

**Institute of Public Health  
Faculty of Health Sciences  
Jagiellonian University  
Medical College**



**Detailed program and plan  
of the full-time studies  
Public Health  
International studies  
second degree**

**EUROPUBHEALTH  
Specialization  
Health Economics  
and Governance of Health System**

ACADEMIC YEAR 2016/2017

**Institute of Public Health Directory:**

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Assoc. prof. Christoph Sowada – Deputy Director

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Epidemiology and Population Studies Department, Head: prof. Andrzej Pająk

Health Policy and Management Department, Head: prof. Włodzimierz Cezary Włodarczyk

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**Responsibility for subject's description and teaching content is borne  
by teachers conducting each subject.**

## **TEACHING PROGRAM ON HIGHER EDUCATION LEVEL**

### **The European Public Health Master (Europubhealth) Classes conducted in 2016/2017 academic years**

**SPECIALIZATION:** Health Economics and Governance of Health System

Program of the second year in the **Europubhealth** structure for international students (it does not regard Polish students choosing this specialization) conducted by the Institute of Public Health Jagiellonian University Medical College.

For the first year of the Europubhealth program students – basic acquisitions on public health – being conducted at University of Sheffield (Sheffield, Great Britain) or in Andalusian School of Public Health, University of Granada (Granada, Spain).

#### **I. GENERAL REQUIREMENTS**

Specialization lasts for two semesters. Number of hours of mandatory classes is 230 (it does not include dissertation seminar, practical placement and Integration Module). Minimal number of acquired ECTS is 30. Additional 11 ECTS student gains for 2-months practical placement and 17 ECTS for magister's seminar (master thesis preparation). Students obtain 2 ECTS for Integration Module conducted by French School of Public Health (EHESP in Rennes, France).

#### **II. QUALIFICATIONS OF THE GRADUATE**

The goal of the second level (master) studies is education enabling graduates to undertake below mentioned positions as well as studies for vocational improvement:

- member of health care programs preparation team,
- leader of health care programs executors,
- head of organization and methodical units and health care institutions,
- head of units for prevention and health promotion in health care administration and institutions,
- candidate for post-graduate training in epidemiology, economy, health care management, journalism, pedagogics etc.
- independent and managerial worker in health care administration, governmental and self-governmental institutions, health insurance institutions and non-governmental organizations,
- candidate for third level education (doctoral studies).

#### **III. EDUCATIONAL FRAMEWORK**

Not applicable.

#### **IV. REQUIREMENTS FOR GRADUATION AND OBTAINING PROFESSIONAL TITLE**

The main condition for graduation is to obtain all mandatory credits and passing all examinations for mandatory subjects included in the program, passing practical placement, obtaining in total 120 ECTS, including ECTS obtained during first year of the program in partner university (Sheffield or Granada) and submitting master thesis along with passing master examination.

#### **V. PRACTICAL PLACEMENT**

Practical placement lasts for 2 months. Students obtains 11 ECTS for passing practical placement.

#### **VI. PHYSICAL EDUCATION**

Not applicable.

#### **VII. FOREIGN LANGUAGES**

Not applicable.

#### **VIII. INFORMATION TECHNOLOGIES**

Not applicable.

#### **IX. OTHER REQUIREMENTS**

Not applicable.

**PLAN OF THE HIGHER EDUCATION STUDIES:**  
**Public Health,**  
**Specialization: Health Economics and Governance of Health System**

**I<sup>st</sup> semester**

No	Name of the subject	Class form	M/F	Subject credit form	Number of teaching hours	ECTS
1	Determinants of health and health care expenditures	Seminar	M(g)	Credit mark	20	2
2	Drug economics	Seminar	M(g)	Credit mark	30	4
3	Funding of health system and financial methods	Seminar	M(g)	Credit mark	30	4
4	Governance of health sector	Seminar	M(g)	Credit mark	30	4
5	Economic analysis of health care and public health programmes	Seminar	M(g)	Credit mark	20	3
6	Economic burden of diseases	Seminar	M(g)	Credit mark	25	3
7	Health insurance	Seminar	M(g)	Credit mark	20	3
8	Health technology assessment	Seminar	M(g)	Credit mark	20	3
9	Human resources for health	Seminar	M(g)	Credit mark	20	2
10	Quantitative methods of health care and public health	Seminar	M(g)	Credit mark	15	2

F- facultative, M(g) – mandatory to graduate

Total number of mandatory hours (without self-education): 230

Total number of ECTS: 30

**II<sup>nd</sup> semester**

No	Name of the subject	Class form	M/F	Subject credit form	Number of teaching hours	ECTS
1	Practical placement	Practical	M(g)	Credit mark	160	11
2	Magister's seminar	Seminar/ Self-education	M(g)	Credit mark	8	17
3	Integration Module 2 - Interspecialization - takes place in EHSP in Rennes	Seminar/ Self-education	M(g)	Credit mark	25/25	2

M- mandatory, F- facultative, M(g) – mandatory to graduate

Total number of mandatory hours (without self-education): 193

Total number of ECTS: 30

### Determinants of health and health care expenditures

Faculty	Faculty of Health Sciences
Unit conducting module	Health Economics and Social Security Department
Course unit title	Determinants of health and health care expenditures
Language of instruction	English
Aim of the course	The aim of module is to provide students a knowledge concerning the most important factors influencing the health care expenditures and revenues in general and in his/her country particularly. After completing the module the student should be able to construct a simple actuarial model of the social health insurance expenditure and revenue and to present the main results of predictive analysis in the form of a short report.
Course objectives and learning outcomes	<p><b>Knowledge - student:</b></p> <ol style="list-style-type: none"> <li>1. describes the sources of revenues in selected countries and the main factors influencing the level of sector revenues</li> <li>2. can explain the determinants of health care expenditures in general and in his/her country particularly</li> </ol> <p><b>Abilities - student:</b></p> <ol style="list-style-type: none"> <li>3. finds, evaluates, analyzes and joins information from different sources</li> <li>4. constructs a model of expenditure and revenue projection, interprets the results of projection</li> <li>5. presents results of research in a form of presentation and paper</li> <li>6. uses foreign language (English) connected with the field of health care system and financing</li> </ol>
Assessment methods and criteria, course grading	Outcomes 1-6 are checked by presentation and paper prepared by a student
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time
Teacher responsible	Ewa Kocot PhD
Name of examiner if not teacher responsible	
Mode of delivery	practical classes in computer laboratory
Prerequisites	Basic knowledge of economy and health care system financing, basic skills of Excel usage
Type of classes and number of hours taught directly by an academic teacher	practical classes in computer laboratory: 20 hours
Number of ECTS credits allocated	2
Estimation of the student workload needed in order to achieve expected learning outcomes	<ul style="list-style-type: none"> <li>- participation in seminars, a needed data gathering and preparation of project: 40 hours – 1,5 ECTS</li> <li>- analysis of results and their presentation in the oral and written form: 15 hours - 0,5 ECTS</li> </ul>
Teaching & learning methods	<ul style="list-style-type: none"> <li>- presentations</li> <li>- discussions</li> <li>- projects prepared by students (prognostic model in Excel)</li> </ul>
Form and conditions for the award of a credit	<p>To complete the module participation in seminars and preparation of health expenditures/revenues projection for selected country is required. The results of projection have to be presented in the oral form at the seminar and in the written form as a report.</p> <p>Final mark depends on the number of points received from the report evaluation. Report is evaluated in terms of:</p> <ol style="list-style-type: none"> <li>a) the accuracy and completeness of forecasts (0-5 points),</li> <li>b) the structure of the report (0-5 points)</li> </ol>

	<p>To receive positive assessment, each (a and b) has to be rated at least 3 points.</p> <p>Grading scale:  9.5-10 points: 5.0 (very good);  8.5-9 points: 4.5 (good plus);  7.5-8 points: 4.0 (good);  6.5-7 points: 3.5 (sufficient plus);  6 points: 3.0 (sufficient)</p>
Course topics	<ol style="list-style-type: none"> <li>1) Determinants of health care expenditures: demography, economy, health status, technology development, organization.</li> <li>2) Sources of revenues of health care system in selected countries and factors influenced the level of revenues</li> <li>3) Projections of health expenditures and revenues: basic models, especially actuarial type.</li> </ol>
Recommended and required reading	<p><b>Basic literature:</b></p> <ul style="list-style-type: none"> <li>• European Commission (2012), The 2012 Ageing Report.</li> <li>• Economic and budgetary projections for the 27 EU Member States (2010-2060), European Economy 2/2012 (part 3: Health care expenditure)</li> <li>• Astolfi R., Lorenzoni L., Oderkirk J. (2012), A comparative Analysis of Health Forecasting Methods, OECD Health Working Papers, No. 59, OECD Publishing</li> </ul> <p><b>Supplementary literature:</b></p> <ul style="list-style-type: none"> <li>• Golinowska S., Kocot E., Sowa A. (2007), Health Expenditure scenarios in the New Member States: Country Report on Poland, ENEPRI Research Report No.47</li> <li>• Przywara B. (2010), Projecting future health care expenditure at European level: drivers, methodology and main results, European Economy, Economic Papers 417</li> <li>• OECD (2013), Public spending on health and long-term care: a new set of projections, OECD Economic Policy Papers No.06</li> </ul>



