

HFSY359e Fatigue Management

Level: 3

Credit Units: 5 Credit Units

Language: ENGLISH

Presentation Pattern: EVERY JAN

E-Learning: BLENDED - Learning is done MAINLY online using interactive study materials in Canvas. Students receive guidance and support from online instructors via discussion forums and emails. This is supplemented with SOME face-to-face sessions. If the course has an exam component, this will be administered on-campus.

Synopsis:

Fatigue is mainly caused by lack of rest and sleep, and significantly impacts a worker's ability to perform. This course helps students understand human circadian rhythm and sleep cycle, impacts of sleep debt and causes of sleep loss. The impact of fatigue on health and performance at work will also be covered. Students will also be equipped with knowledge on conducting physical and cognitive tests to evaluate performance impact from fatigue. Developing an effective fatigue management programme that assesses and manages risk factors (work shift cycles, roster design, rest breaks and occupational exposure levels) will be covered.

Topics:

- Physiology of Sleep and Circadian Rhythm
- Fatigue: Concept and Assessment
- Shift Work
- Assessing Fatigue Risk
- Fatigue Risk Management Systems
- FRMS: Local Context

Textbooks:

John A. Caldwell (Author): Fatigue in Aviation: A Guide to Staying Awake at the Stick (Studies in Aviation Psychology and Human Factors)
ISBN-13: 9780754633006-AA

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Learning Outcome:

- Explain the physiology of sleep, sleep types and various stages of sleep.
- Illustrate the concepts and impact of sleep deprivation and disorders its impact on performance.
- Examine the impact of Fatigue in Workplace Safety and Health
- Test for fatigue using the appropriate methods according to the appropriate circumstances.
- Propose various ways to manage the risk of fatigue and evaluate appropriate shift work strategies
- Discuss the workplace Safety and Health guidelines on management of fatigue at the workplace.

Assessment Strategies:

Continuous Assessment Component	Weightage (%)
PRE-CLASS QUIZ	2
PRE-CLASS QUIZ	2
PRE-CLASS QUIZ	2
QUIZ	6
GROUP BASED ASSIGNMENT	18
Sub-Total	30

Examinable Component	Weightage (%)
Written Exam	70
Sub-Total	70

Weightage Total **100**