# The new Hungarian Diploma for Ergonomics and Human Factors Specialist

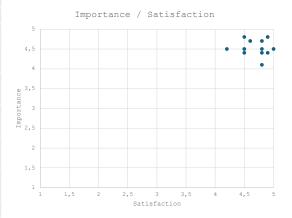
Eur. Erg. Dr. Jókai Erika, Óbuda University Eur.Erg. Dr. Habil. Szabó Gyula, Óbuda University

## Short summary

- 13/11 Graduate students
- 22 instructors
- 7x2 days of lessons x 2 semesters (hybrid)
- Final survey about the Course (13/7 respondents): all subjects and all instructors received very good reviews, with useful comments for improve it better ©

Subject	Importance	Satisfaction
Anthropometry and		
biomechanics	4,8	4,7
Basics of Ergonomics	5	4,5
Technical Basics	4,2	4,5
Basics of Psychology	4,5	4,8
Basics of Occupational		
Health	4,9	4,8
Management of ergonomic		
projects	4,5	4,5
Activity analysis and		
work planning	4,8	4,4
Anthropometric assessment		
and design	4,9	4,4
Workability, ability		
assessment	4,5	4,4
Ergonomic methods	4,8	4,1
Workplace ergonomics in		
practice	4,8	4,5
Final Thesis	4,6	4,7

## Imortance Satisfaction analysis



### Topics of Final theses

- Ergonomic challenges of winter winemaking in an artisanal cellar Musculoskeletal disorders and their prevention.
- · Investigation of maintenance and parts-exchange workstations with the help of ergonomic evaluation methods
- A complex ergonomic evaluation of the static welding workstation of a car parts manufacturing company
- Provision of "home office" tasks for employees with altered work ability (safety and ergonomic compliance of home work environments)
- · Office ergonomic tests at a multinational company
- · Complex ergonomic evaulation of operations in a mixing unit at an ice cream factory
- · Ergonomic improvement of registration workstation equipped with visual display unit, in industrial environment
- The examination of the impact of corporate office transformation
- · Complex ergonomic evaluation of a large company production line workplace and its effect on skeletal muscles
- Complex ergonomic assessment and evaluation of the upholstery tailoring and sewing workplaces at an industrial production company
- · Ergonomic evaluation of a preventive maintenance shop, directions of improvement
- · Ergonomic assessment of a chemistry research lab based work

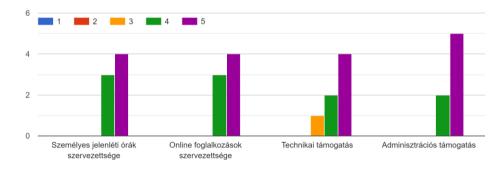
#### Evaluation related to the organization of training:

Please indicate on the scale how satisfied you were with the organization of the training.

(1 - not at all, 5 - completely)

- Organization of personal attendance lessons
- Organization of online sessions
- Technical support
- Administrative support

Comments:



I had no negative experience.

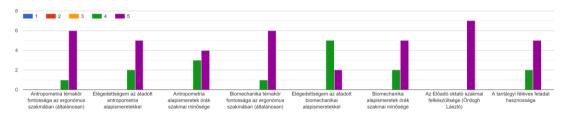
In the first semester, the organization and information service were still smooth, but there were interruptions in the second semester.

The projector often did not work. / I always received appropriate help when I had a problem.

All went well. / Both Neptun and Moodle worked well. It was useful that the lectures could be reviewed.

## Semester 1

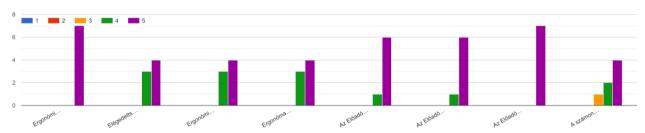
### Anthropometry and biomechanics (4,8 / 4,7)



- The importance of anthropometry in the ergonomist profession (in general)
- My satisfaction with the basic knowledge of anthropometry that I have learned
- · Professional quality of basic anthropometry lessons
- The importance of biomechanics in the ergonomist profession (in general)
- My satisfaction with the basic knowledge of biomechanics provided
- Professional quality of basic biomechanics lessons
- Professional competence of the Lecturer (László Ördogh)
- The usefulness of the assignment

- · I thank my teachers for their help and support.
- The practical lesson was a real help, based on this the assignment was understandable and solvable.
- It would have been better to give out a task rather than choosing it for us on our own.
- It was practical, perhaps spending more time on its practical application would make it easier to master.
- · It could have been a bit more practical.
- More information on biomechanics, the forces acting on the joints, would be very useful.

