

# Textbooks and learning materials: GeSt core resources

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# 3.1 Teaching materials for students

*Start:* 15 February, 2016

*Finish:* 15 August, 2018

*Languages:*

Arabic, French, Ukrainian, English

- 2 textbooks on 2 new courses , each 150 copies // **PNU** and **USMBA** are responsible;
- 2 manuals on 2 new courses, each 150 copies // **US** and **NMGUSU** are responsible;
- 4 tutorials on 4 new courses, each 150 copies // **KSPU**, **NMGUSU**, **US**, **USMS** are responsible;
- 3 guides on educational practice, manufacturing practice, diploma designing & final exam, each 100 copies // **USMBA**, **UMA**, **PNU** are responsible.



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# 3.2 Training materials for teachers

*Start:* 15 April, 2016

*Finish:* 15 October, 2018

*Languages:*

Arabic, French, Ukrainian, English

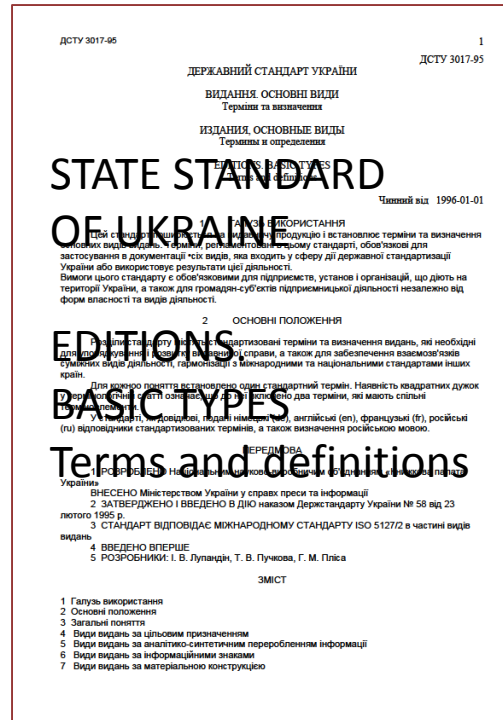
- 3 national Training complexes in MA, TN and UA, each 200 copies // **USMS**, **UMA**, **PNU** are responsible, HEIs from **MA**, **TN** and **UA** have to participate in there preparation;
- 1 Inter-regional Training complex, 300 copies // **KSPU** is responsible, all HEIs have to participate in its preparation.



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# Documents with requirements and recommendations for educational literature



DEFINITIONS  
of training methodological  
issues  
and requirements to them  
(Ukraine)

# Types of educational publications

**Textbook** - educational publication containing systematic presentation of discipline, corresponds to the program of this discipline, officially approved as a type of publication.

**Tutorial** - educational publications, in part or completely replaces or complements manual and officially approved as a type of publication.

**Manual** - publications designed to help in practice or in learning discipline.

**Practical guide** (guide-book) - vocational-practical publication designed for practitioners to master knowledge and skills in the performance of any work, operation process.

**Guidance manual** (methods handbook) - educative publication on teaching methods of a discipline (its section, parts) or methods of education.



# Structure of textbooks / tutorials / manuals

- Content (for parts);
- Introduction (or preface);
- Main Text;
- Questions for self-tests;
- Mandatory and optional tasks examples;
- Reference information data to solve problems (tables, diagrams, etc.);
- The device for orientation in the book (subject, name signs).

# Volume

- **Textbook**

$$V_{\text{textbook}} = 0,14 * (Tc + Tiw)$$

- **Tutorials & Manuals**

$$V_{\text{tutorial}} = V_{\text{manual}} = C * 0,14 * (Tc + Tiw),$$

- V - volume of textbook/tutorial/manual in author sheets (40000 symbols);
- C - coefficient of tutorial/manual ( $0.5 < C < 0.9$ );
- 0.14 is a convenient for student volume of text-information in author sheets per one hour of the material (author sheets / hours);
- Tc - number of hours in the curriculum, discipline allotted for classes;
- Tiw - number of hours in the curriculum aside for independent/individual work.

*“DEFINITIONS of training methodological issues and requirements to them (Ukraine)”*

**Example:** if the discipline according the curriculum is designed for 72 hours (2 credits credits) = 36 for classroom and 36 for independent work. Then the volume textbook =  $0.14 * 72 = 10.08$  author sheets = 403,200 characters, or 224 pages (60 characters per line, 30 lines per page).

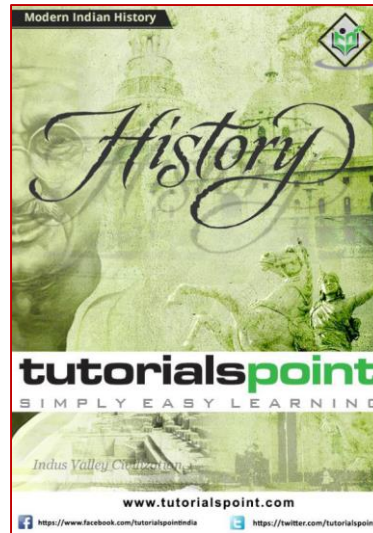
**BUT** now credit in Ukraine = 30 hours, so, the same textbook volume will be = 8,4 a.sh.  
=336,000 characters, or 187 pages

# Examples (textbook, tutorial, manual, guide)

textbook

Single and Multivariable  
Calculus  
*Early Transcendentals*

textbook



Tutorial

Manual

Guide



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# Training Complexes

## Moroccan, Tunisian, Ukrainian, and Inter-regional

A big books with important theoretical and practical results of the project:

- Introduction
- Curriculum
- Syllabuses
- Some scientific articles
- Some methodical materials
- Interesting facts
- Photographies



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# Example of final Training complex

## TEMPUS-project “Education measurements adapted to EU standards”

### NEW TEACHING PROGRAMS ON EDUCATIONAL MEASUREMENTS AND TEMPUS PROJECT “EDUCATIONAL MEASUREMENTS ADAPTED TO EU STANDARDS”

*Silvestrov D.S., Borysenko O.D.*

Tempus Project “Educational Measurements Adapted to EU Standards” is carried out within the fourth stage of the European Tempus Programme (2007 – 2013) which supports the modernization of higher education in the EU’s surrounding area. Tempus promotes institutional cooperation that involves the European Union and Partner Countries and focuses on the reform and modernization of higher education systems in the Partner Countries of Eastern Europe, Central Asia, the Western Balkans and the Mediterranean region.

The Eastern Partnership [1] fosters cooperation between the European Union and six neighbouring countries: Armenia, Azerbaijan, Belarus, Georgia, Moldova and the Ukraine. Heads of government of EU and Eastern Partnership countries and the European Commission have emphasized the importance of increasing the contacts between people in the two regions - particularly at the level of civil society. “People-to-people contacts” has therefore been set as one of the priorities for developing relations between the EU and these six countries. It forms the basis for Platform IV of the Partnership, which aims at target-oriented activities to stimulate open and free discussion around the main areas of cooperation and higher education.

Moreover, “Promoting higher education reform and student mobility” is one of the six priority areas for the EU’s relations with all its neighbouring countries. So while Eastern Partnership countries are at the centre of the European Union’s efforts to support democratic and growth-oriented reforms around the world, they are also the EU’s privileged partners for international academic cooperation through the improvement of education systems and increased mobility of students and staff.

The specific objectives of Tempus are following [2]:

- To promote the reform and modernization of higher education in the Partner Countries;
- To enhance the quality and relevance of higher education to the world of work and society in the Partner Countries;

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### Розділ 1. Математико-статистичні методи освітніх вимірювань

#### МОДЕЛІ ТА МЕТОДИ СТАТИСТИЧНОЇ ОБРОБКИ РЕЗУЛЬТАТІВ ТЕСТУВАННЯ: ОГЛЯД МОНОГРАФІЙ ТА ПІДРУЧНИКІВ

*Авраменко О.В.*

**Вступ.** Стрімкий розвиток протягом останніх років в Україні практики застосування різноманітних технологій тестування у освіті, психології, медицині та інших галузях діяльності людини викликає необхідність ознайомлення галузевих фахівців з основами математичного моделювання та параметризації тестів та сучасними методами визначення ідеальних параметрів.

Наведемо деякі фундаментальні праці, в яких наведені загальні поняття теорії освітніх вимірювань, оскільки вони ознайомлюють дослідників з проблематикою освітніх вимірювань, термінологією, сучасними методами, практичними рекомендаціями, тощо.

Видання R.Brennan «Educational Measurement» [27], яке називають Біблією у галузі освітніх вимірювань, було опубліковано Американською радою з освіти (ACE) в 1951 році. Метою четвертого видання є оновлення новими поколіннями дослідників та практиків та розширення його тематики, представленої у трьох попередніх виданнях. Редаговане Робертом Бреннаном під спільною егідою Американської ради з освіти (ACE) та Національної ради з вимірювання в галузі освіти четверте видання надає увагу поглибленому аналізу освітніх вимірювань. Тематику можна розділити на три предметні області: теорія і загальні принципи, конструювання, адміністрування та

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<http://moodle.ndu.edu.ua/mod/page/view.php?id=234&lang=en>



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# WP.3 Core resources

*UMA is a leader, KSPU is a co-leader*

- 3.1 Teaching materials for students  
(*activity 3.1 Creating of materials for students*)
- 3.2 Training materials for teachers  
(*activity 3.2 Creating of materials for teachers*)
- 3.3 Staff skills in Partner countries HEIs  
(*activity 3.3 Improvement of staff skills*)



# MA Partners

- **USMBA (Fez)**
  - 1 textbook on new course (150 copies);
  - 1 guide on educational practice (100 cop.);
- **USMS (Beni Mellal)**
  - 1 tutorial (100 copies);
  - ***National Training complex in Morocco (200 copies)***

# TN Partners

- **US (Sousse)**
  - 1 manual on new course (150 copies);
  - 1 tutorial (100 copies);
- **UMA (Manouba)**
  - 1 guide on manufacturing practice (100 cop.);
  - ***National Training complex in Tunisia (200 copies)***

# UA Partners

- **KSPU**

- 1 tutorial (100 copies);
- **Inter-regional Training complex (300 copies);**

- **NMGUSU**

- 1 manual on new course (150 copies);
- 1 tutorial (100 copies);

- **PNU**

- 1 textbook on new course (150 copies);
- 1 guide on diploma designing & final exam (100 cop.);
- ***National Training complex in Ukraine (200 copies )***

# Mandatory requirements for training materials

All published materials should be peer reviewed.

The materials should be published:

- 1) *in hard copy*
- 2) *in the e-version*
- 3) *posted on the project website*
- 4) *posted on the Education, Audio-visual, Culture, Citizenship and Volunteering (EACCV) Participant Portal*

The subcontracting costs will be used for the publication of these materials.

Proofreading of materials prepared for publication and editing will be done at co-financing of the universities.