UNIVERSITY of DEBRECEN

FACULTY OF SCIENCE AND TECHNOLOGY
UNIVERSITY OF DEBRECEN
Institute of Earth Sciences
H-4032 Egyetem tér 1, Debrecen
Phone: +36 52 518667
E-mail: geo@science.unideb.hu

Topics „B"; Meteorology specialization

1. Structure of the weather observation network. Weather station types and timing of observations.
2. Methods of statistical climatology: basic statistics, hypothesis and goodness of fit tests, linear correlation and regression.
3. Radiation budget of the climate system: astronomical factors the role of the atmosphere and the earth surface. Solar climate zones.
4. Development of the wind in the free atmosphere and in the planetary boundary layer.
5. Main features of the climate of Hungary: passive and active climate forming factors; the spatial and temporal patterns of solar irradiation, temperature, winds and precipitation.
6. Methods used in meteorological field measurements.
7. Main characteristics of the climate over simple non vegetated surfaces, water bodies, snow and ice surfaces.
8. Most important statements in the reports of the Intergovernmental Panel on Climate Change (IPCC) for future climate on global scale.
9. Main characteristics of the climate of Europe and Asia.
10. Major features of the climate of North-and South America.
11. Scientific, archaeological and historical sources used in climate reconstruction.
12. Characteristics of the "medieval optimum climate" and the "little ice age".
13. Tools used in Synoptic analysis. The weather prognosis; forecasting methods of different weather elements.
14. Synoptic meteorological features of the Carpathian basin.
15. Characteristics of the climate of crops, orchards and forests.