



Form: Course Syllabus

| | |
|--|-------------------------------|
| Form Number | EXC-01-02-02A |
| Issue Number and Date | 2963/2022/24/3/2 5/12/2022 |
| Number and Date of Revision or Modification | 2/(10/12/2023) |
| Deans Council Approval Decision Number | 50/2023 |
| The Date of the Deans Council Approval Decision | 26/12/2023 |
| Number of Pages | 06 |

| | |
|--|--|
| 1. Course Title | Incident Prevention, Investigation, and Emergency Management |
| 2. Course Number | 0905711 |
| 3. Credit Hours (Theory, Practical) | (3,0) |
| 3. Contact Hours (Theory, Practical) | (3,0) |
| 4. Prerequisites/ Corequisites | - |
| 5. Program Title | M.Sc. of Process Safety Engineering and Intelligent Systems |
| 6. Program Code | 07 |
| 7. School/ Center | School of Engineering |
| 8. Department | Department of Chemical Engineering |
| 9. Course Level | Master |
| 10. Year of Study and Semester (s) | |
| 11. Other Department(s) Involved in Teaching the Course | |
| 12. Main Learning Language | English |
| 13. Learning Types | <input type="checkbox"/> Face to face learning <input checked="" type="checkbox"/> Blended <input type="checkbox"/> Fully online |
| 14. Online Platforms(s) | <input type="checkbox"/> Moodle <input type="checkbox"/> Microsoft Teams |
| 15. Issuing Date | |
| 16. Revision Date | |

17. Course Coordinator:

| | |
|----------------|----------------|
| Name: | Contact hours: |
| Office number: | Phone number: |
| Email: | |



18. Other Instructors:

Name:

Office number:

Phone number:

Email:

Contact hours:

Name:

Office number:

Phone number:

Email:

Contact hours:

19. Course Description:

As stated in the approved study plan.

This course is designed to enhance students' knowledge in preventing, investigating, and managing incidents in high-risk environments. Students will learn about the incident investigation process, focusing on accident cause theory, emergency response, and securing the scene. The course covers data management during investigations, including interviews, witness statements, and the organization of incident timelines. Students will also explore hazard identification, risk assessment, and the application of safety systems such as job safety analysis, permit-to-work, and hazardous area classification. Emergency management strategies for natural and man-made disasters, including communication, evacuation procedures, and preparedness planning, will be examined. Additionally, students will gain practical skills in formulating corrective actions and using incident statistics to improve workplace safety.

20. Program Intended Learning Outcomes: (To be used in designing the matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program)

- 1.
- 2.
- 3.

4.

21. Course Intended Learning Outcomes: (Upon completion of the course, the student will be able to achieve the following intended learning outcomes)

1.

2.

3.

4.

22. The matrix linking the intended learning outcomes of the course with the intended learning outcomes of the program:

| Program ILOs | ILO (1) | ILO (2) | ILO (3) | ILO (4) | ILO (5) |
|--------------|---------|---------|---------|---------|---------|
| Course ILOs | | | | | |
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |



| | | | | | |
|---|--|--|--|--|--|
| 4 | | | | | |
| 5 | | | | | |
| 6 | | | | | |
| 7 | | | | | |
| 8 | | | | | |

23. Topic Outline and Schedule:

| Week | Lecture | Topic | ILO/s Linked to the Topic | Learning Types (Face to Face/ Blended/ Fully Online) | Platform Used | Synchronous / Asynchronous Lecturing | Evaluation Methods | Learning Resources |
|------|---------|-------|---------------------------|--|---------------|---|--------------------|--------------------|
| 1 | 1.1 | | | | | | | |
| | 1.2 | | | | | | | |
| | 1.3 | | | | | | | |
| 2 | 2.1 | | | | | | | |
| | 2.2 | | | | | | | |
| | 2.3 | | | | | | | |
| 3 | 3.1 | | | | | | | |
| | 3.2 | | | | | | | |
| | 3.3 | | | | | | | |
| 4 | 4.1 | | | | | | | |
| | 4.2 | | | | | | | |
| | 4.3 | | | | | | | |
| 5 | 5.1 | | | | | | | |
| | 5.2 | | | | | | | |
| | 5.3 | | | | | | | |
| 6 | 6.1 | | | | | | | |
| | 6.2 | | | | | | | |
| | 6.3 | | | | | | | |
| 7 | 7.1 | | | | | | | |
| | 7.2 | | | | | | | |
| | 7.3 | | | | | | | |
| 8 | 8.1 | | | | | | | |



| | | | | | | | | |
|----|------|--|--|--|--|--|--|--|
| | 8.2 | | | | | | | |
| | 8.3 | | | | | | | |
| 9 | 9.1 | | | | | | | |
| | 9.2 | | | | | | | |
| | 9.3 | | | | | | | |
| 10 | 10.1 | | | | | | | |
| | 10.2 | | | | | | | |
| | 10.3 | | | | | | | |
| 11 | 11.1 | | | | | | | |
| | 11.2 | | | | | | | |
| | 11.3 | | | | | | | |
| 12 | 12.1 | | | | | | | |
| | 12.2 | | | | | | | |
| | 12.3 | | | | | | | |
| 13 | 13.1 | | | | | | | |
| | 13.2 | | | | | | | |
| | 13.3 | | | | | | | |
| 14 | 14.1 | | | | | | | |
| | 14.2 | | | | | | | |
| | 14.3 | | | | | | | |
| 15 | 15.1 | | | | | | | |
| | 15.2 | | | | | | | |
| | 15.3 | | | | | | | |

24. Evaluation Methods:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

| Evaluation Activity | Mark | Topic(s) | ILO/s Linked to the Evaluation activity | Period (Week) | Platform |
|---------------------|------|----------|---|---------------|----------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

25. Course Requirements:



(e.g.: students should have a computer, internet connection, webcam, account on a specific software/platform...etc.):

26. Course Policies:

- A- Attendance policies:
- B- Absences from exams and submitting assignments on time:
- C- Health and safety procedures:
- D- Honesty policy regarding cheating, plagiarism, misbehavior:
- E- Grading policy:
- F- Available university services that support achievement in the course:

27. References:

- A- Required book(s), assigned reading and audio-visuals:
- B- Recommended books, materials, and media:

28. Additional information:

| | | |
|---|------------|-------|
| Name of the Instructor or the Course Coordinator: | Signature: | Date: |
| | | |
| Name of the Head of Quality Assurance Committee/ Department | Signature: | Date: |
| | | |
| Name of the Head of Department | Signature: | Date: |
| | | |
| Name of the Head of Quality Assurance Committee/ School or Center | Signature: | Date: |
| | | |
| Name of the Dean or the Director | Signature: | Date: |
| | | |