COURSE TITLE: **Reservoir engineering course**

INSTRUCTORS: Prof. Harold Vinegar and Dr. Itay Reznik.

One of the most important functions in reservoir engineering is the prediction of future production rates from a given oil/gas/water reservoir or a specific well. Over the years, engineers have developed several methods to accomplish this task. This course will provide key methods in reservoir management methods ranging from simple decline curve analysis techniques to multidimensional, multi-flow reservoir simulators.

Necessary background for these techniques will be discussed: rock, water, gas and crude oil properties, material balance equations, single and multi-phase flow through porous media, reservoir types, optimum field development, oil recovery methods and reservoir surveillance.

2nd semester

Graduate students

2 credit points

References: will be published at a later stage