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**Department of Physics**

**College of Science**

**University of Salahaddin**

**Subject: Method of Research**

**Course Book – (Year 4 – general+ medical+ communication physics)**

**Lecturer's name *Abdulrhman.KH.ALASSAFEE***

**Academic Year: 20022/2023**

**Course Book**

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| **1. Course name** | **Method of reserach** | |
| **2. Lecturer in charge** | **Abdulrhman.KH.ALASSAFEE** | |
| **3. Department/ College** | **Physics / science** | |
| **4. Contact** | **e-mail:** [abdulrahman.suliman@su.edu.krd](mailto:abdulrahman.suliman@su.edu.krd)  **Tel:** | |
| **5. Time (in hours) per week** | **Theory: 1**  **Practical: 2** | |
| **6. Office hours** |  | |
| **7. Course code** |  | |
| **8. Teacher's academic profile** | **I have more than 13 year experience teaching of different subjects such as;-HEAT AND THERMODYNAMIC, MEDICAL PHYSICS and METHOD OF RESEARCH, thermodynamic lab, atomic lab, nuclear lab, electricity lab, electrical measurement lab and physiology lab. also I have four(9) papers are published in different foreign journals.. Participation in different conferences and meeting. I worked in radiology filed too,**  **B.Sc. of Physics from 1994**  **M.Sc. of nano Physics from 2006**  **Assist Lecturer** Oct 2006 – March 2011  **Instructor** Feb 2012 – up to date  **Assist Prof.** ………….2019 | |
| **9. Keywords** | **Method of research, structure of research , Concepts of research, types of research** | |
| **10. Course overview:**  The course **introduces the language of research, ethical principles and challenges, and the elements of the research process within quantitative, qualitative, and mixed methods approaches**. | | |
| **11. Course objective:**  **Research methodology provides students with the necessary knowledge to undertake better research and conceivably become successful career researchers. Moreover, teaching research methodology to students has become more critical than ever because of the changing nature of data.** | | |
| **12. Student's obligation**  The research is important for the students because **it helps them to have a detailed analysis of everything**. When you have a proper in-depth analysis of any topic, the result comes out to be fruitful and also the knowledge is enhanced.  لێره‌ مامۆستا به‌رپرسیارێتی قوتابی خوێندکار ڕوونده‌کاته‌وه‌ سه‌باره‌ت به‌ کۆرسه‌که‌ بۆ نموونه‌ ئاماده‌بوونی قوتابیان له‌ وانه‌کاندا، له‌ تاقیکردنه‌وه‌کاندا، راپۆرت و ووتار نووسین... هتد. | | |
| **13. Forms of teaching**  **Our laboratory is depend directly on showing the strong point in the experemnt via data show depending on the power point program**  لێره‌ مامۆستا ڕێگه‌ی وانه‌‌ ووتنه‌وه‌ ده‌نووسێت، بۆ نموونه‌:‌ داتاشۆ و پاوه‌رپۆینت، ‌سه‌ر ته‌خته‌ڕه‌ش، ته‌خته‌ی سپی، سمارتبۆرد یان‌ مه‌لزه‌مه‌... هتد | | |
| **14. Assessment scheme**  **All exams have 10 marks, full report has 5 marks,**  **Mid- discuss: 30%**  **superviser :20 %**  **Final discuss: 40%.**  Breakdown of overall assessment and examination  لێره‌ مامۆستا جۆری هه‌ڵسه‌نگاندن (تاقیکردنه‌وه‌کان یان ئه‌زموونه‌کان) ده‌نووسێت بۆ نموونه‌ تاقیکردنه‌وه‌ی مانگانه‌، کویزه‌کان، بیرکردنه‌وه‌ی ڕه‌خنه‌گرانه (پریزه‌نته‌یشن)، ڕاپۆرت نووسین، ووتار نووسین‌ یان ئاماده‌نه‌بوونی خوێندکار له‌ پۆلدا...هتد. ئامانه‌ چه‌ند نمره‌ی له‌سه‌رده‌بێت و مامۆستا چۆن نمره‌کان دابه‌شده‌کات؟‌ | | |