## Drug economics

Faculty	Faculty of Health Sciences
Unit conducting module	Department of Drug Management
Course unit title	Drug economics
Language of instruction	English
Aim of the course	The goal of this module is to provide the student with knowledge, abilities and competencies necessary to understand and detect the major problems associated with appropriate utilization and management of pharmaceuticals within health care facilities and health care systems, as well as to prepare, undertake or participate in interventions aimed to rationalize usage of medicines at various levels of the health care system.
Course objectives and learning outcomes	<p><b>Knowledge - student:</b></p> <ol style="list-style-type: none"> <li>1. analyzes, critically assesses and concludes from facts on organization and financing of medicinal products (pharmaceuticals) within health care systems, including Poland, some other countries and international setting. To a smaller extent, this type of knowledge pertains also to medical devices</li> <li>2. knows and categorizes main rules, pertaining to pharmaceutical policy, in local and national context and also from a broader, European or global perspective</li> <li>3. characterizes and explains legal regulations, related to local, national and international health policy, in the area of pharmaceuticals; and to a smaller extent to medical devices</li> </ol> <p><b>Abilities - student:</b></p> <ol style="list-style-type: none"> <li>4. can independently formulate, plan and propose solutions of concrete problems, related to economics and management of pharmaceuticals and medical devices. Student has also skills, which are necessary for implementing procedures, related to undertaking relevant solutions</li> <li>5. can perform critical analysis and interpretation of scientific publications, expert reports and texts of analyses from area of public health, focusing on provision of pharmaceuticals</li> <li>6. knows foreign language - understands meaning of main plots of content of complex texts on concrete and abstract topics. This includes understanding of relevant issues of pharmacoconomics, pharmaceutical policy, pharmaceutical pricing and reimbursement policy and provision of pharmaceuticals and medical devices</li> </ol> <p><b>Social competencies:</b></p> <ol style="list-style-type: none"> <li>7. is able to independently gather knowledge and expand research skills, utilizing objective sources of information. Student is also aware of the necessity of such activities in his/her own professional career</li> <li>8. demonstrates engagement in promotion of rational management of pharmaceuticals and shows interest in problems of pharmaceutical policy (understood as an important element of health policy)</li> <li>9. is able to work in multidisciplinary team, aiming to solve practical problems in area of pharmaceutical policy</li> </ol>
Assessment methods and criteria, course grading	Effects 1 - 6: assessment of the final examination results. Effects 1 - 9: monitoring student's activity during seminars, assessment of involvement in a project, preparation of a report and presentation of project's results.
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time
Teacher responsible	<u>Tomasz Bochenek PhD</u>

	Andrzej Pilec Prof. Paweł Kawalec PhD Rafał Nowak MPH
Name of examiner if not teacher responsible	
Mode of delivery	practical classes
Prerequisites	Basic knowledge of health economics, health care management, health policy, epidemiology, health care systems science. English language skills at a level, which enables to efficiently utilize scientific literature and participate actively in seminars.
Type of classes and number of hours taught directly by an academic teacher	practical classes: 30
Number of ECTS credits allocated	4
Estimation of the student workload needed in order to achieve expected learning outcomes	- participation in contact activities (seminars): 30 hours - 1 ECTS - preparation for seminars: 25 hours - 1 ECTS - realization of project and presentation of its results: 25 hours - 1 ECTS - preparation for exam and participation in it: 30 hours - 1 ECTS
Teaching & learning methods	Presentation of didactic content in form of short lectures. Discussion on issues related to the didactic content, building on the pre-existing students' knowledge, experience and observations. Development of group projects, followed by presentation of their results on a students' group forum and discussion. Implementation of "e-learning" techniques, tailored to needs and possibilities of a particular group of students, is possible.
Form and conditions for the award of a credit	Awarding a credit and a final grade is based on 4 elements: active participation in seminars (20%), preparation of a written group report (20%) and its oral presentation (20%), passing a written exam (40%).  Assessment of each of 4 elements of a final grade:  1) Active participation (10% absence in classes is allowed, as a general rule): -) very good – highly active involvement in seminars, important input into discussions and group work and excellent team work, combined with 100% presence throughout the course; -) good plus – highly active involvement in seminars, discussions and group work, combined with 100% presence throughout the course; -) good – moderately intensive involvement in seminars, discussions and group work; -) satisfactory plus – basic involvement in seminars, discussions and group work, combined with 100% presence throughout the course; -) satisfactory – only basic involvement in seminars, discussions and group work.  2) Written project report, prepared in teams: -) very good – highly appropriate combination of information gathered independently by a team and taught at seminars, content is highly relevant to a task, reflects in-depth knowledge of facts, excellent assortment and use of bibliography;  -) good plus – appropriate combination of information gathered independently by a team and taught at seminars, content is relevant to a task, reflects correct knowledge of facts, appropriate assortment and use of bibliography; -) good – the goal of a report is achieved, no major errors occur; -) satisfactory plus – research topic is tackled at a rather basic level, with some defects, but a text is fully correct in technical terms; -) satisfactory – presents a research topic, which is tackled at a rather basic

	<p>level, with some defects, there are some technical errors, which are not disqualifying.</p> <p>3) Oral presentation of a project report:          -) very good – exceptional form and content of presentation, very good timing, proportionate involvement of a whole team, very formative discussion with the audience;          -) good plus – very plausible form, content and timing of presentation, proportionate involvement of a whole team, formative discussion with the audience;          -) good – appropriate form, content and timing of presentation, proportionate involvement of a whole team, formative discussion with the audience;          -) satisfactory plus – acceptable form and content of presentation, minor concerns about proportionate involvement of a whole team or efforts to involve the audience into a discussion;          -) satisfactory – acceptable form and content of presentation, major concerns about proportionate involvement of a whole team, weak efforts to involve the audience into a discussion.</p> <p>4) Written exam (multiple choice / single answer type of questions plus text completion questions):          -) very good: 91-100% of points;          -) good plus: 84-90% of points;          -) good: 77-83% of points;          -) satisfactory plus: 70-76% of points;          -) satisfactory: 60-69% of points.          Pre-requisites for exam entry: appropriate presence and active involvement in seminars, submission of a written project report and its presentation.</p>
Course topics	<ol style="list-style-type: none"> <li>1) Pharmaceuticals and medical devices, their role in medicine and health care system.</li> <li>2) Selected, basic concepts in pharmacology.</li> <li>3) General characteristics of pharmaceutical market.</li> <li>4) National pharmaceutical (drug) policies and their stakeholders.</li> <li>5) Pricing and reimbursement of pharmaceuticals.</li> <li>6) Pharmaceutical policy and its implications for public health.</li> <li>7) Analyses of drug utilization and economics of use of pharmaceuticals.</li> <li>8) Hospital pharmacies and their role in rational drug management.</li> <li>9) Application of pharmacoeconomic analyses in rational pharmaceutical policy.</li> <li>10) Applications of health technology assessment (HTA) and evidence-based medicine (EBM) to rationalization of pharmacological treatment and medical devices' utilization.</li> <li>11) Risk of fraud and corruption on pharmaceutical market and strategies aimed to prevent and overcome these issues.</li> <li>12) Practical exercises in drug economics.</li> </ol> <p>Scientific scope of this module includes: pharmacoeconomics, pharmacology, health technology assessment (HTA), evidence-based medicine (EBM), health economics, health policy, pharmaceutical policy, drug management, drug utilization.</p>
Recommended and required reading	<p><b>Basic literature:</b></p> <ul style="list-style-type: none"> <li>• Schweitzer S.O. (2007), Pharmaceutical economics and policy, Oxford University Press, Oxford (selected chapters)</li> <li>• Strom B.L. (1989), Pharmacoepidemiology, Churchill Livingstone, New York, Edinburgh, London, Melbourne (selected chapters)</li> <li>• European Observatory on Health, Systems and Policies (2011), Health Systems in Transition, Poland Health System Review, WHO</li> </ul>

	<p>Copenhagen</p> <ul style="list-style-type: none"> <li>• WHO (2010) Continuity and Change. Implementing the third WHO Medicines Strategy 2008-2013, WHO</li> <li>• Dukes MNG et al. (2004), Drugs and money. Prices, affordability and cost containment, IOS Press, Amsterdam</li> <li>• WHO (2001), How to develop and implement a national drug policy, WHO, Geneva</li> <li>• Espin J., Rovira J. (2007), Analysis of differences and commonalities in pricing and reimbursement systems in Europe, EASP, Granada</li> <li>• Mossialos E. et al. (2004), Regulating pharmaceuticals in Europe: striving for efficiency, equity and quality, Open University Press, Berkshire (selected chapters)</li> </ul> <p><b>Supplementary literature:</b></p> <ul style="list-style-type: none"> <li>• Quick J.D. et al. (1997), Managing drug supply, Management Sciences for Health, Kumarian Press, New York (selected chapters)</li> <li>• Sloan F.A., Hsieh C.R. (2007), Pharmaceutical innovation. Incentives, competition, and cost-benefit analysis in international perspective, Cambridge University Press, Cambridge (selected chapters)</li> <li>• Other scientific sources, including papers from specialist scientific literature, are recommended or delivered to students before some seminars, depending on individual research topic and project of a student.</li> </ul>
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### Funding of health system and financial methods

