



AVICENNA
Batumi Medical University

„Approved by“

*the Order of Rector of Avicenna - Batumi Medical University,
LLC on October 12, 2022. Appendix N1 of the Minutes №01-09/18*

Avicenna - Batumi Medical University
Procedures for Planning, Implementation and
Evaluation of the Scientific-Research Component
within the Framework of
One-cycle Educational Program of Medicine

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Article 1. General Provisions

- 1.1. The present procedures set the rules of Planning, implementation and evaluation of **Scientific Component** (Scientific-research paper/project) of the one-cycle medical educational program – “Medical Doctor” (hereinafter referred to as “the Program”) for “Avicenna - Batumi Medical University” LLC (hereinafter referred to as “Avicenna” or “University”).
- 1.2. Performance of scientific-research paper/project is a compulsory component of the one-cycle Medical Educational Program and aims to develop the scientific-research skills among the students, include the teaching of basic principles of research planning, organization, management, analysis of outcomes, critical evaluation of scientific information and presentation of the outcomes.
- 1.3. All other additional requirements to the scientific-research paper/project are described in the syllabus of the scientific-research paper.
- 1.4. These procedures aim at promotion of academic integrity, protection of intellectual property and prevention of plagiarism.
- 1.5. The effect of the procedures applies to those students who write the scientific-research paper/project in the framework of the one-cycle educational program of Medicine.
- 1.6. The effect of these procedures may be extended to the scientific-research paper/project being prepared by the student beyond the one-cycle educational program of Medicine.

Article 2. The Essence of Scientific-Research Component

- 2.1. The scientific-research component is integrated into the one-cycle Medical Educational Program – “Medical Doctor” as a mandatory component and envisages the student to plan, organize, manage the scientific research/project, review the relevant scientific literature, analyse data, critically evaluate scientific information and represent the outcomes obtained.
- 2.2. One-cycle educational program of Medicine – “Medical Doctor” provides for teaching the scientific skills and engagement of students into the research from its initial stage (the first-second years-students are expected to do the following learning courses: “Academic writing”; “Research Methodology” and “Biostatistics”, students will also be able to participate into the Students’ Scientific Conferences).

Article 3. Planning and Implementation of the Scientific-Research Component

- 3.1. The scientific-research paper/project shall comply with the research priorities set by the University.
- 3.2. The scientific-research paper/project shall be conducted under the supervision of a scientific advisor/supervisor (An academic or visiting staff of the university). Each scientific advisor can supervise no more than 2 scientific papers.
- 3.3. The topic of the scientific-research paper/project shall be selected by the student in agreement with the scientific advisor, that is confirmed by the signatures of the advisor and the student on a written application on approval of the topic of the scientific-research paper/project (**Sample – Form N1 of this Procedure**).
- 3.4. The scientific advisor ensures submission of the agreed (with the student(s)) title(s) for the scientific-research paper/project and the research topics for discussion to the school Board Meeting. The School Board discusses the compliance of the scientific-research paper/project to the research priorities of the

University and makes respective decision on approval or rejection of the title and the scientific supervisor of the paper/project.

3.5. In case of approval of the title of the scientific-research paper/project, the resolution of the school board shall reflect the student's and advisor's names, surnames and the title of the work, as well as (if necessary) the amount of funding for the research activities required to conduct the research work (if such activity is financed by the school).

3.6. In case of rejection of the title of the scientific-research paper/project, the resolution of the school board shall provide the reasons to such rejection, which shall derive from one of the following circumstances:

- a) The scientific-research paper/project does not correspond to the research priorities of the University;
- b) The scientific-research paper/project repeats the work/project conducted at the University in the last 3 years;
- c) The scientific-research work/project requires such research, financial or any other resources, which will not or cannot be available for the period of work on the paper;
- d) The qualification and scientific-research experience of the supposed scientific advisor do not correspond to the specific direction of the research;

3.7. In case of rejection of the scientific-research paper/project, the student is entitled to change the title and/or the scientific advisor of the paper and re-submit the topic/research project of the work within the period of time determined by the school board.

