation | |
| \*Conducting daily and monthly written and oral tests on the subject of the study subject.  \*Adopting the practical test to increase students’ skills in the field of specialization.  \* Allocating a percentage of grades for the student’s participation in scientific discussion during the lesson and for scientific reports and research. | |
| 1. Learning and Teaching Resources | |
| Required textbooks (curricular books, if any) |  |
| Main references (sources) | Portney LG, Watkins MP. Foundations of clinical research: Applications to practice. 3rd edition. F. A. Davis Company; Philadilphia, 2015.  Dawson C. Practical research methods: :A user-friendly guide to mastering research techniques and projects. How To Books Ltd; Oxford: United Kingdom, 2002.  Hurley WL, Denegar CR, Hertel J. Research Methods: :A framework for evidence-based clinical practice. Lippincott Williams & Wilkins, a Wolters Kluwer business; Philadilphia, 2011. |
| Recommended books and references (scientific journals, reports...) | السماك، محمد ازهر سعيد و الفهادي، قيس سعيد و الصفاوي، صفاء يونس. 1989. اصول البحث العلمي. الطبعة الثانية. العراق. مطبعة جامعة صلاح الدين.ع ص: 207 |
| Electronic References, Websites | <https://www.wunu.edu.ua/opp/nnimev/miznarodna_ekonomika_anglomovna_programa/miznarodna_ekonomika_anglomovna_programa_magistr/methodology_of_scientific_research/syllabus.pdf>  <https://courses.mak.ac.ug/courses/research-methodology-and-scientific-writing>  <https://www.edraak.org/en/programs/course/srm-v2017_t1/>  <https://www.udemy.com/course/scientific-method-in-research-methodology/>  <https://www.hkmu.edu.hk/admissions/course-info/sci-8010sef/>  <https://education.ki.se/student/scientific-research-methods-75-credits/5hi022> |