

Field name	Description
University	"Constantin Brâncuși" University of Târgu -Jiu
Faculty	Faculty of Medical and Behaviour Sciences
Departament	Health and Motricity
Faculty position	13
Rank	Associate professor
Disciplines	➤ Elements of statistics applied in Phsysical education and sport ➤ Medical informatics. Biostatistics ➤ Mathematics and Medical Informatics ➤ Medical Statistics ➤ Biostatistics
Scientific field	CYBERNETICS AND STATISTICS
The description of the academic position	Post Associate Professor position 13, Department "Health and Motricity"/ Faculty of Medical and Behavioral Sciences All the disciplines in the job structure are found in the curricula of the undergraduate study programs within the faculty. The position also includes, in addition to teaching activities and consultation activities in the disciplines included in the structure of the position put up for competition. Given the standards of the A.R.A.C.I.S. on the ratio of students / teachers, the achievement of the objectives of the development plan of the faculty, as well as the scientific value of the tenured teachers of the institution in the total number of teachers in the teaching staff positions, it is necessary to compete for the position of associate professor, position 13 . Also, the disciplines in the structure of the mentioned position are fundamental disciplines for the career training of future graduates of undergraduate and master's degree programs, this being another reason why it is necessary that the teaching and practical activities be carried out by a tenured teacher. of the institution, well prepared, both from the didactic point of view and of the scientific research. The post is put up for competition for an indefinite period.
Academic duties	Didactic norm (job disciplines): Elements of statistics applied in PES- 2 hours of course; 2 hours of seminar. Medical informatics. Biostatistics - 1 hour of course; 2 hours of seminar. Mathematics and Medical Informatics - 2 hours of course; 1 hour of seminar. Medical Statistics - 1 hour course; 1 hour of seminar. Biostatistics - 2 hours of course; 2 hours of seminar Evaluation activities – 0,5 hours; Consultations - 2 hours;

	Research activities - according to the Law no. 199/2023, with subsequent amendments and completions and the job description, which will be prepared as an annex to the employment contract.
Wage	8631 lei
Date of publishing the announcement in the official gazette	29.11.2023
Starting and final dates of the registration	29.11.2023– 16.01.2024
Date, day of week, time support of the lecture	01.02.2024, 10 o'clock.
Place supporting of the lecture	Faculty of Medical and Behaviour Sciences, no.4, Str. Tineretului, Târgu-Jiu
The data for the competition tests, including lectures, courses, etc.	01.02.2024, 10 o'clock.
Date of exam results communication	01.02.2024
Starting and final dates for appealing the exam results	02.02.2024 – 06.02.2024
Theme samples contest	Discipline: I. Elements of statistics applied in PES TOPICS 1. Methods. Results Presentation of results. Statistical processing of results. Interpretation of results. 2. Variational and covariate methods. ANOVA method. 3. Theoretical aspects of the practical statistical tool. 4. How statistical reasoning is practically applied. 5. Characterization of the results by the usual statistical parameters. 6. Statistical parameters of synthesis. 7. Checking the normality of data distribution. 8. Statistical parameters of analysis. 9. The "Chi square" test (χ^2). Student Test ("t") 10. Statistical correlation. Regression. BIBLIOGRAPHY 1. Gagea, A., Methodology of scientific research in physical education and sports, Publishing House of the "Romania of Tomorrow" Foundation, Bucharest, 1999. 2. Gagea, A., Computerized Statistics in Physical Education and Sports, Ecological Publishing House, Bucharest, 2000. 3. Howitt, D., Introduction to SPSS for psychology, Polirom Publishing House, 2006. 4. Raynald Levesque and SPSS Inc. - Programming and Data Management for SPSS 16.0, A Guide for SPSS and SAS® Users, 2008 Discipline: II. Medical informatics. Biostatistics TOPIC 1. Informatics-generalities. Medical informatics. The objectives of medical informatics. Data, information, knowledge. The amount of information. Commonly used computer terms. 2. Data collection and processing. Collection mode, collection types (representative sample type, exposed-nonexposed type, case-control

type). Database management systems. Microsoft Access application.

3. Creating the structure of a database. Data collection and presentation: MS Access, MS Excel.
4. Presentation of the first results. Analysis and interpretation of results. Elements of biostatistics.
5. Elements of descriptive statistics. Discrete and continuous distributions. Binomial distribution. Normal distribution. Distributions χ^2 , Fisher, Student. Types of variables (qualitative, quantitative, survival). Random variables, mean and dispersion.
6. Statistical methods used by types of clinical trials. Risk factors.
7. Tests on binomial distribution, χ^2 test, RxC tables, homogeneity testing.