3.8. The period for registration of student's paper and advisors/supervisors, as well as re-registration if necessary, shall be determined by the Dean of the Medical School of the University at the beginning of the semester during which the scientific paper is expected to be completed, based on the submission of the head of the program.

3.9. The scientific advisor of the paper shall be obliged to:

- a) provide assistance to the student in drawing up a working plan and in planning-implementation of the research activities;
- b) supervise the process of the scientific work, by providing respective consultations on weekly basis;

3.10. The academic/visiting staff of the University is obliged to evaluate and check the paper/work under his/her supervision and/or the paper which is being carried out within the learning course under his/her guidance and requires citation, in the electronic plagiarism detection system.

3.11. After completion the scientific-research paper/project, the scientific advisor shall prepare a relevant conclusion on the compliance of the work with the established standards (**Sample – Form №2 of this Procedure**).

3.12. If the student violates the paper/project performance plan, the scientific advisor is entitled to deny his/her responsibility as a scientific advisor and address the School Board with the explanatory report card. The School Board shall consider the report card and taking into account the actual circumstances assign a new scientific advisor.

Article 4. Assessment of the Scientific-research Component

- 4.1. The scientific-research component being implemented within the learning course, shall be assessed in line with the rules provided by the syllabus.
- 4.2. An independent scientific-research paper/project completed within the framework of the educational program, subjects to expert review before its public defence /presentation, by the reviewers determined under the legal act of the Rector of Avicenna (**Sample – Form №3 of this document**).
- 4.3. After the scientific-research paper gets positive recommendation, it shall be evaluated by two components – written and oral presentation, in accordance with the criteria set by these procedures.
- 4.4. An independent scientific-research component shall be evaluated by the commission and final result/score is calculated based on the arithmetic average of the sum of points assigned by each member of the commission.
- 4.5. The composition of the Evaluation Committee of the scientific-research paper/project shall be determined by the Dean of Medical School and includes at least five members;
- 4.6. The scientific-research component is assessed according to the following criteria:
- a) the structure of the scientific-research paper;
 - b) the relevance of the research and its practical significance
 - c) the aims and objectives of the research;
 - d) references/used literature;
 - e) the quality of the research performed;
 - f) the author's reasoning;
 - g) conclusions and outcomes;
 - h) standard of academic writing;
 - i) originality of the research.
- 4.7. **Criteria for oral presentation assessment** of the scientific-research paper:
- a) the structure of the presentation and its visualization
 - b) presentation techniques, the ability to justify the relevance of the problem;
 - c) substantiation of novelty, the ability to represent the research outcomes;
 - d) ability to argue, analyse and defend one's own opinions, consistency of reasoning;
- 4.8. The scientific-research paper assessment form is recommended to complete in compliance with the form attached herein (**Sample – Form №5**).
- 4.9. The scientific-research paper presentation assessment form is recommended to complete in compliance with the form attached herein (**Sample – Form №6**).

Article 5. Assessment of the Scientific-research Paper Originality (plagiarism detection)

- 5.1. The scientific-research paper subjects to mandatory check on plagiarism;

- 5.2. The research work shall be checked on plagiarism after the author's application on originality of the paper has been submitted (**Sample – Form №4**).
- 5.3. The scientific-research paper shall be checked in the plagiarism detection electronic system - Turnitin (hereinafter referred to as “anti-plagiarism system”);
- 5.4. One and the same research paper shall be checked for plagiarism no more than twice.
- 5.5. The paper shall be deemed original if (at least) 70% of the test is original;
- 5.6. The following shall not be deemed plagiarism: mentioning of central and local government, names of organizations, normative or legal acts, extracts from the legislative-normative acts, list of used literature, field terms, citations of any text in accordance with the rules prescribed and etc.
- 5.7. If any coincidences are detected by the electronic anti-plagiarism system, the author shall be obliged to revise the paper. Re-checking of the paper shall be allowed no later than within one month period.
- 5.8. If the paper does not meet the established requirements for the time it is re-checked, the author shall not have a right to defend/present publicly/publish his/her paper and will be subject to disciplinary proceedings/action in accordance with the University Regulations (in line with “The Rules of compliance with the Principles of Academic Integrity” and the internal regulations).
- 5.9. If the scientific-research paper goes beyond the specified criteria, a negative recommendation will be given on its public defend based on the assessment made by the committee.
- 5.10. In case of detection of plagiarism/academic fraud/academic dishonesty and considering the level of violation, the student will be subject to the disciplinary responsibility according to the Internal Regulations of the University, “Rules of compliance with the Principles of Academic Integrity” and/or other effective legal acts of the University;
- 5.11. The conclusion of the scientific supervisor, recording(s) of scanning the paper in the anti-plagiarism system, conclusions of the reviewer and committee and the experts, including the scientific-research paper shall be kept in the student's personal profile.

