**Form (H)**
**Short course description**

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| Course title: Theory of reliability | Course number and code: Stat 362 |
| Previous course requirement: Stat 215 | Language of the course: English |
| Course level: 6 (elective for STAT/ OR) | Effective hours: 3(3+0+0) |

Course description

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| Binary components and systems, modular decomposition, relative importance, system reliability, reliability importance, calculation on system reliability, life distributions,  Aging criteria, classes of life distributions |

Course objectives

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| Improve logical judgement and thinking. Modelling practical and real life situations. Enhance the computational and design skills. |

Learning outcomes (understanding, knowledge, and intellectual and scientific skills)
After studying this course, the student is expected to be able to:

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| distinguish different systems |
| Ability to decompose systems |
| Ability to model building. |
| Gain design skills |

Textbook adopted and supporting references

| Title of the book | Author's name | Publisher's name | Date of publication |
|---|---|---|---|
| Statistical Theory of Reliability and life Testing: Probability Models, to Begin With | Edward Barlow and Frank Proschan | Silver Spring | 1981 |
| Reliability: Probabilistic models and Statistical methods | L. M. Leemis | Prentice- Hall, Englewood Cliffs. | 1995 |