

Title:	Human Bioclimatology
Lecture hours:	15
Study period: (summer/winter)	Winter, summer
Number of credits:	4
Assessment methods:	The basis for passing is the correct performance of all tasks. The final grade is the average of grades for all tasks
Language of instruction:	English
Prerequisites:	basic knowledge of meteorology and climatology, basics of working with a computer (MS Office package)
Course content:	<ol style="list-style-type: none"> 1. Introduction 2. Influence of solar radiation for human health <ul style="list-style-type: none"> - solar radiation intensity - UVI - maximal time sun exposition - MTSE 3. Methods for assessing bioclimatic conditions based on measurements <ul style="list-style-type: none"> - assessment of biothermal conditions at high air temperature - Humidex - assessment of biothermal conditions at low air temperature – Wind Chill Temperature 4. Impact of physical activity on thermal sensations <ul style="list-style-type: none"> - Accepted level of physical activity – MHR 5. The role of clothing in shaping perceptible conditions <ul style="list-style-type: none"> - Insulation Predicted 6. Human heat balance 7. Biothermal index based on human heat balance <ul style="list-style-type: none"> - Universal Thermal Climate Index
Learning outcomes:	<p>W01 - knows the relations between the various meteorological elements and their impact on the human body</p> <p>W02 - has knowledge about the methods of assessing the heat exchange between the human body and the external environment</p> <p>W03 - knows methods for assessing bioclimatic conditions in both warm and cold environments</p> <p>U01 - calculates bioclimatic indices, both simple and based on human heat balance</p> <p>U02 - knows how to apply research methods to assess the perceived climate conditions</p> <p>U03 - based on the calculations carried out, correctly assess the impact of weather conditions on the human thermal sensations</p> <p>K01 - understands the need to deepen knowledge about the impact of meteorological conditions on human functioning in the natural environment</p>
References:	Błażejczyk K., 2006, Assesment of recreational potential of bioclimate based on the human heat balance, Geographia

	Polonica, 88 Błażejczyk K., Błażejczyk A., 2012, Changes in UV radiation intensity and their possible impact on skin cancer in Poland, Geographia Polonica, 83 Błażejczyk K., aet al., 2010, UTCI - new index for assesment of heat stress in man, Przegląd Geograficzny, 82, 1
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