



**Catalog Description:**

Financial transactions involving interest: measurement of interest, force of interest, annuities-certain, introduction to financial derivatives.

**Prerequisite:**

C- or better in 1152, 2162.xx, 1172, 2182H, 4181H; or credit for 153, 162, 162H, or 191H.

**Exclusions:** Open only to actuarial science majors and pre-majors, and to math majors.

**Text:**

*Mathematics of Investment & Credit*, 7<sup>th</sup> edition, by Broverman, published by Actex. ISBN: 9781635882216

*Derivatives Markets*, 3<sup>rd</sup> edition, by McDonald, published by Pearson, ISBN: 9780321543080

**Topics List:**

1. Compound and simple rates of interest and discount, force of interest.
2. Annuity certain and annuity due.
3. Mortgage amortizations.
4. Evaluation of bonds.
5. Durations.
6. Asset and liability matching.
7. Introduction to options, futures, and other derivatives.