

Course Objectives:

The objectives of this course are;

1. To introduce the concept of biosafety levels and ethics in laboratory.
2. To make the students understand different biosafety labs.
3. To make the students understand reading the material data safety sheets.
4. To make the students understand the types of chemicals, equipment and the associated issues and problems.

Learning outcomes

After completing this course the students would understand

1. Biosafety concept and ethics while working in lab.
2. which safety level label is required to work with biological agent.
3. The safety and precautions required while dealing different chemicals and equipment in the lab.

Course Contents:

1. Biosafety Standard
2. Biological Material
3. Containment Levels And Containment Zones
4. Risk Factors, Risk Groups, And Risk Assessments
5. Biosecurity
6. Medical Surveillance Program
7. Animal Work Considerations

Teaching-Learning Strategies

Teaching will be a combination of class lectures, class discussions, and group work. Short videos /films will be shown on occasion.

Assignments

The sessional work will be a combination of written assignments, class quizzes, presentation, and class participation/attendance.

Assessments and Examination

| | |
|------------------|----------|
| Sessional Work: | 25 marks |
| Midterm Exam: | 35 marks |
| Final term Exam: | 40 marks |

Books Recommended:

1. Canadian Biosafety Book, 2016, ed 2nd., Government of Canada.
2. Cell and Molecular Biology: Concepts and Experiments (2008) by G. Karp John Wiley and Sons.

Course Objectives:

The objectives of this course are;

1. To introduce the concept of biosafety levels and ethics in laboratory.
2. To make the students understand different biosafety labs.
3. To make the students understand reading about personal and others safety procedures and equipment.
4. To make the students understand how to respond to an accidental situation in lab.

Learning outcomes

After completing this course the students would understand

1. Biosafety concept and ethics while working in lab.
2. which safety level label is required to work with biological agent.
3. The safety and precautions required while dealing different chemicals and equipment in the lab.

Course Contents:

1. Personal Protective Equipment
2. Air Handling
3. Biological Safety Cabinets
4. Safety Considerations For Equipment Used For
5. Biological Work
6. Decontamination
7. Waste Management

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