## Keleti Károly Faculty of Economics

# **Institute of Physical Education and Sport**

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Head of Institute: Ildikó Fehér-Mérey

# 1 Introduction

At Budapest Tech, since its foundation of January 1, 2004, the Institute of Physical Education and Sport as an individual institute of the Keleti Károly Faculty of Economics, has been in charge of professional methodological development of scheduled Physical Education classes and, also, of organising sports competitions for professionals and amateurs on all levels.

#### **Full-time Physical Education Teachers**

Ms. Ilona Borsos, assistant professor,

Mrs. Ildikó Fehér-Mérey, assistant professor,

Mr. László Hőnig, physical education teacher,

Mr. Béla Lévai, physical education teacher,

Ms. Anita Losonci, physical education teacher,

Mrs. Beatrix Molnár-Pajor, physical education teacher,

Lajos Szeibel, physical education teacher,

Mrs. Magdolna Várhelyi-Kulcsár, physical education teacher.

## Divisions

Népszínház u. 8, H-1081 Budapest

Doberdó út 6, H-1032 Budapest

Kiscelli út 78-80, H-1032 Budapest

Tavaszmező u. 15-27, H-1087 Budapest

# 2 Scheduled Physical Education Classes

The aim of the subject Physical Education included in the curricula with 2 classes per week prescribed is to popularise the major elements of a healthy way of life, to make students conscious of the preventive values of exercise and to provide conditions for cultivating sports regularly.

Physical Education is listed as a 'criterion subject', which implies that without fulfilling the requirements, no student is permitted to take his state final examination for graduation. According to curricula schemes, students are advised to fulfil these requirements necessary for a pass mark in the  $2^{nd}$  semester of the  $1^{st}$  year and in the  $1^{st}$  semester of the  $2^{nd}$  year. Disabled students, who are classed in the 'category No. IV by a specialist surgeon, are exempt from fulfilling curricula requirements.

Upon taking up the subject students are free to choose from the two options stated below to acquire their pass mark certifying the fulfilment of subject requirements:

A/ Requirement: active attendance of 20 classes per semester

B/ Requirement: meeting nationally prescribed standards, which imply a state of physical state guaranteeing stable preconditions for a healthy life.

### A/ Requirement

Active attendance of 20 classes per semester.

Students are granted a free choice from subjects including sports and courses indicated by the Institute of Physical Education and Sport.

Other sports activities replacing attendance:

- If a student regularly cultivates sports in one of the sports sections of the institution and the head of the respective section certifies these activities.
- If a student, during the given semester is qualified as an active member of any sports clubs, and can certify it by handing in documented records of competitions or contests.
- If a student occasionally enters for the championships held by the College, amateur sports contests of colleges or universities or competitions between the institutions.

### B/ Requirement

Fulfilling nationally prescribed standards at motory tests applied to measure general physical fitness, which guarantee stable preconditions for a healthy life.

B/1 Standards: Testing circulatory and respiratory functions in the field of aerob capacities:

Cooper test: running or swimming with a duration of 12 minutes.

a) Swimming:	b) Running	
Females: 450 m	Females: 2200 m	
Males: 600 m	Males: 2800 m	

B/2 Testing general physical strength, fitness functions at motory probes:

- Measuring the fitness of muscles in the area of the shoulders and the biceps in pectoral push-ups, steady arm bending and stretching:
  Females: 10 times normal, 20 times aerobic (kneeling position)
  Males: 40 times or pull up to the 10 times uninterruptedly
- Measuring the strength of hip muscles and abdominal muscle: lying on back sit up exercises touching the knees

Females: 70 times

Males: 70 times

- Measuring the overall dynamic strength of the biceps, the leg muscles and the trunk muscles: two handed throwing of the ball backwards, overhead, with padded balls.

Females: 7.5 metres Males: 12 metres

# 3 Sports Facilities and Activities Offered to Students and Staff Outside Classes

### **Options Supporting Students Involved in Professional Sport**

In 2004 Budapest Tech joined the programme 'Being a Champion at the Olympic Games for a Lifetime' (in order to harmonise the career of sportsmen classed as 'promises of the Hungarian Olympic movement or the qualified members of the national Olympic team with preparation for civil life.) Leading sportsmen attending the College are offered the chance for special sports grants of Budapest Tech, whereas students cultivating sports and representing the College at competitions are allowed to apply for grants issued by the Keleti Károly Faculty of Economics.