Faculty	Faculty of Health Sciences
Unit conducting module	Health Economics and Social Security Department
Course unit title	Funding of health system and financial methods
Language of instruction	English
Aim of the course	To deepen student's knowledge on health sector funding and enhance student's ability to analyze and evaluate health system in countries with different models of health sector organizing and different stage of economic development.
Course objectives and learning outcomes	<p><b>Knowledge – student:</b></p> <ol style="list-style-type: none"> <li>1. obtains knowledge on models of health sector funding, types of social health insurance and national health system, types of private health insurance, out-of-pocket payments</li> <li>2. understands fiscal balance in health system</li> <li>3. obtains knowledge on providers payment methods</li> </ol> <p><b>Abilities - student:</b></p> <ol style="list-style-type: none"> <li>4. assesses health care system funding based on defined criteria and understands cultural influence and past dependency of health systems</li> <li>5. analyses and presents health system in a given country</li> <li>6. finds and selects an adequate literature and data</li> </ol> <p><b>Social competences- student:</b></p> <ol style="list-style-type: none"> <li>7. has the ability of team working and cooperation within multicultural groups. Openness to different approaches and solution related to health issues</li> <li>8. presents sensitivity and responsibility for efficiency and sustainable health sector funding</li> <li>9. has understanding of ethical principles in health system</li> </ol>
Assessment methods and criteria, course grading	<p>Effects 1-3 - essays evaluation, evaluation of individual work during the classes</p> <p>Effects 5-6 - evaluation of individual work (essay, oral presentation)</p> <p>Effects 7-9 - evaluation of team work, group discussions</p>
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time
Teacher responsible	<u>Stanisława Golinowska Prof.</u> Marzena Tambor PhD
Name of examiner if not teacher responsible	
Mode of delivery	practical classes
Prerequisites	basic knowledge on health care financing
Type of classes and number of hours taught directly by an academic teacher	practical classes: 30
Number of ECTS credits allocated	4
Estimation of the student workload needed in order to achieve expected learning outcomes	<p>- attendance in seminar: 30 hours - 1 ECTS</p> <p>- self-education: 25 hours - 1 ECTS</p> <p>- preparation of essays and presentation: 55 hours - 2 ECTS</p>
Teaching & learning methods	interactive lecture, students' presentations, discussion
Form and conditions for the award of a credit	To complete the module students are required to submit an individually written essay on health system in a selected country. This will be proceeded by the oral presentation of the outline of the essay and the main results, taking place during the seminars.

	<p>Grade 2: The essay and the presentation do not prove student’s ability to gather relevant data on health sector of a given country, knowledge and understanding how the system functions and ability to analyze the system and present in the written form and in the oral form e.g. there are significant deficits in the coverage of the topic, the use of the terminology is not appropriate, the understanding of the topic is very poor, there is no clear structure of the paper/oral presentation, the references are inadequate, the language is poor.</p> <p>Grade 3: The essay and the presentation prove student’s ability to gather basic data on health sector of a given country, basic knowledge how the system functions and ability to present in the written form and in the oral form.</p> <p>Grade 4: The essay and the presentation prove student’s ability to gather relevant data on health sector system in a given country, good knowledge and understanding how the system functions and good writing and presenting skills.</p> <p>Grade 5: The essay and the presentation prove student’s ability to gather broad range of relevant data on health sector in a given country, deep knowledge and very good understanding how the system functions and ability to analyze and evaluate the health care system. Student’s writing skills and presentation skills are very good.</p>
Course topics	<ol style="list-style-type: none"> <li>1) Funding methods of health sector</li> <li>2) Social health insurance and national health system</li> <li>3) Out-of-pocket payments</li> <li>4) Providers payment methods</li> <li>5) Organization and funding of public health</li> <li>6) Long-term care</li> </ol>
Recommended and required reading	<ul style="list-style-type: none"> <li>• Culyer A., Newhouse J. (ed.) (2005), Handbook of Health Economic's, vol. 1A, fourth impression, Elsevier North Holland, Amsterdam a.o.</li> <li>• Wonderling D., Gruen R., Black N. (2005), Introduction to health Economics, Open University Press, Maidenhead</li> <li>• Mossialos E., Thomson S. (2002), Voluntary health insurance in the EU, Report prepared for the Directorate General for Employment and Social Affairs of the European Commission</li> <li>• Mossialos M., Dixon A., Figueras F., Kutzin J., (2002), Funding health care: options for Europe, Open University Press, European Observatory on Health Systems and Polices, WHO, Buckingham – Philadelphia</li> <li>• Figueras J., E. Jakubowski Robinson R., (2005), Purchasing to Improve Health Systems Performance, Maidenhead: Open University Press</li> <li>• Kutzin, J., (2013), Health financing for universal coverage and health system performance: concepts and implications for policy. Bulletin of the World Health Organization, 91(8), 602–611. <a href="http://doi.org/10.2471/BLT.12.113985">http://doi.org/10.2471/BLT.12.113985</a></li> <li>• Tambor M., (2015), Patient cost-sharing for health care in Europe, Maastricht University, 2015</li> <li>• WHO HIT – Health Systems Reviews ; <a href="http://www.euro.who.int/en/health-system-reviews-hits">http://www.euro.who.int/en/health-system-reviews-hits</a></li> </ul>

## Governance of health sector

Faculty	Faculty of Health Sciences
Unit conducting module	Health Policy and Management Policy
Course unit title	Governance of health sector
Language of instruction	English
Aim of the course	The purpose of this course is to provide an introduction to the important role that governance plays in the health sector, detailing how governance is different but synergistic with management, leadership and decentralisation of power approaches, and ultimately contributes to the highest attainable level of health system performance and good health outcomes for beneficiaries. There will be introduced the key governance terms, concepts, and definitions, and gain an understanding of how governance works in the public sector on international, central and local level and within civil society organizations
Course objectives and learning outcomes	<p><b>Knowledge - student:</b></p> <ol style="list-style-type: none"> <li>1. explains the subject of inequalities in health and the various models of its explanatory</li> <li>2. calls public health policy creation and strategies implementation, as well as social and health policy at the local, European and global level</li> <li>3. calls the rules and conditionings of European, country, local institutions responsible for activities and interventions in the health sector (European union, service providers, payer, the local and governmental authority and other bodies)</li> <li>4. explains the relationship between the political and economic processes (the and effective action for the benefit of health population)</li> </ol> <p><b>Abilities - student:</b></p> <ol style="list-style-type: none"> <li>5. is able to draw conclusions about the impact of health policies to the implementation of public health programmes and other policies (concept of HIA)</li> <li>6. is able to interpret and analyzes the main strategies and health reforms in the selected countries in the aspects of governance good or bad practices</li> <li>7. can present the results of research in the form of an independently prepared presentation with the description of work purpose, adopted the methodology etc.</li> </ol> <p><b>Social competencies – student:</b></p> <ol style="list-style-type: none"> <li>8. is engaged in public health promotion and in problems of social and health policy</li> </ol>
Assessment methods and criteria, course grading	group number 1 - science - test group number 2 - skills - essay group number 3 - social skills- presentation, group work
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time
Teacher responsible	<p><u>Włodzimierz Cezary Włodarczyk prof.</u> Iwona Kowalska-Bobko PhD Anna Mokrzycka PhD Jacek Sitko PhD Alicja Domagała PhD Michał Zabdyr-Jamróż MA Anna Szetela MA</p>
Name of examiner if not teacher responsible	

