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| <b>ID</b>                | 3398   |
| <b>Curricular Unit</b>   | Human Reliability  |
| <b>Regent</b>            | Catarina Maria Gomes Duarte da Silva   |
| <b>Learning Outcomes</b> | <ol style="list-style-type: none"> <li>1. Understanding the concepts in the domain of human reliability and human error</li> <li>2. Interpreting human error in different analysis levels</li> <li>3. Understanding the methodology and techniques of human reliability analysis</li> <li>4. Understanding different error management dynamics</li> </ol>  |
| <b>Syllabus</b>          | <ol style="list-style-type: none"> <li>1. Human reliability and human error               <ol style="list-style-type: none"> <li>1.1. Discussing concepts</li> <li>1.2. Relevance of human error in ergonomics</li> <li>1.3. Approaches for the human reliability analysis</li> </ol> </li> <li>2. Understanding human error               <ol style="list-style-type: none"> <li>2.1. Psychological mechanisms of human error</li> <li>2.2. Organizational approach to human error</li> </ol> </li> <li>3. Evaluation of human reliability               <ol style="list-style-type: none"> <li>3.1. Work analysis in human reliability studies</li> <li>3.2. Methodology for analysing human reliability</li> <li>3.3. Analysis techniques in human reliability</li> </ol> </li> <li>4. Management of human error               <ol style="list-style-type: none"> <li>4.1. Error in action regulation</li> <li>4.2 The role of work groups in error management and prevention</li> <li>4.3. Possible actions for error reduction</li> </ol> </li> <li>5. Accident analysis in different contexts</li> </ol> |
| <b>Evaluation</b>        | <p>Continuous evaluation:</p> <ul style="list-style-type: none"> <li>-Practical works: analysis of errors and accidents in different contexts (50%)</li> <li>-Frequency focusing on theoretical contents (50%).</li> </ul> <p>Final Evaluation:</p> <ul style="list-style-type: none"> <li>-Practical (40%) + Theoretical (60%)</li> </ul>   |

## **Bibliography**

### **Main Bibliography**

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- Girin, J.; Grosjean, M. (eds) (1996). La transgression des règles au travail. Paris: l'Harmattan
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- Reason, J. (1990). L'erreur humaine. Paris:Puf

### **Complementary Bibliography**

- Senders, J.W. and Moray, N.P. (1991) Human Error: Cause, Prediction and Reduction. New Jersey: Lawrence Earlbaum Associates Publishers.
- Rasmussen, J.; Duncan, K.; Leplat, J. (1987). New technology and human error. Chichester: John Wiley and Sons