| **15. Student learning outcome:**  **Demonstrate the ability to choose methods appropriate to research aims and objectives**. Understand the limitations of particular research methods. Develop skills in qualitative and quantitative data analysis and presentation. Develop advanced critical thinking skills.  What are the objectives of research based learning?  Research-based learning (RBL) aims to **promote and develop student competencies related to research practice and to benefit students through activities linked to research** [1]. This technique implies the application of learning and teaching strategies that link research with teaching.  ..  پڕکردنه‌وه‌ی ئه‌م خانه‌یه‌ زۆر گرنگه‌، مامۆستا ده‌رئه‌نجامه‌کانی فێربوون ده‌نووسێت. بۆ نموونه‌: ڕوونی ئامانجه‌ سه‌ره‌کیه‌کانی کۆرسه‌که‌ (بابه‌ته‌که‌) بۆ خوێندکار‌  گونجاندنی ناوه‌ڕۆکی کۆرسه‌که‌ به‌ پێویستی ده‌ره‌وه‌ و بازاڕی کار  قوتابی چی نوێ فێرده‌بێت له‌ ڕێگه‌ی پێدانی ئه‌م کۆرسه‌وه‌؟  This should not be less than 100 words | | |
| 16. Course Reading List and References‌:  Books: There are many good introductory texts on QM, for example:   1. 1- Method of Research By Patrick Mchiel   http:// [www.goanna.cs.rmit.edu.au](http://www.goanna.cs.rmit.edu.au)  4- http:// [www.nd.edu/~](http://www.nd.edu/~) pkamat   1. رسالة - دراسة منهجية لكتابة البحوث د صلاح الهواري كيف تكتب بحثا او مناهج البحث العلمي محمد عوض منتدى البحوث والرسائل الجامعية WWW.HAZIMSAKEEK.COM     ▪ Key references:  ▪ Useful references:  ▪ Magazines and review (internet): | | |
| 17. The Topics: | | **Lecturer's name** |
| Week 1:- 1/10/ 2022  **Chapter1**; **WRITING A RESEARCH PAPER**  1-Some general guidelines for students.  2-What makes a good research paper?.  3- Role of Physics Education Research  4-The purpose of your papers.  Week 2:- 1/1/2022  **STRUCTURE OF SCINTIFIC RESERCH**. | | Abdulrhman alassafee  ex: (1 hrs)  ex: 1/10/2022 |
| Week 3; 1/3/2022  1-**• PowerPoint Writing Guide**  2- poster guid  3 seminar giud | |  |
| why we do scientific research | | Lecturer's name; Abdulrhman alassafee  ex: (1 hrs)  ex: 14/10/2022 |
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| 21. Peer review پێداچوونه‌وه‌ی هاوه‌ڵ  This course book has to be reviewed and signed by a peer. The peer approves the contents of your course book by writing few sentences in this section.  (A peer is person who has enough knowledge about the subject you are teaching, he/she has to be a professor, assistant professor, a lecturer or an expert in the field of your subject).  ئه‌م کۆرسبووکه‌ ده‌بێت له‌لایه‌ن هاوه‌ڵێکی ئه‌کادیمیه‌وه‌ سه‌یر بکرێت و ناوه‌ڕۆکی بابه‌ته‌کانی کۆرسه‌که‌ په‌سه‌ند بکات و جه‌ند ووشه‌یه‌ک بنووسێت له‌سه‌ر شیاوی ناوه‌ڕۆکی کۆرسه‌که و واژووی له‌سه‌ر بکات.  هاوه‌ڵ ئه‌و که‌سه‌یه‌ که‌ زانیاری هه‌بێت له‌سه‌ر کۆرسه‌که‌ و ده‌بیت پله‌ی زانستی له‌ مامۆستا که‌متر نه‌بێت.‌‌ | |  |
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