Mode of delivery	practical classes
Prerequisites	knowledge of basic concepts of health and social policy
Type of classes and number of hours taught directly by an academic teacher	practical classes: 30
Number of ECTS credits allocated	4
Estimation of the student workload needed in order to achieve expected learning outcomes	- seminar: 30 hours - 1 ECTS - self-work: 75 hours - 3 ECTS
Teaching & learning methods	lecture, discussion, group work, presentation
Form and conditions for the award of a credit	<p>The exam has the oral form and takes place for the entire group at the same time. Each lecturer has the right to ask for its partial classes. The students have the opportunity to answer the questions according to the appearance order. If there are no volunteers then questioners shall appoint student who will answer the question. Each student is evaluated by all lecturers leading exam. Assessments received from each examiner pulls the average final note.</p> <p>The assessment 2,0 - student doesn't understand definition of good governance and is not able to use any example of the good governance idea in health care sector</p> <p>The assessment - 3,0 student can provide a definition of good governance in health and a framework for thinking about governance issues as a way of improving performance in the health sector.</p> <p>The assessment - 4,0 student can provide a definition of good governance in health and a framework for thinking about governance issues as a way of improving performance in the health sector using examples of budget and resource management, individual provider performance, health facility performance, informal payments, and corruption perception as well as decentralisation in health care, legal instruments etc.</p> <p>The assessment - 5,0 student perform indicators that offer the potential for tracking relative health performance are proposed, and provide the context for the discussion of good governance in health service delivery in the areas of budget and resource management, individual provider performance, health facility performance, informal payments, corruption perceptions, decentralisation, new public management, law etc. Student can answer the question about effective solutions to advance good governance and performance in health on existing research and documented experiences</p>
Course topics	Concept of governance, WHO, European Commission and leading governmental health national agencies, coordination models of health system, stewardship concept, centralization, decentralization and integration within health sector, national medical consulting, medical protocols and standards, information and reporting, nets of health facilities, waiting lists, people's voice, corruption in health sector
Recommended and required reading	<ul style="list-style-type: none"> <li>• Kaufmann D., Kraay A., Mastruzzi M., Governance Matters VII: Aggregate and Individual Governance Indicators, 1996-2007, World Bank Policy Research Working Paper No. 4654, <a href="http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1148386">http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1148386</a></li> <li>• Saltman R.B., Bankauskaite V., Vrangbaek K. (2007), Decentralization in health care, European Observatory on Health Systems and Policies Series</li> <li>• Anello E. (2008), A Framework for Good Governance in the Public Pharmaceutical Sector, Working draft for field testing and revision, WHO, Department of Essential Medicines and Pharmaceutical Policies, October 2008</li> <li>• Ritsatakis A. (2000), Learning from the past, looking to the future, Exploring health policy development in Europe, Edited by: Anna Ritsatakis, Ruth Barnes, Evert Dekker, Patsy Harrington, Simo</li> </ul>



	<p>Kokko, Peter Makara, WHO regional publications. European series; No. 86, WHO 2000, pp. 347-388</p> <ul style="list-style-type: none"> <li>• Wismar M., Lahtinen E., Stahl T., Ollila E., Leppo K. (2006), Introduction, Health in All Policies. Prospects and potentials, edited by Timo Stahl, Matthias Wismar, Eero Lahtinen, Eeva Ollila, Kimmo Leppo, Ministry of Social Affairs and Health, Finland, European Observatory on Health Systems and Policies</li> <li>• USAID Health Governance: Concepts, Experience, and Programming Options, February 2008, <a href="http://www.healthsystems2020.org/content/resource/detail/1914/">http://www.healthsystems2020.org/content/resource/detail/1914/</a></li> <li>• UNDP and Governance: Experiences and Lessons learned, Management Development and Governance Division, Lessons-Learned Series No. 1, 16.06. 2006 <a href="http://www.pogar.org/publications/other/undp/governance/lessonslearned-e.pdf">http://www.pogar.org/publications/other/undp/governance/lessonslearned-e.pdf</a></li> <li>• COMMISSION OF THE EUROPEAN COMMUNITIES, EUROPEAN GOVERNANCE. A WHITE PAPER, COM(2001) 428 final, Brussels, 25.7.2001, <a href="http://ec.europa.eu/governance/index_en.htm">http://ec.europa.eu/governance/index_en.htm</a></li> <li>• REGULATION (EC) No 1081/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 July 2006 on the European Social Fund and repealing Regulation (EC) No 1784/1999, <a href="http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:210:0012:0018:EN:PDF">http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2006:210:0012:0018:EN:PDF</a></li> <li>• COUNCIL DECISION of 6 October 2006 on Community strategic guidelines on cohesion (2006/702/EC) <a href="http://slimak.onet.pl/_m/specjalne/fundusze/sww20072013_en2.pdf">http://slimak.onet.pl/_m/specjalne/fundusze/sww20072013_en2.pdf</a>.</li> </ul>
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### Economic analysis of health care and public health programmes

Faculty	Faculty of Health Sciences
Unit conducting module	Health Economics and Social Security Department
Course unit title	Economic analysis of health care and public health programmes
Language of instruction	English
Aim of the course	<p>The aim of the module is to enable students to understand the arguments for and the theoretical foundations of economic analysis of health interventions, to demonstrate the concepts and methods of economic analysis of health care and public health programmes and to identify the strengths and weaknesses of different types of economic evaluation for implementation in resource allocation decision making. The practical objectives of the module are to facilitate students:</p> <ul style="list-style-type: none"> <li>• to assess when the different types of economic evaluation are appropriately used;</li> <li>• critically appraise economic evaluation studies in order to judge their relevance for health policy development;</li> <li>• be able to carry out a simple economic evaluation study;</li> <li>• to go through the construction of a decision model and a Markov model in both MS Excel and in TreeAge software;</li> <li>• be able to measure productivity and efficiency in health care organisations to support policy objectives.</li> </ul>
Course objectives and learning outcomes	<p><b>Knowledge - student:</b></p> <ol style="list-style-type: none"> <li>1. enumerates and characterizes the comprehensive methods and tools of economic analyses used in the health care sector</li> <li>2. enumerates and defines all types of costs and outcomes of the health care and public health programmes</li> </ol> <p><b>Abilities – student:</b></p> <ol style="list-style-type: none"> <li>3. is able to assess when the different types of economic analyses are appropriately used</li> <li>4. is able to critically appraise economic evaluation studies in order to judge their relevance for health policy development</li> <li>5. is able to plan and carry out a simple economic evaluation study for a specific population</li> </ol> <p><b>Social competencies – student:</b></p> <ol style="list-style-type: none"> <li>6. is aware of the need for independent learning, is able to search for objective sources of health outcomes and to obtain data for performing economic analysis</li> <li>7. is able to motivate decision-makers to use generated in the health system data for health policy assessment</li> </ol>
Assessment methods and criteria, course grading	<p>Effects 1, 3:written examination  Effects 2, 5:practical case studies realization assessment and written examination  Effects 4, 6-7:activity during the classes</p>
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time
Teacher responsible	Katarzyna Kissimova-Skarbek PhD
Name of examiner if not teacher responsible	
Mode of delivery	computer laboratory
Prerequisites	basic knowledge on health economics, mathematics and epidemiology
Type of classes and number of hours taught directly by an academic teacher	computer laboratory: 20

Number of ECTS credits allocated	3
Estimation of the student workload needed in order to achieve expected learning outcomes	- seminar: 20 hours - 1 ECTS - self-work: 55 hours - 2 ECTS
Teaching & learning methods	lectures, case studies, seminars, practical exercises
Form and conditions for the award of a credit	<p>The module will complete with a written examination whilst single classes will be credited based on the student presence, activity and ability to solve case studies during the classes and computer laboratory. Participation in the classes is obligatory. Student is allowed to miss only one class. In the case of a larger number of absences student must pass the abandoned issues during additional class.</p> <p>Final assessment: written examination 70%, practical case studies realization 20%, activity during classes 10%.</p> <p>The final grade is given according to following scale:  93,0% – 100,0% very good (5,0);  85,0% – 92,9% good plus (4,5);  77,0% – 84,9% good (4,0);  69,0% – 76,9% fair plus (3,5);  60,0% – 68,9% fair (3,0);  0% – 59,9% fail (2,0).</p> <p>Effect 1: Mark fair (3.0): Student knows all main types of economic analyses used in the health care sector, however doesn't know the methods and criteria of choosing the programmes.  Mark good (4.0): Student knows all main types of economic analyses used in the health care sector, and knows methods and criteria of selecting the best programmes, but can't interpret the results.  Mark very good (5.0): Student has an extensive knowledge on the types and methodology of economic analyses used in the health care sector, knows the criteria of selecting the best programmes and how to interpret the results.</p> <p>Effect 2:  Mark fair (3.0): Student knows approaches of costs measurement and measurement of health care and health programmes outcomes, but is not able to perform costs and outcomes measurements within the case studies.  Mark good (4.0): Student knows approaches of costs measurement and measurement of health care and health programmes outcomes, is able to perform costs and outcomes measurements within the case studies, but incorrectly interprets the results.  Mark very good (5.0): Student has an extensive knowledge on costs measurement and measurement of health care and health programmes outcomes, is able to perform costs and outcomes measurements within the case studies, and correctly interprets the results.</p> <p>Effect 3:  Mark fair (3.0): Student is able to assess correctly when the economic analyses are correctly used (at least for three types of the economic analyses), and is not able to assess if the results are properly interpreted.  Mark good (4.0): Student is able to assess when the economic analyses are appropriately used (for all types of analyses), but is not able to assess if the results are correctly interpreted.  Mark very good (5.0): Student is able to assess when different types of economic analyses are appropriately used, and is able to assess if the results are correctly interpreted.</p>