Article 6. Standard for the Scientific-research Paper

- 6.1. The standard for the scientific-research paper implies the performance and designing of the paper in accordance with the requirements set forth in this Article.
- 6.2. **The structure of the paper** shall consist of three parts: 1. formal part; 2. main/essential part; and 3. Annex. Among them:
- 6.2.1. The formal part of the paper:**
- a) **Title page** (Sample - **Form №7** of these procedures) - The very first page of the scientific-research paper, which contains the title, the names and surnames of the author and scientific supervisor. The Title page shall meet the following formal requirements:

Font	Georgian - Sylfaen English - Times New Roman
Page Layout	A4 format, orientation - portrait
Page margins top and bottom	2 cm
Page margin left	3 cm

Page margin right	1,5 cm
Title of the paper	
Font size	16 (Bold / Ctrl+B)
Title align	(Center / Ctrl+E), 5 lines spacing from the top
Author's name and surname	
Font size	11 (Bold / Ctrl+B)
Text align	(Align Right / Ctrl+R), 3 lines spacing from the title
Supervisor's name and surname	
Font size	11 (Bold / Ctrl+B)
Text align	(Align Right / Ctrl+R), 3 lines spacing from the supervisor's name
Date	
Font size	11 (Bold / Ctrl+B)
Text align	(Align Right / Ctrl+R), 3 lines spacing from the supervisor's name
Name of University	
Font size	11 (Bold / Ctrl+B)
Text align	Center / Ctrl+E , 4 lines spacing from the date
Paper completion date	
Font size	11 (Bold / Ctrl+B)
Text align	Center / Ctrl+E , 1 line spacing from the name of University, 2 lines spacing from the bottom

b) Abstract - is a short summary of the scientific paper, briefly reflecting the topic, subject of the research, aims and objectives, applied research methodology, main findings and conclusions of the scientific-research paper. The abstract shall be represented on a separate page and shall not be broken down into paragraphs, no citations or tables should appear in the text. At the end of the abstract shall be provided the keywords (no more than 4 keywords). The abstract shall meet the following formal requirements:

Volume	300-400
Font	Georgian - Sylfaen English - Times New Roman
Page layout	A4 format, orientation - portrait
Page margins top and bottom	2 cm
Page margin left	3 cm
Page margin right	1,5 cm
Title font size	14, (Bold / Ctrl+B)
Text font size	11, (Justify – Ctrl+J)

c) Table of contents - Table of contents shall list a chapter, a sub-chapter and bibliography in an orderly fashion. Follow the instruction to insert the table of contents: **References** □ **Table of Contents** □ **Automatic Table** □ **“Contents” and/or automatic “Table of Content”**.

