## **9. Innovations and Technology in Logistics**

| 1. Module Title  |  | Innovations and 2   |             | 2. Module    | Code                        |                  |  |  |  |
|--|--|---|-------------|--------------|-----------------------------|------------------|--|--|--|
|  |  | Technology in Logistics   |             |              |                             |                  |  |  |  |
| 3. Academic  |  | 2022-2023   |             |              |                             |                  |  |  |  |
| Year, Semester,  |  | Spring semester,  |             |              |                             |                  |  |  |  |
| Module Status Full-time                                    |  |   |             |              |                             |                  |  |  |  |
| 4. Aims and  | The or   | The outcomes to be achieved by the students the end of this course are: |             |              |                             |                  |  |  |  |
| Learning   | •  | enwersumen witchen in regiones,   |             |              |                             |                  |  |  |  |
| Outcomes   | <ul> <li>Understanding broad context of innovations in logistics;</li> </ul> |   |             |              |                             |                  |  |  |  |
|  | •  | Be able to make dec supply chain  | isions con  | cerning inno | vations                     | in logistics and |  |  |  |
| Knowledge  |  |   | Effect Code |              | As                          | sessment         |  |  |  |
|  |  |   |             |              |                             |                  |  |  |  |
|  |  |   | Subject     | Field        |                             |                  |  |  |  |
| 1. Knows how   |  | -   |             | K_W03        | I                           | oup work         |  |  |  |
| individual entrepreneurship                                |  | neurship  |             |              | Fir                         | nal project      |  |  |  |
| Skills   |  | Effect Code   |             | As           | Assessment                  |                  |  |  |  |
| ~ <b></b>  |  |   | Subject     |              |                             |                  |  |  |  |
| 1. Is capable  | to intro   | oduce theoretical   | a cange co  | K_U01        | Fir                         | nal project      |  |  |  |
| _  |  | s of logistics and  |             | _            |                             | 1 3              |  |  |  |
| supply chain   |  |   |             |              |                             |                  |  |  |  |
| 2. Is able to a  | pply ba  | sic knowledge to  |             | K_U02        | Fir                         | nal project      |  |  |  |
| cooperate w  | ith othe   | er functional areas   |             |              |                             |                  |  |  |  |
| 3. Can develop a proje                                     |  | ect aimed at  |             | K_U12        | Gr                          | oup work         |  |  |  |
| _  | he effic   | iency of the supply   |             |              |                             |                  |  |  |  |
| chain  |  |   |             |              |                             |                  |  |  |  |
| 4. Can use the approp                                      |  |   |             | K_U18        | Fir                         | nal project      |  |  |  |
|  | for crea   | ting an innovative  |             |              |                             |                  |  |  |  |
| project  |  |   |             |              |                             |                  |  |  |  |
| Social Competenc   | ies  |   | Effect C    |              | As                          | sessment         |  |  |  |
| 4 77   | 1  | 1 111 111 1 1.1   | Subject     | Field        |                             | 1                |  |  |  |
| *  |  | kills, will work with   |             | K_K10        |                             | nal project      |  |  |  |
|  |  | ely utilize those   |             |              | Gr                          | oup work         |  |  |  |
| skills in the teamwork                                     |  |   |             | K_K09        | Fir                         | nal project      |  |  |  |
| 2. Has the competence to negotiate to achieve common goals |  |   | K_KU9       | I .          | oup work                    |                  |  |  |  |
| acineve coi  | mnon g   | ouis  |             |              |                             | oup work         |  |  |  |
| 5. Module Coordinator Nan                                  |  | Name  | e           |              |                             | E-mail           |  |  |  |
|  |  | prof. Aleksandra Laskowska-   |             | a- a         | a.laskowska@lazarski.edu.pl |                  |  |  |  |
| Rutko  |  |   | ska         |              |                             |                  |  |  |  |
| 6. Lecturer  |  | Name  | Name        |              | E-mail                      |                  |  |  |  |
|  |  | prof. Aleksandra Laskowska-   |             | a- a.        | a.laskowska@lazarski.edu.pl |                  |  |  |  |
|  |  | Rutkows   | l l         |              |                             | 1                |  |  |  |
| 1  |  | 1   |             |              |                             |                  |  |  |  |

