UNIVERSITATEA DIN ORADEA
Facultatea de Protecția Mediului

Nr. înreg. …… /……

Tematica și bibliografia de concurs

Pentru postul nr. 4 Profesor din Statul de Funcții al Departamentului Ingineria Mediului pentru anul 2024 – 2025

Discipline: Microbiologia mediului I-II

MICROBIOLOGIA MEDIULUI I – CURS

1. Microaeroflora din spațiile închise, influența acesteia asupra sănătății umane și aspecte privind condițiile de microclimat și procesul de biodeteriorare.
2. Influența unor factori de stres abiotici asupra activității microbiologice a solului.
3.Microbiologia solului. Profilul microbian al solului.
4. Interacțiunile dintre microorganisme și plantele superioare din sol.
5. Biopreparatele microbiene.

Bibliografie

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MICROBIOLOGIA MEDIULUI II – CURS

1. Bioremedierea și microbiologia apelor reziduale.
2. Studiul micorizelor și al potențialului de formare a micorizelor arbusculare.
3. Procedee de biostimulare a solului utilizate pentru reducerea poluanților și în vederea îmbunătățirii proprietăților solurilor degradate.
4. Microorganisme implicate în obținerea biogazului și factorii care influențează metanogeneza.
5. Bioegradarea microbiană în natură.

Bibliografie

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MICROBIOLOGIA MEDIULUI II – LUCRĂRI PRACTICE

1. Estimarea numărului total de celule microbiene prin metoda Koch (*Plate Count Agar*).
2. Determinarea numărului total de germeni din apă. Metoda filtrelor membrană.
3. Determinarea numărului total de bacterii aerobe, drojdii și mucegaiuri din sol.
4. Studiul bacteriilor celulozice și a actinomicetelor din sol.
5. Studiul bacteriilor simbiotice fixatoare de azot din genul *Rhizobium*

Bibliografie

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