### Basics of Ergonomics (5,0 / 4,5)



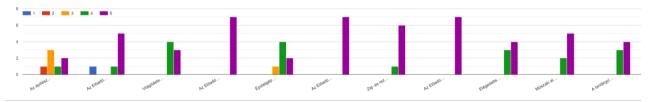
- Basics of Ergonomics in the ergonomist profession (in general)
- Importance of Basics of Ergonomics in the ergonomist profession (in general)
- My satisfaction with the basic knowledge of ergonomics provided
- Professional quality of classes
- Professional competence of the Lecturer (Gyula Szabó, PhD)
- Professional competence of the Lecturer (Fruzsina Pataki-Bittó, PhD)
- · Professional competence of the Lecturer (Bálint Szabó, PhD)
- Evaluation of the assessment (oral exam)

#### Comments:

from the basics.

- I expected more information about colors that are pleasant and unpleasant for the eyes, the ability to navigate the surface with a mouse or tab, and one v. another v. the advantages and disadvantages of the alternate method (hand load, efficiency).
- It would have been easier to learn it if it had been discussed in detail in several lessons, starting
- Super lecturers, they were very useful lessons.

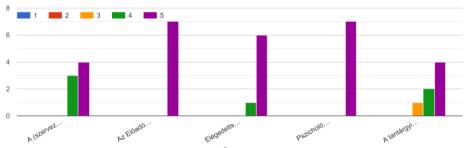
## Technical Basics (4,2/4,5)



- · The importance of the topic of basic architectural knowledge Comments:
- Professional competence of the Lecturer (Erzsébet Domonyi)
- Importance of lighting technical knowledge
- Professional competence of the Lecturer (József Nádas)
- The importance of building mechanical engineering knowledge
- Professional competence of the Lecturer (István Barányi, PhD)
- · The importance of noise and vibration protection
- · Professional competence of the Lecturer (Csaba Bán)
- My satisfaction with the basic technical knowledge provided
- · Professional quality of lessons
- · Usefulness of the subject semester assignment

- On-site measurement exercises would have been useful.
- Each area is very important, but perhaps too deep knowledge material was given.
- Separately, there were many useful things, but there was not enough time, lessons.
- · We heard very high-quality performances.
- In architecture, it would be worthwhile to focus only on what is very basic (e.g. information about the interpretation of a technical drawing) and/or what is significant from a user's, human point of view on a building.

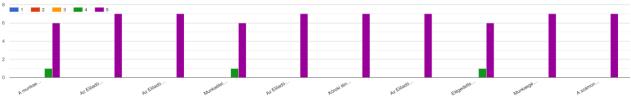
## Basics of Psychology (4,5 / 4,8)



- The importance of the basic knowledge of (organizational) psychology
- Professional competence of the Lecturer (Ágota Kun, PhD)
- My satisfaction with the basic knowledge of (organizational) psychology
- Professional quality of basic knowledge of psychology lessons
- The usefulness of the subject semester assignment

- We liked this subject, but we were able to use it very little in the thesis, since the focus was different.
- The teacher held very interesting and varied classes, she teaches a different field every day, so it was less useful for me.
- · It was very good.
- In my opinion, psychology is very important, but due to the shortness of time, fewer classes might have been enough.
- It is a useful and interesting subject, but less of it would have been enough, so time could be spent on more methodology lessons instead.

#### Basics of Occupational Health (4,9 / 4,8)

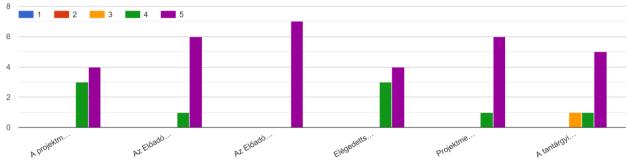


- · The importance of occupational health
- Professional competence of the Lecturer (Sarolta Nagy, med. Dr)
- Professional competence of the Lecturer (Zsuzsa Fekete, med. Dr)
- The importance of occupational physiology
- Professional competence of the Lecturer (Ferenc Kudász, med. Dr)
- The importance of knowledge of pathological factors
- Professional competence of the Lecturer (Attila Budavölgyi, med. Dr)
- My satisfaction with the basic occupational health knowledge provided
- Professional quality of basic knowledge of occupational health classes
- · Evaluation of the assessment (oral exam)

#### Comments:

- Theory tied to practical examples -> As working people, it would have made it easier to understand and remember.
- For me, the classes were the most useful, for a non-professional student, the amount and acquisition of anatomical knowledge is burdensome.
- We received useful information on occupational health issues.
- They were very useful classes, with very good instructors and the topic is very important.

