University of Kragujevac

Faculty of Hotel Management and Tourism in Vrnjačka Banja

REPORT FROM THE COURSE

APPLICATION OF INFORMATION TECHNOLOGY IN BUSINESS STATISTICS

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Vrnjačka Banja

Within the TEMPUS project „Modernization and Harmonization of Tourism study programmes in Serbia" 544543-TEMPUS-1-2013-1-RS-TEMPUS-JPCR, a **course for employees** was organized on the following subject: **Application of information technology in business statistics**.

Professor Nebojša Zdravković, Ph.D. was lecturer on the course. Course was held at the University of Kragujevac, Faculty of Hotel Management and Tourism in Vrnjačka Banja in the period from 11.06.2015. to 09.12.2015., with a total fund of 25 hours of classes consisting of lectures and practical work on the computer in the IBM SPSS Statistics 21.

The aim of the course was to gain knowledge and skills that would enable participants to independently do statistical analysis of data for their scientific research.

Each participant received a brochure in electronic form consisting lectures and completely solved examples in the IBM SPSS Statistics 21. Thirteen participants successfully completed course, four of them were male while nine were female. Each of them received a certificate.

On the first day of training, participants were introduced with different types of data, with their summarization and inserting in the IBM SPSS Statistics 21. Participants were introduced with the way they can make and customize different graphs for presentation of statistical data. Thirteen participants attended the first day of the course, of which four participants were male and nine were female.

Basic knowledge of Probability theory is presented on the second day of training: what is the probability and its basic characteristics, as well as introduction in the Normal distribution. Through practical examples in the IBM SPSS Statistics 21 participants were shown how to test normality distribution. As the first day, thirteen participants (four males and nine females) attended the second day of the course.

On the third day of training, participants were introduced with significance tests, the way in which mean of small samples are compared, as well as with the way of formulating the null and alternative hypotheses and the conditions under which the null hypothesis is adopted or rejected. Parametric tests and cases in which each is used are presented theoretical and practical. On the third day of the course attendance was slightly lower and was attended by five participants, of which one person was male, while four were females.

On the last day of training participants were introduced with regression and correlation and with χ^2 test (Chi-Square test). It was attended by a total of nine students (three males and six females).

QUESTIONNAIRE – EVALUATION RESULTS

After the course, participants were given a **questionnaire** in order to provide estimates and opinions concerning the course delivered. The questionnaire included eight questions. The questionnaire and the average value of the claims are shown below.

Table 1. Questionnaire relating the course success

**QUESTIONNAIRE
PEDAGOGICAL AND IT SKILLS IN HIGHER EDUCATION**

1. Please evaluate the actuality of the course topics. *(Please evaluate from 1 to 5, where 5 stands for very interesting and 1 for completely uninteresting)* (*Average grade: 4,80)*

<div align="center">1   2   3   4   5</div>

2. Are the chosen topics clearly presented? *(Please evaluate from 1 to 5, where 5 stands for very interesting and 1 for completely uninteresting)* (*Average grade: 4,70*)

<div align="center">1   2   3   4   5</div>

3. Is this course helping you to improve your knowledge in the field? (Please circle one answer) *(Response structure: Yes – 90%, No – 10%)*

<div align="center">1) Yes   2) No   3) I do not know</div>

4. Is this course helping you in your workplace? (Please circle one answer) *(Response structure: Yes – 90%, No – 10%)*

<div align="center">1) Yes   2) No   3) I do not know</div>

5. Please evaluate the place where the course is held as well as technical equipment. *(Please evaluate from 1 to 5, where 5 indicates very well equiped, and 1 completely inadequate place)* (*Average grade: 4,80*)

<div align="center">1   2   3   4   5</div>

6. Please evaluate the selection of lecturers. *(Please evaluate from 1 to 5, where 5 indicates very good choice, and 1 complete dissatisfaction with the choice)* (*Average grade: 4,30)*

<div align="center">1   2   3   4   5</div>

7. Are you interested to participate in the further similar courses? (Please circle one answer) *(Response structure: Yes – 80%, I do not know – 20%)*

<table>
<tr><td colspan="2">1) Yes   2) No   3) I do not know</td></tr>
</table>

| 1) Yes | 2) No | 3) I do not know |

8. Please enter your comments, suggestions, proposals, etc.
- Time and date of the course.
- Course would be even better if the classes were held week after week. But this way a huge time difference was created.
- Classes were canceled too many times.

In the Table 2 there is a tabulation of the results of the Questionnaire.

Table 2. Results of the Questionnaire regarding the course success

No.	Question	*Average value*		
1.	**Please evaluate the actuality of the course topics.**	4,80		
2.	**Are the chosen topics clearly presented?**	4,70		
3.	**Is this course helping you to improve your knowledge in the field?**	yes	no	I do not know
		90%	10%	
4.	**Is this course helping you in your workplace?**	yes	no	I do not know
		90%	10%	
5.	**Please evaluate the place where the course is held as well as technical equipment.**	4,80		
6.	**Please evaluate the selection of lecturer.**	4,30		
7.	**Are you interested to participate in the further similar courses?**	yes	no	I do not know
		80%		20%
8.	**Please enter your comments, suggestions, proposals, etc.**			
	• Time and date of the course. • Course would be even better if the classes were held week after week. But this way a huge time difference was created. • Classes were canceled too many times.			

Based on the results of the survey we can determine that the **average rate of course is 4.65**. The highest average grade (4,80) has topic actuality as well as the place where the course was held and tehnical equipment. Also, most of the participants (90%) expressed the view that this course will help them to improve knowledge in their workplace and in this field.

SCHEDULE

The following is given in the attachment: registration lists of participants and example of certificate.

PRIMENA IT TEHNOLOGIJE U POSLOVNOJ STATISTICI

No.	First and last name	Institution	Phone number	E-mail
1.	DARKO DIMITROVSKI	FACULTY OF HOTEL MANAGEMENT	+381642925386	darko.dimitrovski@kg.ac.rs
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Vrnjačka Banja, 11.06.2015.

PRIMENA IT TEHNOLOGIJE U POSLOVNOJ STATISTICI

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Vrnjačka Banja, 18.06.2015.

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Vrnjačka Banja, 02.12.2015.

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Vrnjačka Banja, 09.12.2015.

ФАКУЛТЕТ ЗА ХОТЕЛИЈЕРСТВО И ТУРИЗАМ У ВРЊАЧКОЈ БАЊИ

УНИВЕРЗИТЕТ У КРАГУЈЕВЦУ

ИЗДАЈЕ

СЕРТИФИКАТ

којим се потврђује да је

Марија Мандарић

похађао-ла и успешно савладао-ла обуку на тему

„Примена информационих технологија у пословној статистици"

у оквиру ТЕМПУС пројекта „Модернизација и хармонизација студија туризма у Србији" на Факултету за хотелијерство и туризам у Врњачкој Бањи.

У Врњачкој Бањи,
09.12.2015.године

Обуку реализовао

проф. др Небојша Здравковић

Контакт особа на пројекту
МХТПС

доц. др Марија Мандарић

MODERNIZATION AND HARMONIZATION OF TOURISM STUDY PROGRAMMES IN SERBIA

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European Commission
TEMPUS

Vrnjačka Banja, 10.12.2015.