BIBLIOGRAPHY

1. Bland, M., *An Introduction to Medical Statistics*, Oxford, University Press, 2015, ISBN: 9780199589920.
2. Panaitescu, E., *Linear regression models with applications in biostatistics*, University of Bucharest Publishing House, 2007.
3. Vertan, C., *Image Processing and Analysis* ", Ed. Printech, Bucharest, 1999, (http://alpha.imag.pub.ro/ro/cursuri/archive/carte_pai.pdf).
4. Vertan C., Ciuc, M., *Fundamental techniques for image processing and analysis*, Ed. MatrixROM, Bucharest, 2007.
5. Iliuta, L., Rac-Albu, M., Poenaru, E., Panaitescu, E., *Medical informatics for students*, "Carol Davila" University Publishing House, 2013.
6. Panaitescu, E., Iliuta, L., Rac-Albu, M., Poenaru, E., *Biostatistics for students*, "Carol Davila" University Publishing House, 2013.
7. Tigan, St., Achimas, A., Drugan, T., *Course in Computer Science and Medical Statistics*, Srima Publishing House, 2001.

III. Mathematics and Medical Informatics

TOPIC

1. Introductory notions about functions. Monotonous, even, odd, surjective, bijective functions. Module function, grade II function. Mathematical induction. Progress.
2. Strings. Limits of functions. Continuous functions. Derivable functions. Vertical and horizontal asymptotes.
3. Primitives. Differential equations. Hyperbole. Applications of elementary functions. Linear function. The affine function. Linear interpolation.
4. Polynomial functions. Polynomial interpolation. Radical function of order n. Rational functions. Simple and general homographic functions and their graphs.
5. Exponential functions. Exponential monomials. Logarithmic functions. Approximate calculation, generalities, rules. Graphic calculation, generalities.
6. Operating systems, their basic functions, basic elements, files, directories. Microsoft Windows. Operating elements in Windows. Windows Explorer.
7. Spreadsheet programs. MS Excel

BIBLIOGRAPHY

1. Năstăsescu, C., Niță, C., Stănescu, I. , *Maths. Elements of higher algebra*, 11th grade textbook, Didactic and Pedagogical Publishing House, Bucharest, 1993.

	2. <i>Velea, Șt., Nomographic calculation in medical and pharmaceutical practice, Medical Publishing House, Bucharest, 1966.</i> 3. <i>Vernic, C.V., Interpretive mathematics - course, Eurobit Publishing House, Timișoara, 2003.</i> 4. <i>Udriște, C., Tomuleanu V., Analytical Geometry, Textbook for the 11th grade, Didactic and Pedagogical Publishing House, Bucharest, 1985.</i> 5. <i>Aramă, O., Applications of mathematics in pharmacy and medicine I, Dacia Publishing House, Cluj-Napoca, 1987.</i> IV. Medical Statistics TOPIC 1. <i>Introduction to medical statistics: basic concepts of biostatistics, variables. Statistical parameters: Central trend indicators. Dispersion indicators.</i> 2. <i>Means of power: Moments. Centered moments. Asymmetry. The excess. Distributions: Distribution function. Usual distribution functions. Distribution function. Normalized Gaussian distribution.</i> 3. <i>Statistical estimation: Notion of estimator, estimation of the average population for large and small samples, estimation of percentages, estimation of differences, calculation of sample size. Statistical tests: statistically significant and insignificant differences.</i> 4. <i>Statistical hypotheses: zero hypothesis, alternative hypotheses, significance threshold, confidence level. Stages of applying the statistical test. Erori.</i> 5. <i>Characteristics of statistical tests: confidence level, test strength. Parametric and non-parametric tests. Classification of statistical tests.</i> 6. <i>Usual tests in statistics: t test, Mann-Whitney, ANOVA type, Fischer-Snedecor test, Pearson.</i> 7. <i>Correlation and regression: dependence relation, linear correlation. Significance of the correlation coefficient. Regression line.</i> BIBLIOGRAPHY 1. <i>Machinery, D., Campbell, M.J., Walters, S.J., Medical Statistics, Fourth Edition, John Wiley & Sons Ltd, The Atrium, Southern Gate, Chichester, West Sussex PO19 8SQ, England, 2007.</i> 2. <i>Drugan, T., Achimaș, A., Țigan, Ș., Biostatistics, SRIMA Cluj-Napoca, 2005.</i> 3. <i>Baccalaureate, V., Sabău, M., Mărușteri, M., Baccalaureate A., Methodology of medical scientific research, Univ. Press, Tg. Mureș, 2009.</i> 1. <i>Mărușteri, Șt.M., Fundamental notions of biostatistics: course notes, Târgu-Mureș: University Press, 2006.</i>
Description of the competition procedure	The procedure will be in compliance with the Law no. 199/2023, with the subsequent modifications and completions, the H.G. Ministry of National Education no. 457/04.05.2011, H.G. 883/2018 and with the „Methodology of competition for filling teaching positions and research positions available in University "Constantin Brâncuși" from Târgu-Jiu”, approved in the meetings

