

John Paul II Catholic University of Lublin

Faculty of Philosophy

academic year 2012/2013

field of study

philosophy

second-cycle studies

full-time studies

| Subject catalogue: Selected topics in the ethics of science - social and ethical consequences of techno-scientific progress |   |   |                 |  |
|---|---|---|-----------------|--|
| <b>Type:</b>  | lecture   |   |                 |  |
| <b>Hours:*</b>  | winter semester   | - | summer semester | 30   |
| *If a subject consists of e. g. lecture and classes, the proper hours to any classes should be given.                       |   |   |                 |  |
| <b>ECTS</b>   | winter semester   | - | summer semester | 2 if C; 3 if E                               |
| <b>Language of tuition:</b>   | English   |   |                 |  |
| <b>Method of assessment:*</b>   | winter semester   | - | summer semester | credit without mark ( C ) or paper ( E )     |
| *If a subject consists of lecture and classes, the proper method of assessment to any classes should be given.              |   |   |                 |  |
| SUBJECT SPECIFIC OBJECTIVES   |   |   |                 |  |
| 1.  | introducing students to the debate on social and ethical consequences of techno-scientific progress;  |   |                 |  |
| 2.  | discussing with students main arguments for the value-neutrality and value-ladenness of techno-science;   |   |                 |  |
| 3.  | skills of discerning and analyzing social and ethical problems in techno-science;   |   |                 |  |
| 4.  | improving the knowledge of English;   |   |                 |  |
| 5.  | developing skills of discussing and/or writing papers;  |   |                 |  |
| 6.  | inspiring students to think about their own responsibility for the techno-scientific progress;  |   |                 |  |
| PREREQUISITE (KNOWLEDGE, SKILLS, COMPETENCE, OTHERS)  |   |   |                 |  |
| 1.  | Knowledge of English (medium level), general knowledge of the philosophy of science and ethics  |   |                 |  |
| LEARNING OUTCOMES   |   |   |                 | Correlation with programme learning outcomes |
| Knowledge   |   |   |                 |  |
| 1.  | A student possesses deep understanding of the role of philosophical reflection in shaping science and technology  |   |                 | K_W01  |
| 2.  | A student knows historical background and crucial arguments of the debate over the value-neutrality and the value-ladenness of technoscience and its progress |   |                 | K_W04, K_W06, K_W07                          |

|  |  |                     |
|--|--|---------------------|
| 3.   | A student discerns and understands social and ethical consequences of the development of techno-science as well as knows contemporary institutions designed to deal with those consequences  | K_W03, K_W09        |
| <b>Skills</b>  |  |                     |
| 1.   | A student is able to find, analyze, evaluate, arrange and use information by employing sources both printed and digital;   | K_U01               |
| 2.   | A student develops basic research skills - including formulating and analyzing research problem, elaborating it and presenting results clearly and critically both in an oral and written form;  | K_U02, K_U03, K_U07 |
| 3.   | A student is able to analyze philosophical arguments as well as to identify their key theses, assumptions and consequences;  | K_U04, K_U05, K_U06 |
| 4.   | 4. A students possesses the skill of translating from English;   | K_U08, K_U09        |
| <b>Social Competence</b>   |  |                     |
| 1.   | A student is able to discern social and ethical problems related to techno-scientific progress;  | K_K02, K_K04        |
| 2.   | A student understands and accepts her own responsibility for consequences of techno-scientific progress  | K_K05, K_K06        |
| <b>TEACHING CONTENT (SUBJECT DESCRIPTION)</b>  |  |                     |
| <ol style="list-style-type: none"> <li>1. The basic concepts: technology, science, progres, society;</li> <li>2. The change from science and technology to technoscience;</li> <li>3. The philosophical sources of the idea of progres;</li> <li>4. The idea of value-neutrality and value-ladenness and its historical sources;</li> <li>5. Arguments for value-neutrality of technoscience and their criticism;</li> <li>6. Arguments for value-ladenness of technoscience;</li> <li>7. Developing technoscience and its consequences in varius domains of life;</li> <li>8. Risk-assessment and the quest for controlling technoscience;</li> <li>9. Philosophical foundation of any evaluation of progres;</li> <li>10. Progres and responsibility of scientists and society.</li> </ol> |  |                     |
| <b>TEACHING METHODS*</b>   |  |                     |
| Traditional lecture, discussion  |  |                     |
| *If a subject consists of lecture and classes, the proper teaching methods to any classes should be given.   |  |                     |
| <b>METHODS OF LEARNING ACIEVEMENTS ASSESSMENT*</b>   |  |                     |
| 1.   | Credit with mark: Activity during clases 20%, written paper on a topic agreed with the lecturer (ca 6 - 8 p.) - 80%. A paper may be in Polish if the literature on which it is based is in English or in other foreign language. Otherwise it should be in English |                     |
| 2.   | Credit without mark: Attendance and activity during clases 100%.   |                     |

