

«УТВЕРЖДАЮ»

Зав. кафедрой ИЦ

Хачин С.В.

« 9 » 03 2017 г.

## АННОТАЦИЯ ДИСЦИПЛИНЫ

1. Наименование дисциплины): Профессиональная подготовка на английском языке (Математические основы финансового менеджмента)
2. Условное обозначение (код) в учебных планах: ДИСЦ.В.М1
3. Направление (специальность) (ООП): 27.03.05 «Инноватика»
4. Профиль подготовки (специализация, программа): Предпринимательство в инновационной деятельности
5. Квалификация (степень): Бакалавр
6. Обеспечивающее подразделение: Кафедра инженерного предпринимательства
7. Преподаватель: Калашникова Т.В., тел. 8-903-951-51-73  
*E-mail:* [tvkalash@tpu.ru](mailto:tvkalash@tpu.ru)
9. Результаты освоения дисциплины:

| № п/п    | Результат  |
|----------|--|
| РД1 (Р7) | Способность при разработке проекта применять математический аппарат; |

10. Содержание дисциплины (*перечень основных тем (разделов)*):

Раздел 1. Charging of interest. Discounting. Profitability.

Simple interest formula. Using simple interest in practice. The concept of time based. Fixed and variable interest-rate values. Simple variable growth rates. Definition of the term of loan and simple interest rate. The essence of charging compound interest. The difference between simple and compound interest rates. The formula of a constant rate of compound interest. Accruing compound interest a few times a year. Fixed and variable interest rate. Calculation on variable rates of compound interest. Accrual of interest on a fractional number of years. Determination of the term of a loan and the level of interest rates. The concept of discount. the notion of discounting. The specified sum and coefficient of reduction. Types of discounting: Mathematical discounting and bank accounts. Formula for determining the amount of money obtained by taking into account financial

obligations. The profitability of financial operations. Types and methods of calculating the returns on bonds.

Раздел 2. Equivalence of payments and interest rates. Change of a contract conditions.

Nominal and effective interest rates. The principle of equivalence payments and its application in contracts when conditions change. Merging ( consolidating ) payments. The concept of equivalence in interest rates and their use in quantitative financial analysis. Using equivalence equations. The formula for determining equivalent values of simple interest rates and simple and compound interest rates, effective and nominal rates of compound interest. The essence of the method of calculating the limit values of the parameters of agreements (contracts).

Раздел 3. Cash flow models

The essence of the flow of payments and financial rent. Types of financial rents. General characteristic of financial flows: The sum of accreted and current cash flow value. Determining usual rent. Rate of return coefficient and how it is defined. Current value of an ordinary annuity. Coefficient of reduction of a rent and ways of his definition. Defining parameters of financial rents: annuities and the period of annuities. Credit calculations. Methods of repayment of a loan. Debt repayment in a single one-time payment. Debt repayment in installments. Repayment of debt in differentiated payments.

Раздел 4. Inflation models

The essence of inflation and the need to be considered when carrying out financial transactions. Rate of inflation and inflation index. The definition of the real rate of return of deposit and lending operations. A comparison of real and nominal interest rates for simple and compound interest . The effect of inflation on financial operations and various options of charge of percent taking into account inflation.

11. Курс: 3, семестр: 6, количество кредитов: 2

12. Пререквизиты: Экономика, Математика.

13. Кореквизиты: Финансовый менеджмент.

14. Вид аттестации: зачет

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