**Course Description**

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| **Faculty** | **Pharmacy** |
| **Department**  | **Pharmaceutics and Pharmaceutical Technologies** | **Level** |  |
| **Course**  | **Biorisk management** | **Code** | **1701410** | **Prerequisite** | 1701402 |
| **Credit hours** |  | **Theoretical**  |  | **Practical** |  |
| **Coordinator** | Rehan Al kasasbeh | **Email** |  |
| **Teachers** | Rawan Al karaki | **Emails** |  |
| **Lecture Time** |  | **Place** |  | **Attendance mode** |  |
| **Semester**  |  | **Preparation date**  |  | **Modification Date** |  |

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|  **Abstracted Course Description**  |
| This course provides an in-depth exploration of biohazard risk management within the context of various industries, including healthcare, research, and biotechnology. Students will gain an understanding of the principles, regulations, and best practices for identifying, assessing, and mitigating biological risks. The course covers topics related to biosafety, biosecurity, and the management of biological agents, ensuring the safe and responsible handling of potentially hazardous materials. |
| **Course Goals** |
| * To impart comprehensive knowledge of biological risk management principles and practices.
* To develop students' ability to assess and address biohazard risks in various settings.
* To instill an awareness of regulatory compliance and ethical responsibilities in handling biological agents.
* To prepare students for roles in biohazard risk management across different industries.
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| **CILOs** |
| **Knowledge** |
| a1. Understand the concepts and significance of biosafety and biosecurity.a2. Identify and classify different biological agents and their associated risks.a3. Comprehend the regulatory frameworks and guidelines governing biological risk management... |
| **Skills** |
| b1. Assess biohazard risks in specific environments and develop risk management strategies.b2. Implement safety protocols for handling biological agents and materials.b3. Analyze case studies and scenarios to make informed decisions regarding biohazard risks. |
| **Competencies** |
| c1. Demonstrate the ability to create and implement effective biohazard risk management plans.c2. Apply ethical considerations and compliance with regulatory standards in biohazard management.c3. Communicate and collaborate with stakeholders in addressing biological risks.c4. Evaluate and adapt biosecurity measures for different industries and settings. |
| **Learning Methods** |
| * Lectures and discussions on biohazard risk management principles and practices
* Case studies and real-world scenarios for practical application of knowledge
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| **Evaluation Tools** |
| Quizzes, Midterm exam, Final Exam |
| **Week** | **Topics** | **Learning methods** | **Evaluation tool** | **ILOs** | **Hours** |
| **1.** | Biorisk Management overview  | Lecture material and notes | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **2.** | Biorisk Management overview  | Homework and Projects, Presentation, … | Assignments, | **A2,a3,b1,b3,c2,c3** | **3** |
| **3.** | Biorisk Management overview  | Lecture material and notes  | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **4.** | Risk group, biosafety levels, and risk assessment strategy | Homework and Assignments, Projects, Presentation, … | Exams | **A1,a2,b1,b2,c1** | **3** |
| **5.** | Risk group, biosafety levels, and risk assessment strategy | Lecture material and notes  | Exams | **A1,a2,b1,b2,c1** | **3** |
| **6.** | Biosafety cabinets | Lecture material and notes  | Exams | **A1,a2,b1,b2,c1** | **3** |
| **7.** | Biosecurity | Homework and Assignments, Projects, Presentation, … | Exams | **A1,a2,b1,b2,c1** | **3** |
| **8.** | Biological waste management / Midterm Exam | Lecture material and notes  | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **9.** | Transportation and reception of infectious material | Lecture material and notes  | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **10.** | Good laboratory practice | Lecture material and notes  | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **11.** | Good clinical practice | Lecture material and notes | Exams | **A2,a3,b1,b3,c2,c3** | **3** |
| **12.** | Bioethics | Lecture material and notes | Exams | **A1,a2,b1,b2,c1** | **3** |
| **13.** | Bioethics | Presentation | Presentation, project, assignments | **A1,a2,b1,b2,c1** | **3** |
| **14.** | Emergency preparedness | Presentation | Presentation, project, assignments | **A1,a2,b1,b2,c1** | **3** |
| **15.** | Final Exam |  |
| **16.** |  |  |  |  |  |

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| **Plan of Course Evaluation** |
| **Evaluation Tools** | **Mark** | **ILOs** |
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| **First Exam (Mid-term)**  | **30%** | **A1,a2,b1,b2,c1** |  |  |  |  |  |
| **Second Exam (If available)** |  |  |  |  |  |  |  |
| **Final Exam** | **50%** | **A1,A2,a3,b1,b2,b3,,c1c2,c3** |  |  |  |  |  |
| **Activities** |  |  |
| **Activities Evaluation** | Homework/Tasks | 10% | B1.B2,B3C1 |  |  |  |  |  |
| Case Study  |  |  |  |  |  |  |  |
| Discussion and Interactions |  |  |  |  |  |  |  |
| Group Activities |  |  |  |  |  |  |  |
| Laboratory Exams |  |  |  |  |  |  |  |
| Presentations |  |  |  |  |  |  |  |
| Quizzes | 10% | B1.B2,B3C1 |  |  |  |  |  |
| Others |  |  |  |  |  |  |  |
| **Total** | 100% |  |  |  |  |  |  |

 **Components**  |
| **Book** |  |
| **References** |  |
| **Recommended Readings** |  |
| **Electronic materials** |  |
| **Other websites** |  |