of the Senate of the University "Constantin Brâncuși" from Târgu-Jiu, in date 27.10.2022.

The competition file constituted by the candidate, together with the electronic support, which contains the scanned file, is submitted with registration number to the address of the higher education institution specified on the competition website, directly or through postal services or courier to confirm receipt. The competition file is sent to the members of the competition commission starting with the closing date of the submission process of the competition files, but not later than 5 working days before the first test of the competition. The submission of the file, in electronic format, submitted by the candidates, after multiplying in 5 copies, is done by the dean of the faculty. The file in printed format, submitted by the candidate, will be sent to the chairman of the commission. The competition commission evaluates the candidate from the perspective of fulfilling the minimum standards specific to the position as well as verifying the following aspects: the relevance and impact of the scientific results of the candidate; the candidate's ability to guide students or young researchers; the candidate's teaching skills; the candidate's ability to transfer his/her knowledge and results to the economic or social environment or to popularize his/her own scientific results; the candidate's ability to work in a team and the efficiency of his scientific collaborations; the candidate's ability to lead research and development projects; the professional experience of the candidate in institutions other than the competition organizing institution; teaching and research career development proposal.

The competition committee decides the hierarchy of candidates and nominates the candidate with the best results. The chairman of the competition committee draws up a report on the competition, based on the assessment reports drawn up by each member of the competition committee and in compliance with the hierarchy of candidates decided by the committee. The report on the competition is approved by decision of the competition committee and is signed by each member of the competition committee and by the chairman of the committee. The president of the competition commission submits the competition report approved by decision of the commission, the appreciation reports and the original file submitted by the candidate to the Faculty Council. The competition files, including the report on the competition, are submitted to the dean of the faculty, or to the responsible vice-dean, who organizes their discussion in the Faculty Council and ensures the conditions for the consultation of the competition materials by the members of the Council. The faculty council analyzes the observance of the competition commission procedures and approves or not the report on the

	competition. The hierarchy of candidates established by the competition committee cannot be modified by the faculty council. The competition files approved by the Legal Department and by the Board of Directors are sent to the University Senate in order to validate the results of the competition. Appeals can be filed exclusively for non-compliance with legal procedures. The appeal is formulated in writing, is registered at the UCB registry and is resolved by the appeals commission. The appeal can also be sent online to mail.utgjiu.ro under the conditions provided by art. 25. Alin (5). The result of the contest is published on the web page of the contest, within 2 working days from its completion.
Documents List	In order to register for the competition for a teaching position, the candidate prepares a file containing the following documents: A.1. The application to register for the competition, signed by the candidate, which includes a self-responsible declaration regarding the veracity of the information presented in the file. A.2. Proposal for developing the candidate's career, both from a didactic point of view and from the point of view of scientific research activities. The proposal is written by the candidate and contains a maximum of 10 pages. A.3. Curriculum vitae of the candidate, in original signed by the candidate on each page. Curriculum vitae must include: -information about studies completed and diplomas obtained; -information about professional experience and relevant jobs; -information about the research and development projects he led as project director or in which he was active as a member, indicating himself for each funding source; -information about awards or other recognition of the candidate's scientific contributions; -other relevant information. A.4. Candidate's list of works in printed format (in original, signed on each page) The candidate's full list of works will be structured as follows: the list of a maximum of 10 works considered by the candidate to be the most relevant for their own professional achievements, which are also included in electronic format in the file and which can also be found in the other categories of works provided for in this article; -doctoral thesis or theses; -books and book chapters; -articles / studies, published in journals from the main international scientific stream; -publications in extenso, appearing in papers of the main international specialized conferences; -contract / grant-based research-development-innovation projects that he led as project director or in which he was active as a member, indicating for each funding source; -patents and other industrial property titles;

-other scientific works and contributions or, as the case may be, in the field of artistic creation / sports performance.

