

**University of Oradea**  
**Faculty of Environmental Protection**  
**Department of Animal Husbandry and Agrotourism**

**Topics and References for the position No. 6 from Staff Establishment of the Department of Animal Husbandry and Agrotourism for the year 2021 - 2022**

**Biophysics and Agrometeorology - course**

1. Fluid statics. Water in horticultural organisms.
2. The interaction of ionizing radiation with horticultural systems.
3. Atmospheric precipitation. Risk aspects. The role of rainfall in horticulture
4. Plant growth and development in correlation with meteorological phenomena
5. Climate change; Vulnerability of horticultural systems to climate change.

**References**

1. P.T. Frangopol, Biophysics-Current Issues, Edimpex-Speranta Publishing House, Bucharest, 1992.
2. A.I. Popescu, Fundamentals of Medical Biophysics, All Publishing House, Bucharest, 2001.
3. D.G.Mărgineanu, M.I. Isac, C. Tarba, Biophysics, Ed. Didactică Pedagogică, Bucharest 1980.
4. Anca Dumitrescu - Communication of the risk for health generated by the environment, Ed. Of the Institute of Public Health Bucharest, 2000
5. G. Cristea, Biophysics with medical orientation, vol.I., ISBN: 973-664-111-2, Univ. Vasile Goldiș, Arad, 2005.
6. Daniela Ciorba, Environmental Biophysics, Cluj-Napoca, EFES, 2008.
7. H. Criveanu, Physics Practical works, Rizoprint Publishing House, Cluj-Napoca, 2001
8. Georgeta Țarălungă, Biophysics and meteorology-Course, Ed. Todesco, Cluj-Napoca, 2003
9. H.Criveanu, Classical and modern agrometeorology, Digital Data Publishing House, Cluj-Napoca, 2004
10. H.Criveanu, Georgeta Taralunga, Elements of physics and meteorology applied to biosystems, Ed. Digital Data, 2004

**Biophysics and Agrometeorology - practical works**

1. The interaction of ionizing radiation with horticultural systems. Determination of half-thickness.
2. Measurement of solar radiation. Radiative balance.
3. Determining the relative humidity of the air. Horizontal and vertical angle measurement
4. Hygrometric sizes. Evaporation and evapotranspiration
5. Electricity of the atmosphere.

**References**

1. H.,Criveanu - Agrometeorology, Practical works Ed.Todesco, Cluj-Napoca, 2001
2. H.,Criveanu - Georgeta Taralunga, Elements of physics and meteorology applied to biosystems, Ed. Digital Data, 2004
3. A.,Teusdea - Practical works of biophysics, University of Oradea Publishing House, 2011

4. L.,Enache - "Agrometeorology", USAMV Publishing House, Bucharest, 2009.
5. H.,Criveanu - "Agricultural Biophysics", Ed. Digital Data, 2006.
6. Oancea Servilia - "Practical works of physics and biophysics", Ed. PIM, Iași, 2009

### **Biophysics and Agrometeorology - course**

1. Fluid statics. Water in agricultural bodies.
2. The interaction of ionizing radiation with agricultural systems.
3. Atmospheric precipitation. Risk aspects. The role of rainfall in agriculture
4. Plant growth and development in correlation with meteorological phenomena
5. Climate change; Vulnerability of agricultural systems to climate change.

### **References**

1. P.T. Frangopol, Biophysics-Current Issues, Edimpex-Speranta Publishing House, Bucharest, 1992.
2. A.I. Popescu, Fundamentals of Medical Biophysics, All Publishing House, Bucharest, 2001.
3. D.G.Mărgineanu, M.I. Isac, C. Tarba, Biophysics, Ed. Didactică Pedagogică, Bucharest 1980.
4. Anca Dumitrescu - Communication of the risk for health generated by the environment, Ed. Of the Institute of Public Health Bucharest, 2000
5. G. Cristea, Biophysics with medical orientation, vol.I., ISBN: 973-664-111-2, Univ. Vasile Goldiș, Arad, 2005.
6. Daniela Ciorba, Environmental Biophysics, Cluj-Napoca, EFES, 2008.
7. H. Criveanu, Physics Practical works, Rizoprint Publishing House, Cluj-Napoca, 2001
8. Georgeta Țarălungă, Biophysics and meteorology-Course, Ed. Todesco, Cluj-Napoca, 2003
9. H.Criveanu, Classical and modern agrometeorology, Digital Data Publishing House, Cluj-Napoca, 2004
10. H.Criveanu, Georgeta Taralunga, Elements of physics and meteorology applied to biosystems, Ed. Digital Data, 2004

### **Biophysics and Agrometeorology - practical works**

1. The interaction of ionizing radiation with horticultural systems. Determination of half-thickness.
2. Measurement of solar radiation. Radiative balance.
3. Determining the relative humidity of the air. Horizontal and vertical angle measurement
4. Hygrometric sizes. Evaporation and evapotranspiration
5. Electricity of the atmosphere.

