

NSYSU Regulations for Ergonomic Hazard Prevention

1st University Administration Council Meeting of 2017-academic year on 07-03-2018

4th University Administration Council Meeting of 2021-academic year on 30-03-2022

- Article 1 In order to prevent employees of the University from suffering from ergonomic hazards such as work-related damage to muscles or bones or diseases due to exposure to work environments not ideally designed, repetitive tasks, and bad work postures, the University hereby stipulates the NSYSU Regulations for Ergonomic Hazard Prevention (hereinafter referred to as the Regulation) according to the Occupational Safety and Health Act and related laws and regulations.
- Article 2 The Regulations apply to all employees working for the University.
- Article 3 The terminologies utilized in the Regulations are defined as follows:
Ergonomic Engineering: Ergonomic engineering aims to discover the knowledge of human behavior, ability, limitation, and other characteristics, and apply it to the design of tools, machines, systems, tasks, work, and environment, etc. so that human beings can use them more productively, effectively, comfortably and safely.
Work-related damage to muscles or bones: Soft tissue injury caused or aggravated by risk factors at work, such as sustained or repetitive usage of force or poor posture.
- Article 4 Measures related to the Regulation are as follows:
Analyses of procedure, content, and postures of tasks
(1) Health monitoring: Assessment based on results of health checks
(2) Faculty and Staff Musculoskeletal Symptom Survey: Faculty and staff shall fill out the "Musculoskeletal Symptom Questionnaire" (Appendix 1) every three years. (The questionnaire is based on Nordic Musculoskeletal Questionnaire, NMQ) to perform the survey on musculoskeletal health conditions.
Identify hazardous ergonomic factors
(1) Hazard classification: Hazards shall be classified based on investigation results (Appendix 2) and consolidated into a list of musculoskeletal injury investigations. Hazard assessments and discovery of existing and potential risks shall then be performed.
(2) Health checks shall be performed on employees with potentially hazardous tasks or workplaces.
Evaluation, selection, and execution of improvement methods
(1) Simple ergonomic engineering modification: According to the "Simple Ergonomic Engineering Checklist" (Appendix 3), check the

hazard factors that may cause musculoskeletal injuries in repetitive operations, and modify the hazardous factors.

- (2) Advanced ergonomic engineering modification: To be carried out when simple ergonomic engineering modification fails to remove hazardous factors.
 - i. Observation of current condition: Use the “Ergonomic Hazard Workplace Observation Chart” (Appendix 4) to observe and record data such as Facility layout, tools and workpieces, working hours, applied force, working posture, and action frequency.
 - ii. Hazard assessment: use the “Ergonomic Hazard Analysis Chart” (Appendix 5) based on the data from observation and assess the risks and hazardous factors.
 - iii. Enhancement: Use the “Ergonomic Hazard Enhancement Plan Chart” (Appendix 6) to propose probable modification plans on the hazardous factors identified. The supervisor of the department in question shall modify the work environment according to the plan.
 - iv. Result Evaluation: Evaluate the results of the modification plan to complete the follow-up of the ergonomic engineering modification.

Evaluation of the implementation effectiveness and enhancement

- (1) Continuously control and track the implementation of the improvement plan to evaluate whether it meets the expected results.
- (2) Perform the assessment again on results that did not meet expectations to identify the ergonomic hazard factors and modify them.
- (3) The relevant results of ergonomic engineering prevention are to be regularly reported to the Environmental Safety and Health Committee, and the information is to be presented in the form of integrated reports including data.

Other related safety and health factors

- (1) Assessment and modification of ergonomic hazards require the participation of supervisors of the department in question, occupational safety and health personnel, human factors engineering experts, and physicians with occupational medicine specialties.
- (2) Health management shall be performed based on the Procedure of Ergonomic Analysis and Enhancement (Appendix 7).
- (3) Management and follow-up records shall be kept for three years.

Article 5 The standards are passed in the University Administration Council Meeting and implemented upon approval by the President. The same procedure applies in cases of amendments.