	<p>Effect 4:  Mark fair (3.0): Student is able partially to perform critical appraisal of published studies according to the guidelines.  Mark good (4.0): Student is able to complete critical appraisal of published studies according to the guidelines, but is not able independently to assess their relevance for health policy development.  Mark very good (5.0): Student is able to critically appraise published studies according to the guidelines, and is able comprehensively to assess their relevance for health policy development.</p> <p>Effect 5:  Mark fair (3.0): Student is able independently to plan a simple economic evaluation study, but not the all stages of analyses are correctly performed.  Mark good (4.0): Student is able to plan and perform independently a simple economic evaluation study, but is not able to interpret correctly the results.  Mark very good (5.0): Student is able to plan and perform independently a simple economic evaluation study, to interpret correctly the results and to formulate propositions for action.</p> <p>Effect 6:  Mark fair (3.0): Student is able independently to find proper sources of health outcomes but not able correctly to use this data in economic analysis.  Mark good (4.0): Student is able independently to find proper sources of health outcomes and partially correctly to use this data in economic analysis.  Mark very good (5.0): Student is able independently to find proper sources of health outcomes, correctly to use this data in economic analysis and to interpret the results.</p> <p>Effect 7:  Mark fair (3.0): Student is able to formulate message for using data generated in the health system for health policy assessment, but is not able to show arguments and properly explain them.  Mark good (4.0): Student is able to formulate key messages for using data generated in the health system for health policy assessment, can show arguments, but is not able to explain them properly.  Mark very good (5.0): Student is able to formulate key messages for using data generated in the health system for health policy assessment, creates economic arguments, and is able to explain them properly.</p>
Course topics	<ol style="list-style-type: none"> <li>1) Costs of health care programmes - types of costs, costing methods, adjustment for timing, comparability of cost studies across countries and years of their realization.</li> <li>2) Types of economic analyses: Cost-minimization analysis (CMA), Effect-maximisation analysis (EMA), Cost-benefit analysis (CBA), Cost-effectiveness analysis (CEA), Cost-utility analysis (CUA).</li> <li>3) Methods and units of measurement outcomes of the health care programmes- Stages in the economic analysis.</li> <li>4) Data sources. Decision analytic modelling (decision tree, Markov model).</li> <li>5) Using economic evaluation studies in the planning and management process within the health care sector.</li> <li>6) Preparing economic evaluation - case studies</li> </ol> <p><b>Computation examples and problem sets:</b></p> <ol style="list-style-type: none"> <li>1) Recurrent versus Capital Costs.</li> </ol>

	<ol style="list-style-type: none"> <li>2) Allocation fixed budget between two programmes based on marginal costs.</li> <li>3) Problem set 1: Costing National Immunisation Programme. WHO CHOICE approach.</li> <li>4) Problem set 2: Computing discounted and undiscounted duration of time (life years) gained with the programme. Discounting continuous stream of life.</li> <li>5) Problem set 3: Cost-effectiveness analysis of Hepatitis B immunization programme.</li> <li>6) Problem set 4: Streams of Life and Disability: comparing cost-effectiveness of two health programs using DALY measurement.</li> <li>7) Time and quality of life gained (QALY). Measuring Preferences for Health Outcomes.</li> <li>8) A method for estimating long-term costs and effects for recurrent or chronic conditions and economic evaluation of health interventions. Decision analysis and modelling (decision tree, Markov model). Examples of Markov models in MS Excel and TreeAgePro software.</li> </ol>
Recommended and required reading	<p><b>Basic literature:</b></p> <ul style="list-style-type: none"> <li>• Drummond M.F., Sculpher M.J., Torrance G.W., O'Brien B.J., Stoddart G.L. (2005), Methods for the economic evaluation of health care programmes, Third edition, Oxford University Press, Oxford.</li> <li>• Gold M.R., Siegel J.E., Russell L.B., Weinstein M.C. (1996), Cost-effectiveness in health and medicine, Oxford University Press, New York</li> <li>• Morris S., Devlin N., Parkin D.(2007), Economic Analysis in Health Care, John Willey &amp; Sons, Chichester</li> <li>• Materials prepared by teacher given during the classes</li> </ul> <p><b>Supplementary literature:</b></p> <ul style="list-style-type: none"> <li>• Murray, C.J.L., Lopez A. (1996), The global burden of disease. v1, chapter 1, Published by World Health Organisation, Harvard School of Public Health and World Bank.</li> <li>• Netten A., Beecham J. (1993), Costing Community care. Theory and practice, PSSRU, University of Kent</li> </ul>

## Economic burden of diseases

Faculty	Faculty of Health Sciences
Unit conducting module	Department of Epidemiology and Population Studies, Health Economics and Social Security Department
Course unit title	Economic burden of diseases
Language of instruction	English
Aim of the course	The aim of the course is to provide students with the knowledge about the concepts of economic burden of diseases assessment on the population base.
Course objectives and learning outcomes	<p><b>Knowledge - student:</b></p> <ol style="list-style-type: none"> <li>1. presents knowledge about the fundamental concepts that describe the health of the population</li> <li>2. applies and assess the methods of the preliminary assessment of population health risks and disease prevalence</li> <li>3. lists and assess the methods of economic analysis in health</li> </ol> <p><b>Abilities - student:</b></p> <ol style="list-style-type: none"> <li>4. uses theoretical knowledge, perception, observation and interpretation of phenomena in the field of population health</li> <li>5. finds and takes advantages of available databases in order to clarify the factors affecting health</li> </ol>
Assessment methods and criteria, course grading	project and its presentation The criteria are presented in the row „Form and conditions for the award of a credit.
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time studies
Teacher responsible	<u>Roman Topór-Madry PhD</u> Katarzyna Kissimova-Skarbek PhD
Name of examiner if not teacher responsible	
Mode of delivery	practical classes
Prerequisites	knowledge of epidemiology, biostatistics and pharmacoeconomics
Type of classes and number of hours taught directly by an academic teacher	practical classes: 25
Number of ECTS credits allocated	3
Estimation of the student workload needed in order to achieve expected learning outcomes	- participation: 25 hours - 1 ECTS - tests after class: 15 - 0,5 ECTS - project and presentation: 45 hours - 1,5 ECTS
Teaching & learning methods	seminars, design and presentation
Form and conditions for the award of a credit	<p>Assessment of effects 1-5: Every student is obliged to create a project and prepare and present one final mini-lecture of 10 minute. The mini-lecture will be related to the topic of the course. Form of this final mini-lecture (more details at the bottom of the document): Oral presentation with Power Point - max 10 minutes</p> <p>The length of the project (in MS Word or PDF) – 20 pages. Integration of the presentation transcript within the Slide Show is acceptable (though not recommended) - in such case please use the "Lecturers' notices" option in Power Point. Both electronic form (file) and print-out have to be handed over three days before evaluation (planned for 30 January 2014). After the lecture the author should conduct 5 min discussion.</p>

	<p>Maximum score for this final mini-lecture by lecturers' assessment: 20 points.  Maximum score for the paper essay: 30 points.  The maximum of all collectable points is 50.  Points collected by course participants will be the basis for final score:  Sum of the points collected  0 – 24 fail (2,0)  25-29 fair (3,0)  30-34 plus fair (3,5)  35-39 good (4,0)  40-44 plus good (4,5)  45-50 very good (5,0)</p>
Course topics	<ol style="list-style-type: none"> <li>1) Definitions and overview of social and health problems connected with chronic diseases.</li> <li>2) Issues: Heart diseases and cancer, smoking, physical activity, obesity.</li> <li>3) Quality of life in chronic diseases (HALE, QALY, DALY etc.).</li> <li>4) Economic consequences of chronic diseases.</li> <li>5) Burden of diabetes.</li> <li>6) Costs of disease and its prevention.</li> <li>7) Social determinants of chronic diseases.</li> </ol>
Recommended and required reading	<ul style="list-style-type: none"> <li>• Lopez A.D. (1994), Global burden of disease and risk factors, Disease Control Priorities Project - Confronting the Epidemic of Chronic Disease, Oxford Health Alliance, <a href="http://www.oxha.org/">http://www.oxha.org/</a></li> <li>• WHO National burden of disease studies: a practical guide <a href="http://www.who.int/healthinfo/nationalburdenofdiseasemanual.pdf">http://www.who.int/healthinfo/nationalburdenofdiseasemanual.pdf</a></li> <li>• Sassi F., Hurst J. (2008), The prevention of lifestyle-related chronic diseases DELSA/HEA/WD/HWP(2008)2; OECD HEALTH WORKING PAPERS</li> <li>• Global Alliance for Chronic Disease <a href="http://www.gafcd.org/">http://www.gafcd.org/</a></li> <li>• WHO Chronic diseases and health promotion <a href="http://www.who.int/chp/en/">http://www.who.int/chp/en/</a></li> <li>• The SuRF Report 2: Surveillance of chronic disease Risk Factors; WHO 2007</li> <li>• Major and Chronic Diseases, European Commission, Directorate-General for Health and Consumers 2007; <a href="http://ec.europa.eu/health/ph_threats/non_com/other_diseases_en.htm">http://ec.europa.eu/health/ph_threats/non_com/other_diseases_en.htm</a></li> <li>• Preventing Chronic Disease Vols. 1 to 6; 2004 to 2009; <a href="http://www.ncbi.nlm.nih.gov/pmc/journals/245/">http://www.ncbi.nlm.nih.gov/pmc/journals/245/</a></li> <li>• The Tobacco Atlas <a href="http://www.tobaccoatlas.org/downloads/TobaccoAtlas.pdf">http://www.tobaccoatlas.org/downloads/TobaccoAtlas.pdf</a></li> <li>• Chronic diseases: an economic perspective Oxford Health Alliance, <a href="http://www.oxha.org/">http://www.oxha.org/</a></li> <li>• Jönsson B. (1998), The economic impact of diabetes, Diabetes care, 21 Supplement 3, C7-C-10;</li> <li>• International Diabetes Federation, Diabetes Atlas, Second Edition, 2003 <a href="http://www.eatlas.idf.org/About_e_Atlas/">http://www.eatlas.idf.org/About_e_Atlas/</a></li> <li>• Preventing chronic diseases: a vital investment WHO, 2005 <a href="http://www.who.int/chp/chronic_disease_report/en/">http://www.who.int/chp/chronic_disease_report/en/</a></li> <li>• Chronic diseases management and remote patient monitoring: Eurohealth Vol 1. 2009</li> <li>• 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Noncommunicable Diseases, WHO</li> </ul>