6.2.2. The major /essential part of the paper consists of chapters and sub-chapters of different levels. The structure of the paper shall clearly represent the following components: 1. Introduction; 2. Literature Review; 3. Methodology and research description; 4. Research outcomes, reasoning and analysis; 5. Conclusions/recommendations; 6. Bibliography. Each component shall be divided under the appropriate headings/sub-headings and shall contain information relevant to its headings/sub-headings, in particular:

a) Introduction - the introduction shall set up the research topics, relevance and its practical significance, research aims and objectives, hypothesis. All the considerations provided in the introduction shall be concise and informative.

b) Scientific literature review and theoretical context of the research - this chapter shall be devoted to the review of scientific literature, normative documentation and the existing practices related to the research question/topic;

c) Methodology and research description - it is important to describe the applied research methodology, justify the research relevance and provide the details of the procedures, as well as to explain the relevance of the given research methodology to the aims and objectives set;

d) Research outcomes - the research outcomes shall be based on the descriptive part of the research. The research outcomes shall be outlined and formulated free of critical discussion;

e) Reasoning and scientific findings - this part of the paper shall be a logical continuation of the previous one. It is important for the critical analysis and evaluation of the material reviewed by the author and the outcomes of the research;

f) Conclusions and recommendations – this part is the logical final chapter of the scientific paper. In this part, the author shall wrap up the research outcomes presented in the paper and make/offer some recommendations;

g) Bibliography - used literature/sources shall be listed in alphabetical order – first, the literature in Georgian language, then in foreign languages.

6.2.3. Research Paper Appendices - the paper may have some supplementary materials such as documents, projects, models, samples and etc. developed as a result of the research, addition of which to the body text might disrupt its structural integrity. This part of appendices shall not be included/counted in the total number of pages.

6.3. The text of the scientific-research paper shall meet the following formal requirements:

Volume	25 pages at least
Page layout	A4 format, orientation - portrait
Page margins top and bottom	2 cm
Page margin left	3 cm
Page margin right	1,5 cm
Font	Georgian - Sylfaen English - Times New Roman
Text font size	11, (Justify – Ctrl+J)
Headings and sub-headings font sizes	14-12, (Bold / Ctrl+B)
Line spacing	1,5
Page number	All pages numbered in an orderly fashion except the title page. Page numbers position - at the bottom of the page - in the center
Paragraphs	line spacing - single
Citations	In the body text, font – text sized. APA – (American Psychological Association) – style; official web-site: https://apastyle.apa.org/
Bibliography (List of used literature)	at the end of the text, automatic, in alphabetical order – first publications in Georgian, then – in foreign languages

6.4. The illustrative/visual materials used in the scientific-research paper shall meet the following requirements:

a) The content, position and format of the illustrative materials are determined by the specifics of the paper and may be included into the body text as well as on the separate page or as appendices. In case of need, a landscape orientation of the page is allowed with the same page margins and number position as for the portrait orientation of the page;

- b) In case of using the tables and drawings from some other resources the copyrights shall be respected;
- c) Colored illustrations are allowed;
- d) Titles shall be given at the top or the bottom of the respective illustration/table, on the right (**Align Right / Ctrl+R**) ;
- e) The illustrations included into the body text shall be numbered in an orderly fashion according to the type of illustration (table, scheme, diagram, picture and etc.);
- f) Font and size of the illustration title shall match the font and size of the body text, bold font is allowed (**Bold / Ctrl+B**);

Article 7. Final Provisions

- 7.1.** The present procedures are approved by the Order of the Rector.
- 7.2.** After the formation of the Academic Council of Avicenna, any amendments and/or additions to these procedures or any new edition of this document shall be approved by the Academic Council of the University, in accordance with the Statute and the regulations of the University and the legislation of Georgia.



Application on approval of the Scientific-Research Paper/Project

Medical School, one-cycle educational program of
Medicine

Student's name and surname: _____

Please consider to approve the following title to the scientific-research paper/project:

(Topic/Title)

Author's signature

Date:

III

I do agree to provide scientific supervision

Name, surname, academic position/visiting staff status of the
candidate for scientific supervision

Signature



Scientific Supervisor's Conclusion on the Compliance of the Scientific- Research paper/project

(Name and surname of the student – author of the paper)

The Scientific-research paper/project _____

has been completed in accordance with the rules set by Avicenna – Batumi Medical University.

The paper has been finished and I consider it possible to proceed with the further procedure.