It is recommended to mention all useful information for identifying the respective publication, such as: title of the journal (including ISSN), rated (Impact Factor for the last year), volume, page, name and place of publishing house, hyperlink indexed journal WOS, hyperlink indexed work WOS (including the WOS code), BDI indexed journal hyperlink, BDI indexed paper hyperlink indicating the respective Databases, etc. This information is absolutely necessary for the works selected by the candidate in point (a) for teaching positions and those that support the candidate's fulfillment of the minimum, UCB and national standards, specific to each position.

A.5. The verification sheet for meeting the specific standards of the position, completed and signed by the candidate, in printed format (in the original, signed on each page). The verification sheets for university lecturer positions are prepared by each candidate according to the standards provided in Law no. 199/2023, with subsequent amendments and additions for each individual field, to which are added, as appropriate, the additional standards established by the council of each faculty.

A.6. Documents certifying the possession of the doctor's degree: the copy, in accordance with the original, of the doctor's degree and, if the original doctor's degree is not recognized in Romania, the certificate of recognition/equivalence thereof in a legalized copy, or the copy according to the order of minister confirming the granting of the doctorate title;

A.7. The summary of the doctoral thesis in Romanian and in a language of international circulation (maximum one page for each language).

A.8. Other diplomas certifying the candidate's studies:

For all teaching positions: copies of other diplomas attesting to the candidate's studies (baccalaureate diploma, bachelor's degree, master's degree/in-depth studies, the certificate attesting the psycho-pedagogical training) or, if the original diplomas are not recognized in Romania, the recognition or equivalence certificates of to them; copies of other diplomas attesting to the candidate's studies. The copies are signed by the candidate for certification "in accordance with the original".

A.9. Transcripts, diploma supplements or school records issued for each study cycle.

A.10. Copy of the identity card or, if the candidate does not have an identity card, of the passport or another identity document drawn up for an equivalent purpose to the identity card or passport; Copies certified by candidates "in accordance with the original" of the documents certifying the name change, if applicable, the marriage certificate or proof of the name change.

A.11. Declaration on the candidate's own responsibility that he is not in any situation of incompatibility provided for in Law no. 199/2023 with subsequent amendments and additions;

	A.12. Medical certificate showing that he is fit to carry out teaching activities. A.13. List of referees with their contact details, for university lecturer positions at least 3 names and contact addresses of personalities in the respective field, from the country or abroad, external to the higher education institution whose position is put up for competition, who agreed to draft letters of recommendation regarding the candidate's professional qualities, at request of the competition commission; A.14. Declaration of assumption of responsibility, in original (holograph) signed by the candidate, for all competitive positions: The declaration must state the correctness of the data in the file and the fact that they refer to their own activities and achievements, otherwise the candidate bears the consequences of false declarations, in accordance with the legislation in force. A.15. The folder containing a maximum of 10 of the works considered to be the most significant of the candidate, in scanned form on electronic media (CD/DVD/STICK), and the books and book chapters will be submitted in physical format. In addition, the electronic support will also include the list of works of the candidate cf. A4, in Word format. A.16. The document for payment of the competition registration fee. A.17. Legalized copies of the documents certifying the possession of the respective medical titles, in the case of candidates registered for teaching positions in higher medical education. A.18. Other documents The file will include a cover page and opis. A CD/DVD/STICK, or other electronic format, with all its contents scanned, including the folder with the 10 significant papers, is also attached to the exam file, in order to send it to the exam committee. For all teaching positions, it is mandatory to submit the Certificate attesting the psycho-pedagogical training to the registration file.
Address where the competition file will be sent	„Constantin Brâncuși” University of Târgu-Jiu, no. 4, Tineretului Street, Târgu-Jiu, Gorj
Commission	
Methodology	Upload files with doc, docx or PDF extension. The maximum supported file size is 10MB.

Dean,

Professor PhD. Monica Delia Bică

Head of department,

Assoc. prof. PhD. Daniel Iacob Chivu