**Grading scale for 1.\***

| <b>LEARNING OUTCOMES</b> | <b>2 unsatisfactory (fail)</b>   | <b>3 satisfactory</b>  | <b>4 good</b>   | <b>5 very good</b>  |
|--------------------------|--|--|---|---|
| <b>Knowledge</b>         | <p>A student does not attend (with no excuse) more than 50% of classes; has only a vague understanding of key concepts and poor knowledge on debates over the techno-scientific progress and no on arguments concerning value-neutrality and value-ladenness of techno-science and sees no social and ethical consequences of techno-scientific progress</p> | <p>A student regularly attends classes and has some knowledge of the problems related to the techno-scientific progress and is able to formulate at least some arguments in favor of the value-neutrality and value-ladenness of techno-science; sees problems concerning the techno-scientific progress and understands key concepts involved in the debates over that progress</p> | <p>A student has very good knowledge of key concepts and problems related to the techno-scientific progress, is able to present and to criticize main arguments for the value-neutrality and value-ladenness of techno-science.</p>   | <p>A student possess extensive knowledge on historical and current issues concerning the techno-scientific progress, as well as on historical development of the debate on the techno-scientific progress; understands key concepts involved in debates, presents main arguments for the value-neutrality and value-ladenness of techno-science, sees their weaknesses and merits</p>   |
| <b>skills</b>            | <p>A student is able to find only basic information necessary to prepare a paper; is not able to determine single-handedly a topic for a paper, does not submit a paper;</p>   | <p>A student is able to find common information necessary to prepare a paper; is able to find a topic for his/her paper and submits a paper; yet the paper has unclear structure and argumentation; there are no original ideas and criticisms of that argumentation; there are linguistic mistakes (if the paper is written in English)</p>   | <p>A student is able to find original information necessary to prepare a paper; is able to find an original topic for his/her paper, submits a paper on an important issue; the paper is clearly written, and has a good structure with clear thesis, good analysis of key concepts and argumentation; there are minor linguistic mistakes (if the paper is written in English); is able to indicate institutions which deal with consequences of the techno-scientific development</p> | <p>A student is able to find original and topical information necessary to prepare a paper, submits a paper on a topical issue which was not discussed or even indicated during classes; the paper is clearly written and has a good structure, with a clear question and a thesis as its solution, good analysis of key concepts and argumentation as well as with some criticism of argumentation and indication of further consequences and difficulties of a solution; there are no important linguistic mistakes (if the paper is written in English); is able to indicate institutions which deal with consequences of the techno-scientific development.</p> |

|                           |   |  |   |   |
|---------------------------|---|--|---|---|
| <b>social competences</b> | A student is able to indicate only very common ethical and social problems related to the techno-scientific, does not cooperate to discuss such problems, reject her/his responsibility for any consequences of the techno-scientific development | A student is able to list typical problems connected to the techno-scientific progress, cooperates with other students in discussions designed to develop a solution for those problems but does not provide original remarks, and sees the necessity of taking responsibility for the progress. | A student is able to analyze new cases of techno-science under the aspect of their social and ethical consequences; eagerly engages himself/herself in discussions concerning social and ethical consequences of the techno-scientific progress, brings into discussion original remarks; accepts his/her personal responsibility for that progress | A student looks for new controversial cases in current techno-science, eagerly participates in discussions on their social and ethical dimensions and cooperates with other students to suggest a solution, bringing original ideas; accepts his/her personal responsibility for the techno-scientific progress |
|---------------------------|---|--|---|---|