Name, Surname: _____

**Academic position /visiting staff
status:** _____

Signature: _____

Date: _____



Review of Scientific-Research Paper

Medical School Student,

**Name and Surname of the author of
paper:** _____

Title of the scientific-research paper: _____

Name and Surname of the reviewer: _____

Position: _____

Assessment of the Scientific-research paper

Assessment criteria	Unsatisfactory	Partly satisfactory	Satisfactory
<p>Abstract</p> <p>The abstract is concise, the paper is briefly described, the relevance and significance of the topic, research objectives, research methodology and research outcomes are highlighted</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note:			
<p>Structure of the paper</p> <p>The paper is logically structured, chapters and paragraphs are logically linked to each other.</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note:			
<p>Relevance of the research</p> <p>Research relevance is justified in the paper, research problem highlighted, research aims and objectives defined</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note:			
<p>Overview of the scientific literature</p> <p>The paper represents wide overview of the relevant scientific literature</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note:			

Research Methodology			
The work describes the research procedure and analyzes the research outcomes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note:			
Conclusion			
The conclusion clearly summarizes the outcomes of the conducted research and corresponds to the research aims and objectives	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note:			
Recommendations			
The recommendations represented in the paper determines the area of research outcomes and evaluates it effectiveness	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note:			
Bibliography:			
The rules for referencing the bibliography established by the University are respected.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note:			
Research ethics			
No plagiarism is detected in the paper.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Note:			

Reviewer's Conclusion:

<i>All criteria have been assessed as "Satisfactory"</i>	
The research work fully meets the scientific-research paper/project requirements – <u>I consider it possible to proceed with the further procedure.</u>	<input type="checkbox"/>
<i>3-5 criteria have been assessed as "Unsatisfactory"</i>	
The work partly meets the scientific-research paper/project requirements – <u>I consider it possible to proceed with the further procedure after correcting/considering the specified remarks</u>	<input type="checkbox"/>
<i>5 or more criteria have been assessed as "Unsatisfactory"</i>	
The work does not meet the scientific-research paper/project requirements, requires major revision – <u>I do not consider it possible to proceed with the further procedure.</u>	<input type="checkbox"/>

(Reviewer's signature)

Date:



Author's statement on the originality of the scientific-research paper

(Author's name and surname)

I declare my research work on the topic

to be original, completed and represented in line with “The Rules of compliance with the Principles of Academic Integrity” and ethical principles established in Avicenna; all the opinions, statements and research outcomes belonging to other authors and appearing in this research work have been referenced in compliance with the established rule.

I do realize that if the fact of academic dishonesty on my part is revealed, my disciplinary responsibility may occur.

Signature: _____

Date: _____



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The Scientific-research component Assessment Form for the Committee Member

The Author of the paper:

The scientific supervisor:

Title of the Paper:

Assessment criteria	Highest point	Assessment point	Note
The structure of the scientific-research paper	10		
The relevance of the research and practical significance	15		
Research aims and objective	10		
Used literature	5		
The quality of the conducted research	10		
Author's reasoning	5		
Conclusions and outcomes	10		
Standard of academic writing	5		
The originality of the work	10		
Total:	80		

**Member of
Committee:**

Signature

Date:



Avicenna – Batumi Medical University

**The Scientific-research Component Presentation Assessment Form for the Committee
Member**

Name and Surname of the author of paper, the student
of Medical School, one-cycle educational program of
Medicine:

The scientific supervisor:

Title of the scientific work:

Assessment criteria	Highest point	Assessment point	Note
The structure of presentation and its visualization	5		
Presentation techniques, the ability to represent the relevance of the problem	5		
Substantiation of novelty, the ability to represent the research outcomes	5		
Ability to argue, analyse and defend one's own opinions, consistency of reasoning	5		
Total:	20		

Member of
Committee:

Signature:

Date:



The Title of the Scientific-Research Paper

Name and Surname

of the Author of paper,

the student of Medical School,

one-cycle educational program of Medicine

Scientific Supervisor: Name and Surname

Academic position/Status of the visiting staff

Date: --- -----

Avicenna – Batumi Medical University

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