## Health insurance

Faculty	Faculty of Health Sciences
Unit conducting module	Health Economics and Social Security Department
Course unit title	Health insurance
Language of instruction	English
Aim of the course	The aim of teaching is to provide interested students with specialist knowledge about the insurance mechanism to enable them to understand the principles that determine the functioning of the health insurance markets, both private and public, their advantages and limitations.
Course objectives and learning outcomes	<p><b>Knowledge - student:</b></p> <ol style="list-style-type: none"> <li>1. explains basic categories in economics and organization of health insurance</li> <li>2. explains the determinants of demand and supply of health insurance</li> <li>3. discusses the forms of insurance market failures</li> <li>4. describes the similarities and the differences of diverse health insurance systems</li> </ol> <p><b>Abilities - student:</b></p> <ol style="list-style-type: none"> <li>5. is able to calculate actuarial insurance premiums</li> <li>6. is able to calculate basic determinants of insurance demand and supply (e.g. certainty equivalent, risk premium, loading fees)</li> </ol> <p><b>Social competences - student:</b></p> <ol style="list-style-type: none"> <li>7. can broadly formulate clear and detailed statements, in written and orally, and also explains his/her position on issues at stake, considering advantages and disadvantages of various solutions in area of health insurance</li> <li>8. is able to search for and obtain the objective sources of health insurance problems</li> </ol>
Assessment methods and criteria, course grading	The module will complete with a written examination, presentation and preparation of a short essay, whilst single classes will be credited based on the student presence and activity in the discussion
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time
Teacher responsible	<u>Christoph Sowada Assoc. Prof.</u> Barbara Więckowska PhD
Name of examiner if not teacher responsible	
Mode of delivery	practical classes
Prerequisites	basic knowledge of economics, health economics, mathematics and statistics and health care system financing
Type of classes and number of hours taught directly by an academic teacher	practical classes: 20
Number of ECTS credits allocated	3
Estimation of the student workload needed in order to achieve expected learning outcomes	- seminar: 20 hours - 0,75 ECTS - preparation for the seminars based on literature: 20 hours - 0,75 ECTS - preparation of presentation and essay: 30 hours - 1 ECTS - preparation for an examination: 15 hours - 0,5 ECTS
Teaching & learning methods	seminars connected with short lectures, students presentations, discussions
Form and conditions for the award of a credit	Effect 1-6, written examination (60 minutes), presentation prepared by a student, activity during the classes Effect 7-8 presentation prepared by a student, participation in discussion



	<p>Final score: weighted average of the scores for presentation (40%) and exam (60%). Both parts have to be passed with minimum 3,0 (sufficient).</p> <p>Scores for the presentation</p> <ul style="list-style-type: none"> <li>- sufficient (dst) - 9-10 points</li> <li>- sufficient plus (+ dst) – 11 points</li> <li>- good (db) - 12-13 points</li> <li>- good plus (+ db) – 14 points</li> <li>- very good (bdb) - 15-16 points</li> </ul> <p>Scores for the exam:</p> <ul style="list-style-type: none"> <li>- sufficient (dst) - 60-67%</li> <li>- sufficient plus (+ dst) - 68-76%</li> <li>- good (db) - 77-84%</li> <li>- good plus (+ db) - 84-91%</li> <li>- very good (bdb) - 92-100%</li> </ul>
Course topics	<ol style="list-style-type: none"> <li>1) Definition and classification of risks, characteristics of health risk, risk management.</li> <li>2) Decisions under uncertainty, expected utility function, certainty equivalent, risk premium.</li> <li>3) Demand for health insurance, actuarially fair insurance premium, loading fee, optimal health insurance.</li> <li>4) Market failures in health insurance - information asymmetries, moral hazard, adverse selection, cream skinning.</li> <li>5) Types of health insurance - social health insurance, private (voluntary) health insurance.</li> <li>6) Insurance systems in Europe – examples.</li> </ol>
Recommended and required reading	<ul style="list-style-type: none"> <li>• Kifmann M. (2002), Insuring Premium Risk in Competitive Health Insurance Markets, Mohr Verlag, Tübingen, p. 14-20</li> <li>• Phelps C. (2003), Health Economics 3rd ed., Addison Wesley, Boston, p. 324-330, 344-351</li> <li>• Folland S., Goodman A.C., Stano M. (2004), The Economics of Health and Health Care, Pearson Prentice Hall, Upper Saddle River NJ, in 4th ed. chapter 7 - 12, 17 - 21</li> <li>• Folland S., The Quality of Mercy: Social Health Insurance in the Charitable Liberal State, in: Journal of Health Care Finance and Economics, vol. 5, p. 23-46</li> <li>• Zweifel P. (2007), The Theory of Social Health Insurance, NOW Publisher, Boston</li> <li>• Blum W.F. (2007), Individual Health Insurance, ACTEX Publications, Winsted, CT</li> </ul>

## Health technology assessment

Faculty	Faculty of Health Sciences
Unit conducting module	Department of Drug Management, Department of Scientific Information
Course unit title	Health technology assessment
Language of instruction	English
Aim of the course	The goal of this module is to provide the student with knowledge, abilities and competencies necessary to appreciate the role of health technology assessment within contemporary health care systems, as well as to effectively participate in multidisciplinary teams involved in the process of health technologies assessment at its various stages.
Course objectives and learning outcomes	<p><b>Knowledge - student:</b></p> <ol style="list-style-type: none"> <li>1. explains and presents advantages and disadvantages of economic analysis methods, which are being used in HTA research</li> <li>2. can list the sources of scientific information, which are necessary in performing HTA analyses, and explain their practical applications</li> <li>3. explains the conduct and steps of scientific research based on HTA.</li> <li>4. can design and plan the HTA research, justify the application of necessary research tools and methods of data gathering</li> </ol> <p><b>Abilities - student:</b></p> <ol style="list-style-type: none"> <li>5. can perform critical analysis and interpretation of HTA report, as well as draw conclusions based on such report</li> <li>6. can prepare HTA report in its basic and standard form, containing major and necessary elements</li> <li>7. knows foreign language - understands meaning of main plots of content of complex texts on concrete and abstract topics. This includes understanding of relevant HTA-related issues</li> </ol> <p><b>Social competences - student:</b></p> <ol style="list-style-type: none"> <li>8. is able to independently gather knowledge and expand research skills, utilizing objective sources of information. Student is also aware of the necessity of such activities in his/her own professional career</li> <li>9. demonstrates engagement in promotion of HTA, aiming to optimize the way of health care delivery. Student shows interest in problems related to HTA</li> <li>10. is able to work in multidisciplinary team, aiming to solve practical problems in area of HTA</li> </ol>
Assessment methods and criteria, course grading	Effects 1 - 6: assessment of the final examination results. Effects 1 - 9: monitoring student's activity during seminars, assessment of involvement in a project, preparation of a report and presentation of project's results.
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time studies
Teacher responsible	<u>Tomasz Bochenek PhD</u> Barbara Niedźwiedzka Assoc. Prof. Paweł Kawalec PhD Rafał Nowak MPH
Name of examiner if not teacher responsible	
Mode of delivery	practical classes
Prerequisites	Knowledge of basic concepts of health economics, epidemiology and statistics. Ability to communicate in English at level enabling to effectively utilize scientific literature, actively participate in seminars and perform HTA project.