| 7. Module Level   |   | Masters   | Bachelors                        |        |  |  |  |  |
|---|---|---|----------------------------------|--------|--|--|--|--|
|   |   |   | X                                |        |  |  |  |  |
| 8. Yes  | ar and                                      | Year  | Programme                        |        |  |  |  |  |
|   | ramme                                       | 3   | BA in Management                 |        |  |  |  |  |
| 0 Ma  | odule Content                               | 3   | Bit in Management                |        |  |  |  |  |
| #   | dule Content                                | Topics Discussed  | Ho                               | ours   |  |  |  |  |
| 11  |   | Seminar   | 110                              | Juis   |  |  |  |  |
| 1   | Introduction to the course; Design thinking |   |                                  |        |  |  |  |  |
| 2   | Creativity and inno                         |   | 2,5<br>eac                       |        |  |  |  |  |
| 3   | Innovative technol                          |   | top                              | oic    |  |  |  |  |
| 4   | Go to market analy                          | ysis  | 30                               |        |  |  |  |  |
| 5   | Innovations in log                          | istics and supply chain   | tog                              | gether |  |  |  |  |
| 6   | Innovations types                           | and diffusion in logistics and supply c   | hain                             |        |  |  |  |  |
| 7   | European Union a                            | nd national policy in support of innova   | tions                            |        |  |  |  |  |
| 8   | Digital supply chains                       |   |                                  |        |  |  |  |  |
| 9   | Eco – innovations:                          | Green supply chains   |                                  |        |  |  |  |  |
| 10  | Supply chains of the                        | he future   |                                  |        |  |  |  |  |
| 11  | Final project prese                         | ntation   |                                  |        |  |  |  |  |
| 12  | Final projects pres                         | entation  |                                  |        |  |  |  |  |
| The primary goal of this seminar is to impart the knowledge to allow students to intelligently solve practical business problems and to apply creative concepts to real logistic problems.  10. Individual Student's Work |   |   |                                  |        |  |  |  |  |
| #   |   | Description   | Hours                            |        |  |  |  |  |
|   | D   |   | 1.5                              |        |  |  |  |  |
|   | Preparation for wo                          | rkshops   | 15                               |        |  |  |  |  |
| Preparation for cla   |   | ss discussion   | 15                               |        |  |  |  |  |
|   | Preparation for fina                        | al project  | 50                               |        |  |  |  |  |
|   |   | 1 0   |                                  |        |  |  |  |  |
|   |   | Coursework (100%): In-class assignm   | ents (50%), Group final projec   | t and  |  |  |  |  |
| Meth  |   | presentation (50%)  |                                  |        |  |  |  |  |
|   |   | In order to pass the course student sho   | uld score at least grade 3.0 (50 | )%) as |  |  |  |  |
| Crite   |   | the total grade for semester.   |                                  |        |  |  |  |  |
| Scoring translates into grades as follows:  |   |   |                                  |        |  |  |  |  |
|   |   | 50 - 59 points - grade 3  |                                  |        |  |  |  |  |
|   |   | 60 - 69 points - grade 3.5  |                                  |        |  |  |  |  |
|   |   | 70 - 79 points - grade 4  |                                  |        |  |  |  |  |
|   |   | 80 - 89 points - grade 4.5  |                                  |        |  |  |  |  |
|   |   | 90 - 98 points - grade 5  |                                  |        |  |  |  |  |
|   |   | 98-100 points - grade 5.5   |                                  |        |  |  |  |  |
|   |   | In the case of exceptional student achievements, the lecturer can award a 5.5 mark with fewer points. |                                  |        |  |  |  |  |
| 13. ECTS Credits  |   | 5   |                                  |        |  |  |  |  |
| 13. EC15 Cicuits  |   |   |                                  |        |  |  |  |  |

|   |  | Hours   | ECTS |  |  |  |
|---|--|---|------|--|--|--|
|   | Contact H  | Contact Hours   |      |  |  |  |
|   | Lecture  | 30  | 1,2  |  |  |  |
|   | Consultation   | 15  | 0,6  |  |  |  |
|   | Other Kind of Student's Activity   |   |      |  |  |  |
|   | Individual Student's Work  | 80  | 3,2  |  |  |  |
|   | SUMM   | 125   | 5    |  |  |  |
| 14. Required Readings  15. Recommended Readings | <ol> <li>Future supply chains, Cap Ger</li> <li>Laskowska-Rutkowska A., In chain, Research in Logistics at Vol. 5, No 3., s. 287-297</li> <li>Laskowska-Rutkowska A., Eff</li> </ol> | <ol> <li>Future supply chains, Cap Gemini 2008.</li> <li>Laskowska-Rutkowska A., Innovation diffusion in the supply chain, Research in Logistics and Production. Special Issue, 2015</li> </ol> |      |  |  |  |
| 16. Place where module run                      |  | Management, Vol.8, nr 681, Szczecin 2012, s. 9 – 21.  LU campus   |      |  |  |  |
| 17. Other                                       |  |   |      |  |  |  |