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**COURSE SYLLABUS**

**School:** MechanicalEngineering **Campus: Universitary CiTy**

**Professor:** Deborah Reis Alvarenga, Phd.

**Subjetct:** Physical Engineering

**LLABUS**

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| **SUBJECT** | **AREA** | **WORKLOAD (HOURS)** |
| Physical Engineering | Engeneering | 5 ECT’s |
| **COURSE TOPICS** |
| - Scientific Measurements.- Motion.- Projectile motion.- Forces and Newton’s Laws of Motion.- Energy.- Fluid Mechanics.- Thermal Energy and Thermodynamics.- Heat transfer and change of phase. |
| **REFERENCES (TENTATIVE)** |
| 1. Physics for Scientists & Engineers, Volume 1 (Serway & Jewett), Brooks/Cole 2013
2. Physics for Scientists & Engineers, Volume 2 (Serway & Jewett). Brooks/Cole 2013
3. Young, Hugh D., and Roger A. Freedman. University Physics. 11th ed. with Mastering Physics. Reading, MA: Addison-Wesley, 2004.
4. Conceptual Physical Science 5th edition by Hewitt, Suchocki, and Hewitt.
5. Principles of Engineering Thermodynamics - 8th edition. Moran, Shapiro, et.al. John Wiley and Sons
6. White, Frank M. Fluid Mechanics. 7th ed. McGraw-Hill, 2010
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