### The Institute of Physical Education and Sport runs Ball Game Clubs

- Handball (Female and male teams): Dr. Ildikó Fehér-Mérey
- Basketball (Students teams): Béla Lévai
- Football: Lajos Szeibel
- Volleyball (Students teams): László Hőnig

# Activities (Mass Sports Events, Other Activities in Sports)

### Amateur Competitions and Contests

- Competitions among the teams of the institutions of higher education in the area of Budapest: for students and lecturers regularly cultivating sports on an amateur level.
- Competitions among the Faculties of Budapest Tech involving both students and lecturers.
- Budapest Tech Cup (competitions among the Faculties in the sports listed below:
  - table tennis
  - football
  - handball
  - basketball (with male and female teams)
  - chess
- Competitions measuring physical fitness for the Faculties with teams of 3:
  - Competitions inside the Faculties for students and lecturers
  - 'The Fittest Person' Competition measuring physical fitness

## Other Sports Facilities (for Lecturers, Employees and Students)

- Aerobic (for students and lecturers)
- Tennis (for lecturers)
- Country-cross running, gymnastics (for lecturers, other staff and students)
- Measuring fitness, advising on lifestyle (for students and lecturers)
- Adapted physical education (for students and lecturers)
- Football for Lecturers

# 4 Lead Sportsmen

A Lead Sportsmen Section was first launched by the College of Light Industry (one of the legal predecessors of Budapest Tech), headed by Mrs. Mária Várhelyi-Kulcsár, a physical education teacher. Our Lead Sportsmen student have proven by achieving outstanding results (at the Olympic Games, World Cups and Euro Cups, College and University Students World Championships) that apart from fulfilling requirements in education they can simultaneously cultivate professional sports.

Following the foundation of the Institute of Physical Education and Sport, Dr. Imre J. Rudas, rector completed a declaration of accession involving all students of Budapest Tech to join the programme 'Being a Champion at the Olympic Games for a Lifetime' which was announced by the Hungarian Olympic Committee, and signed an agreement with the Hungarian Olympic Committee to guarantee financial and moral support for lead sportsmen. (For details cf. http://www.kgk.bmf.hu/intezet/tsi)

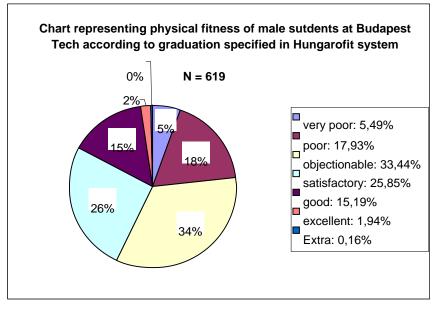
Our students achieved the most outstanding result at Sydney Olympic Games, where 7 students verified the ultimate success of out talent-scouting programme: Mr. Zsolt Ferjancsik in sabre-fencing, individual and team competitions 4<sup>th</sup> prize, Mr. Zsolt Nemcsik in sabre-fencing, team competitions, 4<sup>th</sup> prize, Mr. Tibor Pető in rowing, 5<sup>th</sup> prize, Mr. Péter Sidi in shooting, 15<sup>th</sup> prize, Mr. Csaba Kuttor triathlon, 35<sup>th</sup> prize, Mr. Attila Kilvinger in athletics, member of the relay team, Miss Petra Mandula in tennis, Miss Kinga Bóta in kayaking.

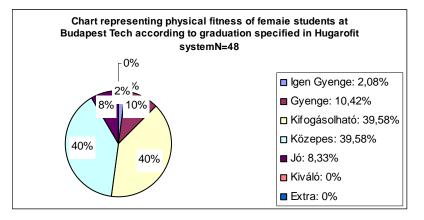
In 2003, 10 students, juniors, all of them members of the national rising generation team were training for the Olympic Games to be help in Athens and Peking (Beijing) in the Heracles Champions' Programme: Mr. Gergő Rajcsányi in judo, Miss Réka Kling in pentathlon, Mr. Lorenzó Mazza in fencing, Miss Julianna Révész in fencing, Miss Erzsébet Garai in fencing, Mr. Norbert Csohay in fencing, Mr. Gábor Szabó in judo, Mr. Gergely Boros in kayaking, Miss Anna Köpöczi in judo. Students holding qualifications many times: Miss Kinga Dékány in kayaking, Miss Ildikó Dragoner in gymnastics 5th prize at the Olympic Games, Miss Krisztina Egyed and Mr. Zsolt Baló in racing skates Olympic champions, Miss Ibolya Bali, Miss Ágnes Kókai, Mr. Imre Bak, Mr. Ádám Pattyus, Mr. Gábor Pengő in table tennis, Miss Linda Diósi, Miss Orsolya Nagy, Miss Réka Kovalszky in fencing, Mr. Ádám Dobai in aerobic, Miss Nóra Török in shooting, Miss Júlia Sebestyén, Miss Kitty Jónás in figure skating, Mr. Zoltán Harkányi in cross-country running, Miss Anita Tóth in shooting, Mr. Antal Marton, Mr. Gábor Förhész, Mr. Zoltán Lakatos in wrestling, Miss Anita Budai in fencing, Miss Amália Benk, Mr. Tamás Takács in judo, Mr. Ádám Szever in athletics, Mr. Gergely Takács in scuba-diving, Mr. Attila Szebeni and Mr. József Szebeni in karate, Mr. Norbert Mészáros, in cycling, Mr. Viktor Kovács, Miss Anna Székely in swimming, Mr. Sándor Páli in chess, Miss Nóra Bújdosó in basketball, the competitors of the junior team in kayaking, canoeing, fencing, judo, triathlon and water polo.