### Management of ergonomic projects (4,5 / 4,5)

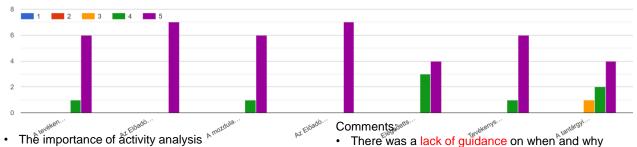


- The importance of project management
- Professional competence of the Lecturer (László Ördögh)
- Professional competence of the Lecturer (László Palotai)
- My satisfaction with the transferred project management knowledge
- Professional quality of project management skills classes
- · The usefulness of the subject semester assignment

- This should have happened earlier and should have been put into practice. E.g. go through, act out a fictional case together. We would have understood what our task would be in relation to the thesis.
- Presentation of several practical projects, performance of independent practical tasks.
- Lecturer gave a lot of new knowledge to those who had not dealt with the organization and management of projects during their previous work.

## Semester 2

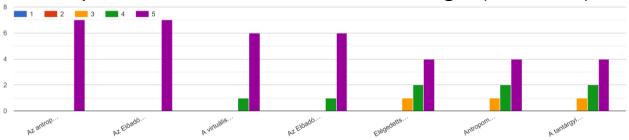
## Activity analysis and work planning (4,8 / 4,5)



- Professional competence of the Lecturer (György Kaucsek, PhD)
- The importance of movement analysis and load-demand acceptance
- Professional competence of the Lecturer (Zoltán Dunajcsik)
- My satisfaction with the activity and movement analysis knowledge provided
- Professional quality of activity analysis and work planning classes
- The usefulness of the subject semester assignment

- There was a lack of guidance on when and why we use it, what methods are available and,
- compared to them, what is said and where it is connected.
- Emphasis should be placed on practicality, here learning the theory should have preceded the tasks, e.g.: MTM button sewing.
- I think that this is one of the most important parts of ergonomics, but again there was only a short time available to try out what we learned in theory in practice.
- It was useful and there was enough time for this.

#### Anthropometric assessment and design (4,9 / 4,4)

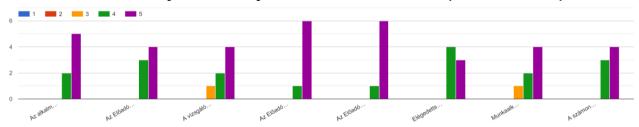


- The importance of anthropometric assessment and planning
- Professional competence of the Lecturer (László Ördögh)
- The importance of the virtual ergonomic assessment exercise
- Professional competence of the Lecturer (Kata Koloszár)
- My satisfaction with the anthropometric design knowledge provided
- Professional quality of anthropometric design classes
- The usefulness of the subject semester assignment

#### Comments:

- It was easier based on what I learned in the first semester, but it was difficult to work with the software because it didn't work properly.
- The instructors did their best. The software is difficult
  to use and can be evaluated if someone is not at home
  either in the world of movement analysis or IT. It was
  difficult and would have taken more time in a different
  distribution during the semester.

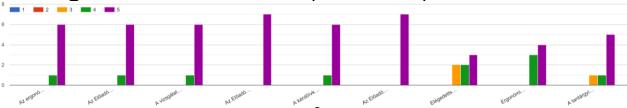
### Workability, ability assessment (4,5 / 4,4)



- · The importance of aptitude tests
- Professional competence of the Lecturer (Lajos Izsó, Prof.)
- · The importance of test equipment practice
- Professional competence of the Lecturer (Sarolta Nagy, med. Dr.)
- Professional competence of the Lecturer (Máté Pusker)
- My satisfaction with the knowledge of the passed work suitability assessments
- Professional quality of fitness for work classes
- · Evaluation of the assessment (online test).

- It was a bit depressing to see how many options
   ErgoScope has, but few people operate it. So although
   the information was useful, we cannot recommend it or
   use it for research.
- · I would have planned the class differently.
- We heard interesting presentations.
- The lecture on ATOM went into too much detail about the statistical method. Such background knowledge is not necessary as an ergonomist. Sampling and statistics belong more to the subject of methodology. The rest of the subject was very helpful.

