WAT-E2180 - Biological Treatment of Water and Waste

02.03.2021-08.04.2021

**Introduction to Microbiology**

**Practical exercises**

04.03.2020

1. Classification Casino

<https://www.quia.com/rr/220195.html>

1. Drawing phylogenetic tree

<https://www.ebi.ac.uk/Tools/phylogeny/simple_phylogeny/>

1. Sequencing exercise

OTU X – Sequence example for the lecture

tcctggctcagattgaacgctggcggcatgccttacacatgcaagtcgaacggcagcacgggagcaatcctggtggcgagtggcgaacgggtgagtaatgtatcggaacgtacctttcagtgggggataacgtagcgaaagttacgctaataccgcatattctgtgcgcaggaaagcaggggaccttcgggccttgcgctgattgagcggccgatatcagattagctagttggtgaggtaaaggctcaccaaggcgacgatctgtagcgggtctgagaggatgatccgccacactggaactgagacacggtccagactcctacgggaggcagcagtggggaattttggacaatgggcgcaagcctgatccagccatgccgcgtgagtgaagaaggccttcgggttgtaaagctctttcggccgggaagaaatcgcatgggttaataccctgtgcggatgacggtaccggcataagaagcaccggctaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttaatcggaattactgggcgtaaagcgtgcgcaggcggttttgtaagacaggcgtgaaatccccgggctcaacctgggaactgcgcttgtgactgcaaggctagagtacggcagaggggggtggaattccacgtgtagcagtgaaatgcgtagagatgtggaggaacaccaatggcgaaggcagccccctgggtcgatactgacgctcatgc

**Sequences for independent work (HW1)**

>**OTU1**

tgttacgtcc tcccctggcc aaggtctaag ggctccaaat atcccgcgta cggtcgggaa

gaagaaagaa gcactgcctg aaagaggtcg ggacgaaggg ggaagaggat gggctgggac

acctctgcta tcgtgggaag ttatcgagac cacccggata gaaaggagcc cagcccatgc

gacgaattgt aatcggcatc accagtcttg agcagcatat cgaggccgtc aagacccacc

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ccgaacaagt ggcggacagg ggggg

>**OTU2**

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cccaaccctt tagggaggga gctgccgaag gtggga

>**OTU3**

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aggggggcgg ttgccacggt agggttcgtg actggggtga agtc

>**OTU4**

cggtaatacg tagggcgcaa gcgttatccg gaattattgg gcgtaaagag ctcgtaggcg

gtttgtcgcg tctgctgtga aatcccgagg ctcaacctcg ggcctgcagt gggtacgggc

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caggaggaac accgatggcg aaggcagatc tctgggccgt aactgacgct gaggagcgaa

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aacacctgaa gccggtggcc taacccttgt ggagggagcc gtcgaaggt

>**OTU5**

acctaccttt gagatgggaa caacaacgtt ccaagtaatt ggggctaccg aaagggttgc

taattctcaa taaaaatgct gacactttgg tgtcggcagt caaagaaatg gatctgaaaa

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gtaaagagca tgtaggcggc tatgtaagtc ggttgtgaaa gccttccgct taacggaaga

atggcggtcg aaactgcatg gcttgagtgc gggaggggag agtggaactt ctggtggagc

ggtgaaatgc gtagatatca gaaggaacgt cggcggcgaa agcgactctc tagaccgtaa

ctgacgctga gtgtgcgaaa gctaggggag caaacgggat tagatacccc ggtagtccta

gccgtaaacg atgggcac