

## IB01x - 2.0 - Week introduction

Hello, my name is Sef Heijnen and I am professor in Bioprocess Technology at the University of Delft.

In week 1 the relevance and opportunities of the biobased economy have been explained.

However to be successful we need new economically attractive biobased production processes.

In this week 2 we will introduce in unit 1,2 the basis of these new processes, which are the natural abundance of microorganisms and their nutrients requirement.

However a successful new process must also be designed in an economic attractive way, which demands insight in rates of consumed and produced compounds. These rates cannot be measured but must be calculated from balances which will be discussed in unit 3 to 6. After these 6 units typical errors in using balances and rate calculations, called bananas, are discussed. Please remember that such errors can be disastrous because the derived economic indicators can be too positive or too negative.

I hope you enjoy this week where you start to learn about quantification of life.