### **References**

1. H.,Criveanu - Agrometeorology, Practical works Ed.Todesco, Cluj-Napoca, 2001
2. H.,Criveanu - Georgeta Taralunga, Elements of physics and meteorology applied to biosystems, Ed. Digital Data, 2004
3. A.,Teusdea - Practical works of biophysics, University of Oradea Publishing House, 2011
4. L.,Enache - "Agrometeorology", USAMV Publishing House, Bucharest, 2009.
5. H.,Criveanu - "Agricultural Biophysics", Ed. Digital Data, 2006.
6. Oancea Servilia - "Practical works of physics and biophysics", Ed. PIM, Iași, 2009

## **Ecology and Environmental Protection - course**

1. The structure and structural indices of the biocenosis
2. The living environment of the population - Physical factors
3. The relationship between the environment and production activities
4. Local effects of environmental pollution generated by zootechnical activities
5. The global effects of environmental pollution generated by animal husbandry; Vulnerability and adaptability of animal husbandry to climate change

## **References**

1. Anca Dumitrescu - Communication of the risk for health generated by the environment, Ed. Of the Institute of Public Health Bucharest, 2000
2. Băbeanu Narcisa, 2008 - Ecology and Environmental Protection - Dominor Publishing House, Bucharest
3. Barnea, M. and Papadapol, C. 1975. Pollution and environmental protection. Scientific and Encyclopedic Publishing House. Bucharest.
4. Berca, M. 2000. General ecology and environmental protection. Ceres Publishing House. Bucharest.
5. Botnariuc, N. and Vădineanu, V. 1982. Ecology. Didactic and Pedagogical Ed. Bucharest.
6. Ciolac, A. 2004. Fundamental elements of ecology and environmental protection. Didactic and Pedagogical Ed. Bucharest.
7. Criveanu H., Georgeta Taralunga, Elements of physics and meteorology applied to biosystems, Ed. Digital Data, 2004
8. Georgescu Bogdan - Ecology and environmental protection, RISOPRINT Cluj-Napoca Publishing House, 2006
9. Holton J.R., Introduction to Dynamic Meteorology, Technical Publishing House, Bucharest, 1996
10. Ionescu, Al. 1973. The biological effects of environmental pollution. Ed. Of the Academy of the Socialist Republic of Romania. Bucharest.
11. Iozon, Doina. 1996. Course in Ecology and Environmental Protection. Typography Agronomy. Cluj-Napoca.
12. Mîntaş Olimpia - The atmosphere is unknown ?, Agora University Publishing House, 2010
13. Mohan, Gh., Ardelean, A. 1993. Ecology and Environmental Protection. Ed. Scaiul. Bucharest.
14. Muntean, L.S., Ştirban, M.S. 1995. Ecology, Agrosystems and Environmental Protection. Ed. Dacia. Cluj-Napoca.
15. Neacşu, P., 1984. General ecology. Multiplication Center of the University of Bucharest.
16. Resmeriţă, I. 1983. Dynamic conservation of nature. Scientific and encyclopedic ed. Bucharest.
17. Red, Al. 1987. Earth - the geosystem of life. Scientific and Encyclopedic Publishing House. Bucharest.
18. Şchiopu D., Vîntu V., 2002 - Ecology and environmental protection, Ed. I.I. from Brad, Iasi.
19. Vîntu V., 2000 - Ecology and environmental protection. Ed. "Ion Ionescu de la Brad" Iasi
20. Non-paper Guidelines for Project Managers: Making vulnerable investments climate resilient
- 21.

## **Ecology and Environmental Protection - practical works**

1. Methods of monitoring fish
2. Animal nutrition in the ecological breeding system
3. Environmental assessment for agro-zootechnical plans and programs
4. Assessment of the impact of zootechnical activities on the environment
5. Integrated environmental monitoring in animal husbandry

## References

1. Antohi C.M., 2002 - Monitoring of Air-Water environmental factors. Ed. Performantica, Iași.
2. Jelev I., Brejea R. Applied environmental management systems. University of Oradea Publishing House. ISBN (10) 973-759-105-4; ISBN (13) 978-973-759-105-0. 2006
3. Mihăiescu R., 2014 - Integrated environmental monitoring. Cluj-Napoca
4. "Guide for monitoring plant species of community interest in Romania",
5. "Synthetic monitoring guide for marine species and coastal and marine habitats of community interest in Romania",
6. "Synthetic monitoring guide for habitats of community interest (salts, continental dunes, meadows, fresh water) in Romania"
7. "Synthetic monitoring guide for habitats of Community interest: bushes, peat bogs and swamps, rocks, forests",
8. "Synthetic monitoring guide for amphibian and reptile species of community interest in Romania",
9. "Synthetic guide for monitoring caves and bat species of Community interest in Romania",
10. "Synthetic monitoring guide for mammal species of community interest in Romania",
11. "Synthetic guide for monitoring community fish species in Romania",
12. "Synthetic guide for monitoring invertebrate species of community interest in Romania".
13. Bird monitoring guide Consultation at

Head of Department,

Lecturer. eng. DODU Monica Angelica, PhD