Type of classes and number of hours taught directly by an academic teacher	practical classes: 20
Number of ECTS credits allocated	3
Estimation of the student workload needed in order to achieve expected learning outcomes	- participation in contact activities (seminars): 20 hours - 1 ECTS - preparation for seminars: 25 hours - 1 ECTS - involvement in project, preparation of report and its presentation, preparation for exam and participation in it: 35 hours - 1 ECTS
Teaching & learning methods	Presentation of didactic content in form of short lectures. Discussion on issues related to didactic content and practical exercises. Development of group projects, based on HTA analysis, followed by presentation of their results on a students' group forum and discussion. Implementation of "e-learning" techniques, tailored to needs and possibilities of particular groups of students, is possible.
Form and conditions for the award of a credit	Awarding a credit and a final grade is based on 4 elements: active participation in seminars (20%), preparation of a written group report (15%) and its oral presentation (15%), passing a written exam (50%). Assessment of each of 4 elements of a final grade: 1) Active participation (10% absence in classes is allowed, as a general rule): - very good – highly active involvement in seminars, important input into discussions and group work and excellent team work, combined with 100% presence throughout the course; - good plus – highly active involvement in seminars, discussions and group work, combined with 100% presence throughout the course; - good – moderately intensive involvement in seminars, discussions and group work; - satisfactory plus – basic involvement in seminars, discussions and group work, combined with 100% presence throughout the course; - satisfactory – only basic involvement in seminars, discussions and group work.  2) Written project report, prepared in teams: - very good – highly appropriate combination of information gathered independently by a team and taught at seminars, content is highly relevant to a task, reflects in-depth knowledge of facts, excellent assortment and use of bibliography; - good plus – appropriate combination of information gathered independently by a team and taught at seminars, content is relevant to a task, reflects correct knowledge of facts, appropriate assortment and use of bibliography; - good – the goal of a report is achieved, no major errors occur; - satisfactory plus – research topic is tackled at a rather basic level, with some defects, but a text is fully correct in technical terms; - satisfactory – presents a research topic, which is tackled at a rather basic level, with some defects, there are some technical errors, which are not disqualifying. 3) Oral presentation of a project report: - very good – exceptional form and content of presentation, very good timing, proportionate involvement of a whole team, very formative discussion with the audience; - good plus – very plausible form, content and timing of presentation, proportionate involvement of a whole team, formative discussion with the audience; - good – appropriate form, content and timing of presentation, proportionate involvement of a whole team, formative discussion with the audience;

	<p>-) satisfactory plus – acceptable form and content of presentation, minor concerns about proportionate involvement of a whole team or efforts to involve the audience into a discussion;</p> <p>-) satisfactory – acceptable form and content of presentation, major concerns about proportionate involvement of a whole team, weak efforts to involve the audience into a discussion.</p> <p>4) Written exam (multiple choice / single answer type of questions plus text completion or calculation-based questions):</p> <p>-) very good: 91-100% of points;</p> <p>-) good plus: 84-90% of points;</p> <p>-) good: 77-83% of points;</p> <p>-) satisfactory plus: 70-76% of points;</p> <p>-) satisfactory: 60-69% of points.</p> <p>Pre-requisites for exam entry: appropriate presence and active involvement in seminars, submission of a written project report and its presentation.</p>
Course topics	<ol style="list-style-type: none"> <li>1) Subsequent steps of HTA analyses.</li> <li>2) Methods of gathering and processing information necessary for performing HTA analyses.</li> <li>3) Systematic reviews and meta analyses of data coming from medical literature.</li> <li>4) Clinical effectiveness analyses.</li> <li>5) Critical assessment of medical literature and analyses of cost-effectiveness of treatment.</li> <li>6) Cost-effectiveness analyses in HTA and methods of modeling.</li> <li>7) Budget impact analyses and health care system impact analyses.</li> <li>8) Role of HTA analyses in decision making within health care system.</li> <li>9) International overview of HTA applications.</li> <li>10) HTA guidelines and HTA organizations in Poland and worldwide.</li> </ol>
Recommended and required reading	<p><b>Basic literature:</b></p> <ul style="list-style-type: none"> <li>• Drummond M.F. et al. (2005), Methods for the economic evaluation of health care programmes, Oxford University Press, Oxford - New York (selected chapters)</li> <li>• Agencja Oceny Technologii Medycznych (2009) Health Technology Assessment Guidelines, AOTM, Warszawa</li> <li>• National Institute for Health and Technology Assessment (2007) Guide to the methods of technology appraisal, NICE, London</li> <li>• The Cochrane Collaboration (2008) Cochrane Collaboration open learning material for reviewers. Version 1.1., The Cochrane Collaboration (selected chapters)</li> <li>• Smith M.D. et al. (2003), Health care, cost, quality, and outcomes. ISPOR book of terms, ISPOR, Princeton</li> <li>• Stahl J.E. (2008), Modelling methods for pharmacoeconomics and health technology assessment. An overview and guide, Pharmacoeconomics 26 (2): 131-148</li> <li>• Orlewska E., Gulacsi L. (2009), Budget-Impact Analyses. A critical review of published studies, Pharmacoeconomics, 27 (10): 807-827</li> </ul> <p><b>Supplementary literature:</b></p> <ul style="list-style-type: none"> <li>• Drummond M., McGuire A. (2002), Economic evaluation in health care. Merging theory with practice, Oxford University Press, Oxford (selected chapters)</li> <li>• Other scientific sources, including papers from specialist scientific literature, are recommended or delivered to students before some seminars.</li> </ul>

## Human Resources for Health

Faculty	Faculty of Health Sciences
Unit conducting module	Health Policy and Management Policy
Course unit title	Human Resources for Health
Language of instruction	English
Aim of the course	To present students current information regarding the health care market and practical tools of human resources management. Of the basis of acquired theoretical knowledge in the area of Human Resources Management and skills connected with this knowledge, students obtain the fundamentals of the proper management of health care staff.
Course objectives and learning outcomes	<p><b>Knowledge - student:</b></p> <ol style="list-style-type: none"> <li>1. explains, compares and orders the rules of creation and realization of the public health strategy and health politics in the field of human resources for health at the local, national and international levels</li> <li>2. knows categories, justifies the principles and rules for effective and efficient human resources management</li> </ol> <p><b>Abilities - student:</b></p> <ol style="list-style-type: none"> <li>3. proposes and plans solutions to various problems in the field of human resources for health, taking into account the current problems</li> </ol> <p><b>Social competencies - student:</b></p> <ol style="list-style-type: none"> <li>4. is able to work and cooperate in a group</li> </ol>
Assessment methods and criteria, course grading	Effect 1: written examination (multiple choice test) Effect 2: written examination (multiple choice test), Effect 3: student's presentation (prepared in pairs) Effect 4: group work (during lessons)
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time
Teacher responsible	<u>Alicja Domagała PhD</u> Stanisława Golinowska Prof. Marcin Kautsch PhD Anna Mokrzycka PhD
Name of examiner if not teacher responsible	
Mode of delivery	practical classes
Prerequisites	basic knowledge on health management
Type of classes and number of hours taught directly by an academic teacher	practical classes: 20
Number of ECTS credits allocated	2
Estimation of the student workload needed in order to achieve expected learning outcomes	- preparation to classes, self-work: 25 hours - 1 ECTS - participation in the seminar and written examination: 25 hours - 1 ECTS
Teaching & learning methods	multimedia presentation, brainstorming, case studies, small groupwork
Form and conditions for the award of a credit	<p>Final rating: 70% - written exam, 30% - presentation prepared by students (students will prepare presentation on current problems of Human resources for health in their country).</p> <p><b>Evaluation of the outcomes:</b> Assessment of Effects 1-2: Results of the final written exam (multiple choice test): 2 - students wrote the test below 60% of the test, 3 - student wrote the test on 60-79%</p>

	<p>4 - student wrote a test on 80-94%</p> <p>5 - student wrote the test more than 95%</p> <p>Assessment of Effect 3:</p> <p>2 - Student is not able to propose any solutions of the problems.</p> <p>3 – Student is able to propose limited solutions of the problems</p> <p>4 – Student is able to propose different solutions of the problems</p> <p>5 - Student is able to propose different solutions of the problems and can define the limitations and advantage of particular solutions.</p> <p>Assessment of Effect 4:</p> <p>2 - Student does not work and cooperate in a group</p> <p>3 -Student is able to s work and cooperate in a group but only in limited scope, his/her activity is limited</p> <p>4 - Student is able active work and cooperate in a group</p> <p>5 - Student is able active work and active cooperate in a group and takes the lead in the group</p>
Course topics	<ol style="list-style-type: none"> <li>1) Human resources for health: definition, characteristics, international comparison</li> <li>2) Employment of medical staff, trends in health employment, shortages of medical staff (scale and reason worldwide)</li> <li>3) Process of health human resources planning at the national and international levels</li> <li>4) Education for health. Training and specialization</li> <li>5) Legal regulations of medical staff</li> <li>6) Motivation of health care personnel: incentives for health professional, financial and non-financial incentives, effective incentive scheme</li> <li>7) Migration problems</li> <li>8) The most important international initiatives on Human Recourses for Health</li> </ol>
Recommended and required reading	<ul style="list-style-type: none"> <li>• European Commission, <i>Green Paper on the European Workforce for Health</i>, 2008, Brussels</li> <li>• WHO Report “<i>Human resources for Health in the WHO European Region</i>”, WHO Regional Office for Europe, Copenhagen 2006.</li> <li>• European Union, „<i>EU level Collaboration on Forecasting Health Workforce Needs, Workforce Planning and Health Workforce Trends – A Feasibility Study</i>” May 2012</li> <li>• Other documents prepared and distributed to students by lecturers</li> </ul>

