



CAUSES AND MANAGEMENT OF TURFGRASS STRESS

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Turfgrass plants need to adapt to changing weather conditions or they perish. This six-week course will cover different forms of abiotic stress, their impact on health, and it provide management strategies to over-come stress. Different topics include heat, cold, too little & too much light, drought, ice encasement, desiccation, and traffic damage. Multiple stresses, plant health, and plant health promoting products will also be discussed.

WEEK 1: "NORMAL" PLANT GROWTH AND DEVELOPMENT

Plant adaptations to climate, energy transfer, phytohormones: Efficiency discussion

WEEK 2: CARBON PARTITIONING, TRAFFIC, AND CULTIVATION

Photo-oxidation, turf colorants, shades & PGRs: Discussion on daily light integral

WEEK 3: LIGHT STRESS – TOO LITTLE OR TOO MUCH

Photo-oxidation, turf colorants, shades & PGRs: Discussion on daily light integral

WEEK 4: HEAT AND COLD STRESS

Acute vs chronic heat stress, management, types of winterkill: Temp mgmt. discussion

WEEK 5: TURFGRASS WATER USE & DESICCATION DURING SUMMER AND WINTER

Water requirements, boundary layers, syringing, management: Winterkill recovery disc.

WEEK 6: MAXIMIZING TURFGRASS HEALTH WITH PRODUCTS

**Measuring plant health, plant health models, products to improve plant health:
Discussion about plant health programs and other forms of abiotic stress**

GreenKeeper University courses generally consist of two hours of lecture content each week for students to view at their convenience and one weekly ZOOM discussion.

THIS COURSE IS OFFERED FROM JAN 11 – FEB 19, 2021