Sometimes the plus symbol or decimal is used to modify the numerical grades

**Grading scale for 2.\***

| <b>LEARNING OUTCOMES</b>  | <b>fail</b>  | <b>pass</b>  |
|---------------------------|--|--|
| <b>Knowledge</b>          | A student does not attend (with no excuse) more than 50% of classes; has only vague knowledge on concepts and problems related to the techno-scientific progress and on arguments concerning value-neutrality and value-ladenness of techno-science and sees only very commonly discussed social and ethical consequences of techno-scientific progress; | A student possesses some knowledge on problems related to the techno-scientific progress and on arguments concerning value-neutrality and value-ladenness of techno-science as well as on debates on social and ethical consequences of techno-scientific progress; sees problems concerning the techno-scientific progress and understands key concepts involved in the debates over that progress; |
| <b>skills</b>             | is not able to analyze required readings and to sum up issues discussed during classes;  | A student able to analyze required readings, to sum up issues discussed during classes, to make some criticism of arguments on value-neutrality and value-ladenness of techno-science, and to find additional information (also in English) on discussed issues and to present clearly that information in English;  |
| <b>social competences</b> | A student is able to indicate only very commonly discussed social and ethical problems related to the techno-scientific progress, does not often participate in discussions during classes;  | A student is able to indicate social and ethical problems related to the techno-scientific progress, participate often in discussions during classes, sees and argues for the necessity to take personal responsibility for the direction of techno-scientific progress;   |

**STUDENT WORKLOAD**

| Activity                             | Average time students typically need to complete proper learning activity |              |
|--------------------------------------|---|--------------|
| the time with the lecturer           | 30  | or 30        |
| reading and preparing for discussion | 30  | or 30        |
| finding a topic and writing a paper  | 0   | or 25        |
| <b>TOTAL HOURS</b>                   | <b>60</b>   | <b>or 85</b> |

Workload indicates the time students typically need to complete all learning activities required to achieve the expected learning outcomes. In most cases, student workload ranges from 1,500 to 1,800 hours for an academic year, whereby one credit corresponds to 25 to 30 hours of work.

|                    |          |             |
|--------------------|----------|-------------|
| <b>TOTAL ECTS:</b> | <b>2</b> | <b>or 3</b> |
|--------------------|----------|-------------|

**REQUIRED READING LIST**

|    |   |
|----|---|
| 1. | Postman N. Technopoly: The Surrender of Culture to Technology New York 1993                           |
| 2. | Winner L., The Whale and the Reactor. A Search form Limits in an Age of High Technology, Chicago 1986 |
| 3. | Hughes Th. P., Human-built Word. How to Think about Technology and Culture, Chicago 2005.             |
| 4. | Ellul, J., The Technological Society, New York 1964   |

**RECOMENDED READING LIST**

|    |  |
|----|--|
| 1. | Agazzi, E., Right, Wrong and Science. The Ethical Dimensions of the Techno-Scientific Enterprise, Amsterdam 2004   |
| 2. | Brey Philip (2006), „The Social Agency of Technological Artifacts”, in: P. P. Verbeek and A. Slob, Kluwer (red.), A Typology, User Behavior and Technology Development, Dordrecht, 71-81 |
| 3. | Brey Philip (2007), „The Technological Construction of Social Power”, Social Epistemology 22(1), 71-95   |
| 4. | Green Lelia (2001), Technoculture: From Alphabet to Cybersex, Sydney   |
| 5. | Ihde Don (1990), Technology and the lifeworld: from garden to earth, Bloomington   |

Lublin, 1.10.2012

place, date

dr hab. Ewa Agnieszka Lekka-Kowalik prof.. KUL

signature