

ID	3804
Curricular Unit	Human Reliability
Regent	Catarina Maria Gomes Duarte da Silva
Learning Outcomes	<ol style="list-style-type: none"> 1. Understanding the concepts in the domain of human reliability and human error 2. Interpreting human error in different analysis levels 3. Understanding the methodology and techniques of human reliability analysis 4. Understanding different error management dynamics
Syllabus	<ol style="list-style-type: none"> 1. Human reliability and human error <ol style="list-style-type: none"> 1.1. Discussing concepts 1.2. Relevance of human error in ergonomics 1.3. Approaches for the human reliability analysis 2. Understanding human error <ol style="list-style-type: none"> 2.1. Psychological mechanisms of human error 2.2. Organizational approach to human error 3. Evaluation of human reliability <ol style="list-style-type: none"> 3.1. Work analysis in human reliability studies 3.2. Methodology for analysing human reliability 3.3. Analysis techniques in human reliability 4. Management of human error <ol style="list-style-type: none"> 4.1. Error in action regulation 4.2 The role of work groups in error management and prevention 4.3. Possible actions for error reduction 5. Accident analysis in different contexts
Evaluation	<p>Continuous evaluation:</p> <ul style="list-style-type: none"> -Practical works: analysis of errors and accidents in different contexts (50%) -Frequency focusing on theoretical contents (50%). <p>Final Evaluation:</p> <ul style="list-style-type: none"> -Practical (40%) + Theoretical (60%)

Bibliography

Main Bibliography

- Amalberti, R. (1997) Facteurs humains et fiabilité. Quelles démarches pratiques? Toulouse: Editions Octares
- Bourrier, M. (2001) Organiser la fiabilité. Paris: L'Harmattan.
- De Keyser, V.; Leonova, A. (2001). Error prevention and well-being at work in Western Europe and Russia. Dordrecht: Kluwers Academic
- Girin, J.; Grosjean, M. (eds) (1996). La transgression des règles au travail. Paris: l'Harmattan
- Hollnagel, E. (1998) Cognitive reliability and error analysis method, CREAM. Elsevier Science.
- Kirwan, B. (1994) A guide to practical human reliability assessment. London: Taylor and Francis
- Lavallette, B.; Neboit, M. (1996). L'erreur humaine: question de points de vue? Toulouse: Editions Octares
- Leplat, J. Terssac, G. (1990). Les facteurs humains de la fiabilité dans les systèmes complexes. Marseille: Editions Octares
- 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