## Ergonomic methods (4,8 / 4,1)

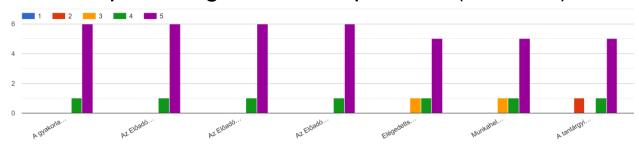


- · The importance of ergonomic methods
- Professional competence of the Lecturer (Gyula Szabó, PhD)
- The importance of (usability) test design knowledge
- Professional competence of the Lecturer (Erika Jókai, PhD)
- The importance of questionnaire preparation and data analysis
- · Professional competence of the Lecturer (János Káldos) ·
- My satisfaction with the ergonomics methodological knowledge provided
- Professional quality of ergonomics methodology classes
- · The usefulness of the subject semester assignment

#### Comments:

- The knowledge arrived late, practical lessons would have been necessary. E.g. application of paper-pencil methods based on examples. Questionnaire: it would have been more useful to see them and try them out in order to apply them to the thesis.
- · Several guided, tutor-assisted practical task solutions.
- It would have been nice if there had been more time to practice each method.
- Especially important subjects with great instructors.
   More classes like this would have been useful. Also, it would be worthwhile to actually complete each paperpencil method together, in a real situation or a simulated situation.

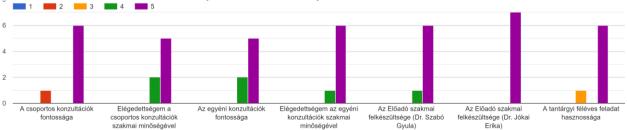
#### Workplace ergonomics in practice (4,8 / 4,5)



- The importance of the transfer of practical experience
- Professional competence of the Lecturer (Fruzsina Pataki-Bittó, PhD)
- Professional competence of the Lecturer (Gábor Paukovics)
- Professional competence of the Lecturer (Kata Koloszár)
- My satisfaction with the practical knowledge of ergonomics provided
- Workplace ergonomics in practice, professional quality of lessons
- · The usefulness of the subject semester assignment

- I find it useful to get several practical sessions.
- The ViveLab Ergo software was easy to learn, but there were so many interruptions that our hands were shaking when preparing the tasks. Many times it got lost in what we had already done, it consumed a lot of time.
- Several guided, tutor-assisted practical task solutions. Fruzsina's classes, e.g. they were interactive, it was good.
- We participated in meaningful presentations.

## Final Thesis (4,6 / 4,7)



- The importance of group consultations
- My satisfaction with the professional quality of group consultations
- The importance of individual consultations
- My satisfaction with the professional quality of individual consultations
- Professional competence of the Lecturer (Gyula Szabó, PhD)
- Professional competence of the Lecturer (Erika Jókai, PhD)
- The usefulness of the subject semester assignment

#### Comments:

- · Thanks for the preparation.
- It would have been good to have a separate semester for this after submitting the subjects.
- If the training could be at least 1 semester longer, the thesis could be written in a separate semester due to the average knowledge and practice.
- I thought the group consultations were very good, I think we learned a lot from them.
- It was enough time to negotiate. Those who didn't ask didn't want to.:)

## General and other comments regarding the entire training

- Thank you for letting me study here!
- It would be advisable to link the subjects to the survey process, with as many practical lessons as possible. It is very difficult to learn from lecture notes.
- Thanks for organizing the training and for the professional instructors. We gained a lot of new knowledge and contacts, all of which we can use in our own field of expertise.
- Instead of 2 semesters, 2 semesters and a 2-month thesis should have been written.
- The location of attendance education is below criticism. Dirty, smelly, musty, uncomfortable chairs...

## General and other comments regarding the entire training

- First of all, thank you very much for starting this training and allowing me to participate in it. As with all new things, there are sometimes difficulties, but that's why it's very good that we can give feedback now and it will be helpful in the future.
- During the training, we acquired very useful knowledge, the lecturers gave high-quality presentations without exception. I thought a lot about how to transfer such a large amount of knowledge in such a short time in the most efficient way, and I came to the conclusion that the chronology could be changed a little, for example, as an ergonomic test takes place in practice, the individual subjects would be connected to that specific part.

## General and other comments regarding the entire training

- The whole year was nicely structured, everything came together at the end! The only difficulty was that we got to know the important elements of the methodological subjects of the second semester when the thesis had to be written in full swing. This made it difficult to choose a topic and allocate time for the thesis. The psychology and ATOM topics can be shortened and simplified a bit, so that more emphasis can be placed on the methodologies. Vivelab also requires more time, or in several, smaller steps, with breaks in between, so that you can give feedback and ask questions. The assignments were very useful and instructive everywhere. Perhaps if it fits into the organization and time there could be more homework during the semester for the more important subjects, so that you can practice each methodology, topic, and task several times, from several perspectives, and give and receive feedback more often. They were very nice and well-prepared, and they were excellent instructors on all topics!
- Thank you very much!