### Quantitative methods of health care and public health

Faculty	Faculty of Health Sciences
Unit conducting module	Department of Epidemiology and Population Studies
Course unit title	Quantitative methods of health care and public health
Language of instruction	English
Aim of the course	The course provides training in the basics of statistical theory, methods in planning and conducting analyses, and writing reports, the interpretation of numeric data for scientific inference in studies in medicine and public health. Students apply modern statistical and computational methods to effectively analyze complex medical data.
Course objectives and learning outcomes	<p><b>Knowledge - student:</b></p> <ol style="list-style-type: none"> <li>1. proofs comprehension of descriptive methods of quantitative and qualitative data and criteria of choosing statistical tests and assumptions required for applications of suitable statistical analyses</li> </ol> <p><b>Skills - student:</b></p> <ol style="list-style-type: none"> <li>2. is able to prepare data for statistical analysis and to get information on population characteristics applying descriptive statistics</li> <li>3. is able to properly use of statistical tests (parametric and nonparametric), analyse data and interpret results</li> <li>4. is able to present results of analysis as scientific research</li> </ol> <p><b>Social competences – student:</b></p> <ol style="list-style-type: none"> <li>5. understands a need of precision in making the notes and explaining arguments</li> <li>6. formulates a critical judgments of presented reasoning</li> </ol>
Assessment methods and criteria, course grading	<p>Effects 1: Evaluation of the class and homework assignments for choice of proper statistical procedures to recognize patterns in raw data and to perform statistics.</p> <p>Effects 2-3: Evaluation of technical reports of computer designed statistical analysis.</p> <p>Effects 4-6: Evaluation of a final project presented in written form</p>
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	3
Type of studies	full-time
Teacher responsible	Krystyna Szafraniec PhD
Name of examiner if not teacher responsible	
Mode of delivery	practical classes in computer laboratory
Prerequisites	a basic knowledge of mathematics, base of descriptive and inferential statistics
Type of classes and number of hours taught directly by an academic teacher	practical classes in computer laboratory: 15
Number of ECTS credits allocated	2
Estimation of the student workload needed in order to achieve expected learning outcomes	<p>- weekly lessons: 15 hours - 0,7 ECTS</p> <p>- preparatory work: text readings and homework assignments: 35 hours - 1,3 ECTS</p>
Teaching & learning methods	Instructional classes and seminars including short review of the concepts of descriptive and inferential statistics, and data-based exercises in computer lab using statistical software
Form and conditions for the award of a credit	A final project in written form will be required. The goal of the project is to conduct statistical analysis of a population health issue using a dataset.

	<p>Project is scored from 0 to 40 points; minimum credit requirement is 24 points.</p> <p>Grades:  ndst – no credit (&lt;24 pt) - means the work was not completed or it was completed at very low, unsatisfactory level  dst – (24-29 pt.) - student presents aim of the analysis, methodology and results on basic level  db – (30-35 pt.) represents achievement which is significantly above basic; student demonstrates an appropriate use of a data tables and graphs and is able to summarize results efficiently  bdb – (36-40 pt.) represents outstanding achievements; student is able to present research results in a clear way, interpret the results and formulate a critical judgments of reasoning.</p>
Course topics	<ol style="list-style-type: none"> <li>1) Utilize the methods and technics of statistical analysis in scientific research (descriptive and inferential statistics).</li> <li>2) Critical judgement of the outcome of statistical analysis.</li> </ol>
Recommended and required reading	Handouts and other materials will be made available in advance to class period.



## Practical placement

Faculty	Faculty of Health Sciences
Unit conducting module	Institute of Public Health
Course unit title	Practical placement
Language of instruction	English
Aim of the course	The student should get acquainted with practical aspects of functioning of the selected health care institutions, be involved in the development of a public health project, gain valuable experience of the public health work arena and observe practices and organisations in order to put them in perspective with his/her learning and employment objectives. Practical placement should also provide student with experience in developing job applications and general career plans, both for short and long terms.
Course objectives and learning outcomes	<p>Knowledge - student:</p> <ol style="list-style-type: none"> <li>1. can describe the structure and role of the institution in its own environment</li> <li>2. gets knowledge on the practical functioning of the institution(s) belonging to the health sector</li> <li>3. gets knowledge in the basic documents related to the institution(s)</li> </ol> <p>Abilities - student:</p> <ol style="list-style-type: none"> <li>4. gets experience in the realization of practical tasks</li> <li>5. analyses the environment of the institution and its role</li> <li>6. uses the theory in solving practical problems</li> </ol>
Assessment methods and criteria, course grading	The credit is given based on the active participation.
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	4
Type of studies	full-time
Teacher responsible	Tomasz Bochenek MD, MPH, PhD (coordinator) Master degree thesis promoters (supervisors) On-site practical placement supervisors
Name of examiner	
Mode of delivery	Practical placement in health sector institution(s) – practical work
Prerequisites	
Type of classes and number of hours taught directly by an academic teacher	Active observation, practical tasks
Number of ECTS credits allocated	11
Estimation of the student workload needed in order to achieve expected learning outcomes	Realization of tasks included in the program of practical placement: 160 hours - 11 ECTS
Teaching & learning methods	Active observation, practical tasks
Form and conditions for the award of a credit	Document issued from the hosting institution(s) confirming the realization of practical placement, confirmed then by the Coordinator of practical placements.
Course topics	<p>The content of this module depends on institution, where the practical placement is done. The recommended scope includes:</p> <ul style="list-style-type: none"> <li>• introduction to organizational structure and rules of functioning of the institution,</li> <li>• getting acquainted with methods and techniques of work and its documentation ,</li> <li>• practical approach to utilization of learned theories and gained</li> </ul>

	<p>knowledge,</p> <ul style="list-style-type: none"> <li>• performing analysis of institution's environment and its influence on institution's functioning,</li> <li>• observation and participation in selected institution's activities, as agreed with the practical placement supervisor.</li> </ul>
Recommended and required reading	Accordingly to needs, the necessary scientific literature is recommended or given to students based on a particular placement.

## Magister's seminar

Faculty	Faculty of Health Sciences
Unit conducting module	Institute of Public Health
Course unit title	Magister's seminar
Language of instruction	English
Aim of the course	The seminar serves to prepare the student to conduct research that demonstrates his/her competence as a first-hand researcher and to write and defend a master degree thesis. After the seminar student should know how to take a position of a scientific researcher, appropriate for a public health professional.
Course objectives and learning outcomes	<p>Knowledge - student:</p> <ol style="list-style-type: none"> <li>1. knows the rules and requirements related to elaboration and defending a master degree thesis.</li> </ol> <p>Abilities - student:</p> <ol style="list-style-type: none"> <li>2. can apply the knowledge gained during the studies in his/her own scientific work.</li> <li>3. uses skills on gathering scientific data, critical analysis of scientific papers, running independent necessary statistical analyses</li> <li>4. can describe own research results and analyse them</li> </ol>
Assessment methods and criteria, course grading	
Type of course unit (compulsory/optional)	mandatory
Year of study (if applicable)	2
Semester	4
Type of studies	full-time
Teacher responsible	Tomasz Bochenek MD, MPH, PhD (coordinator) Master degree thesis promoters (supervisors)
Name of examiner	
Mode of delivery	seminar
Prerequisites	Readiness to prepare and defend the MPH thesis
Type of classes and number of hours taught directly by an academic teacher	8
Number of ECTS credits allocated	17
Estimation of the student workload needed in order to achieve expected learning outcomes	
Teaching & learning methods	Seminars, individual and group work, discussions. There is a possibility of e-learning methods, tailored to needs and possibilities of particular students.
Form and conditions for the award of a credit	Credit mark on the basis of submitted dissertation
Course topics	<ul style="list-style-type: none"> <li>• Discussion on scientific papers, both on their content and style of writing.</li> <li>• Discussion on selection of appropriate methods of statistical analysis, with utilization of a computer software.</li> <li>• Other methods, relevant to a particular topic of a master degree thesis.</li> </ul>
Recommended and required reading	<ul style="list-style-type: none"> <li>• The Institute of Public Health guidelines on MPH theses preparation</li> <li>• Other literature is recommended or given to students based on a particular topic of MPH thesis.</li> </ul>