Senior lead sportsmen supporting lecturers: László Kuti, tennis, Ildikó Fehér-Mérey, handball.

# 5 Research and Scientific Activity

The Outcome of the Research Carried out in the Institute of Physical Education and Sport





The lecturers of Budapest Tech regularly test the physical state of the students enrolled for training. Measurement results indicate that during the years spent in higher education training that the state of health and physique continuously becomes worse and worse among students. Maintaining prospects for a healthy life among students with a very poor or poor physique is endangered, thus not only does their physical performance become poorer, but their intellectual performance becomes limited, as well. A sedentary lifestyle with opportunities for exercise declining can be considered as one of the factors indicating risks, leading to the development of various cardio-vascular diseases (obesity, high blood pressure, limited stress handling, exhaustion).

#### The Outcome of the Research Carried out in a Nationwide Survey

Mrs. Ildikó Fehér-Mérey has been the professional leader of National Exercise Programme ever since 1995. The purpose of this programme is to develop the physique of the young generation on a systematic, conscious and harmonised basis. The fragments of the curricula called 'Health in Schools' and 'Physical Education and Sport' are highlighted by her name. The professional work team operating under her control, has elaborated a bill called 'The Content and Methodology Aspects of Standard Requirements for Managing Tasks of Institutions in Students' Physical Education and Health Education'. She has organised 'Universitas Sports Competitions' in 15 sports for universities and colleges in the Budapest region for amateur participants including students and lecturers as well.

In 1997 an informal cheerful sports contest called 'Move, Hungary' was organised among the population, relying on co-operation with the National Surgeon General's Office and non-profit organisations due to her professional contribution, which had a successful final, she has organised the 1<sup>st</sup> National Fitness Competition for the handicapped in 2003.

The simple, reliable and clear-cut testing method called HUNGAROFIT which is devised to measure physical fitness was developed by her as a result of research work carried out for twenty years. The method was verified by endurance tests.

This testing technique which is easy to apply in practice is being utilised more and more widely by experts employed in education or health services, furthermore by coaches and also citizens who wish to cultivate sports regularly. By means of this method we have evaluated the test result of well over 1, 500, 000 youngsters aged 7 to 25 and those of nearly 10, 000 inhabitants of over 26.

In 1996, covering some sports, we started testing lead sportsmen, with the purpose of exploring a potential link between the most essential conditional abilities relevant for physical capacity and special motory (conditional and co-ordination) abilities utmost typical of individual sports.

# 'National Course of Action for Exercise' to Develop Physical/Health State of the Young

### Preliminaries

Related research completed for the past 20 years offers doubtless facts and figures, which confirm that physical activities and specific knowledge of the subject among the young declines year by year, their physique gradually worsens and their attitude to sport and physical education manifests negative tendencies.

In spite of the fact that few years ago Hungary was still officially and legitimately recognised as a country providing physical education surpassing international standards in nursery schools, those times the lack of exercise with young children dated to the first years of elementary school studies, presently a lifestyle characterised by a lack of exercise among children attending nurseries has become typical. This worrisome phenomenon may lead to unwanted alterations in respect of the physical and psychological wellness, the behaviour and learning abilities of future generations. Political changes and processes affecting the whole of the society in Hungary for the past decade has also caused alterations in public education. The changes and the demand for changes are experienced in the field of physical education and sports. The expectations of society concerning physical education have in part changed, and has been specified on a large scale.

The Ministry of Education (and its legal predecessor the Ministry of Culture and Public Education) has regularly confirmed its standpoint, according to which 'The physical and mental well-being of students is of crucial importance to the Ministry of Education'. The programme the National Course of Action for Exercise aims at consciously improving the health-protective effects of physical education and physical culture in schools.

The course of action supplying reliable figures on the physical and functional state of pupils has proven to have its justification. The programme is based upon regularly sampling, assessing and evaluating the physical state of pupils (and the quality control of the most essential conditional abilities which guarantee health capacities).

No extra financial means are needed for the efficient accomplishment of the tasks connected to the programme in the field of education, health services or lead sport.

Those participating in the project are as follows: the Ministry of Education and Culture, the Ministry of Health, the National Surgeon General's Office and the National Institute for Training Junior Sportsmen.

#### **Objectives**

- To shape and protect pupils' physical and mental balance of pupils in the course of years spent in education.

Task: to provide a conscious, harmonious and systematised development of the conditional abilities with differentiated load, tailored to the fitness state of the pupil if he has acquired the one of the qualifications 'satisfactory, good, excellent or extra'.

- To recreate the balance if it has happened to have been disturbed and to provide the young with a chance for life.

Task: To explore and to eliminate essential deficiencies relevant for the state of health with pupils acquiring one of the qualifications 'very poor, poor, objectionable'. To upgrade young people with handicaps due to

their physique to the level vital for keeping the chance to live in good health.

- To popularise regular the protective, recreational values of exercise, making them conscious and to expand the knowledge of the young concerning health and physical culture.

Task: To improve the knowledge of human biology (physiology, medicine, the theory of coaching) among the young both theoretically and practically. Pupils should more actively and consciously take part in measuring the state of their own physique, assessing performances achieved, evaluating their physique, interpreting the results achieved, creating training schedules tailored individually.

Via interpreting the categories of gradation teachers, pupils and parents should be supplied with correct and verifiable information on the physical capacities, state of fitness and the occurrence of potential factors causing diseases linked to a lifestyle lacking exercise of individual pupils.

- To transmit data concerning the physical (conditional) state of pupil to sanitary authorities.

Task: To extend the results of medical check-ups with data expressed in figures concerning the physical (functional) state of students in terms of epidemiology (according to categories of grading differentiating between groups of age and sex).

Processing and interpreting data taken in education and transmitted to sanitary authorities offers a chance to diagnose and cure ailments that can be connected to a lifestyle short of exercise.

### Methods

The programme outlined above specifically centres on improving and modernising the subject of Physical Education at schools with the aim of developing the healthprotective effects of sports in schools.

Mini Hungarofit methods are being applied to measure the performance of schoolchildren of different ages. Monitoring pupils' state of health is completed by keeping special case sheets of schoolchildren.

Thank to measurement the abilities of the students who reach 'extra' or 'excellent' qualifications lead sportsmen's abilities come to the fore.

Controlling the programme's efficiency: At the end of each academic year by comparing data gleaned in the spring versus in the autumn a finalised survey based on verified figures and statistics is completed. Following up on the effects which have come into being due to the programme, and also monitoring trends and proportions of changes – in the light of objectives set and realised – results should undergo a analysis in greater depth, and prevention programmes launched

interpretation in the area of education and health care implicate further potentials for development.

Sta	State		Programme	
1	a	Implies good physical state	Reaching any of the qualifications 'satisfactory, good, excellent or extra'	Upholding and Development Programme
	b	Implies a state with no disease	A medical check-up with 'negative' result	A steady protection of health is needed
2	a	Implies good physical state	Reaching any of the qualifications 'satisfactory, good, excellent or extra'	Upholding and Development Programme
	b	Implies a disease	A medical check-up with 'positive' result	Curing the disease applying adapted gymnastics
3	a	Implies poor physical condition	Reaching any of the qualifications 'very poor, poor, objectionable'	Eliminating deficiencres with and upgrading programme
	b	Implies a state with no disease	A medical check-up with 'negative' result	A steady protection of health is needed
4	a	Implies poor physical condition	Reaching any of the qualifications 'very poor, poor, objectionable'	Eliminating deficiencres with and upgrading programme
	b	Implies a disease	A medical check-up with 'positive' result	Curing the disease applying adapted gymnastics

Qualification system surveying pupil's physical & health condition:

#### Results

Owing to the programme officially launched by the Ministry of Education, over 2,000,000 data reflecting the results of a nationwide survey on pupils' health have been gleaned and systemised, which proves that employing this technique is justified.

Completing proposals, compiling summaries based on statistics, drawing conclusions processing data would greatly contribute to a conscious development relying upon facts.

Publications related to this topic today number well over 100.

Around 9 books and coursebooks have been published in this subject up to now.