|    |  | BIO   |  |  |  |  |  |  |  |
|----|--|---|--|--|--|--|--|--|--|
| 1  | Course Title:  | BIOLOG  | SY II  |  |  |  |  |  |  |
| 2  | Course Code:   | FEN220  | 5  |  |  |  |  |  |  |
| 3  | Type of Course:  | Compuls   | sory   |  |  |  |  |  |  |
| 4  | Level of Course:   | First Cycle   |  |  |  |  |  |  |  |
| 5  | Year of Study:   | 2   |  |  |  |  |  |  |  |
| 6  | Semester:  | 3   |  |  |  |  |  |  |  |
| 7  | ECTS Credits Allocated:                                    | 4.00  |  |  |  |  |  |  |  |
| 8  | Theoretical (hour/week):                                   | 2.00  |  |  |  |  |  |  |  |
| 9  | Practice (hour/week):                                      | 2.00  |  |  |  |  |  |  |  |
| 10 | Laboratory (hour/week):                                    | 0   |  |  |  |  |  |  |  |
| 11 | Prerequisites:   |   |  |  |  |  |  |  |  |
| 12 | Language:  | Turkish   |  |  |  |  |  |  |  |
| 13 | Mode of Delivery:  | Face to face  |  |  |  |  |  |  |  |
| 14 | Course Coordinator:  | Prof. Dr. MUSTAFA ÖZKAN   |  |  |  |  |  |  |  |
| 15 | Course Lecturers:  |   |  |  |  |  |  |  |  |
| 16 | Contact information of the Course<br>Coordinator:          | Prof. Dr. Mustafa ÖZKAN<br>Bursa Uludağ Üniversitesi Eğitim Fakültesi Matematik ve Fen<br>Bilimleri Bölümü Fen Bilgisi Anabilim dalı Öğretim Üyesi Tel :40683   |  |  |  |  |  |  |  |
| 17 | Website:   |   |  |  |  |  |  |  |  |
| 18 | Objective of the Course:                                   | The objectives of this lesson are:<br>To introduce the structures of the organ systems of animal<br>organisms<br>To explain how the organ systems of animal organisms operate   |  |  |  |  |  |  |  |
| 19 | Contribution of the Course to<br>Professional Development: | This course will provide students with an advanced level of<br>theoretical, methodological and factual knowledge in the field of<br>"Teaching Profession General Competencies" and "Professional<br>Knowledge" in a way that includes an interrogative perspective. In<br>addition, this course contributes to the students' ability to acquire<br>competencies specific to the field, by enabling them to obtain<br>advanced theoretical knowledge from the basic field of teacher<br>training and educational sciences and the ability to use them. |  |  |  |  |  |  |  |
| 20 | Learning Outcomes:   |   |  |  |  |  |  |  |  |
|    |  | 1   | The students will learn the differences between living and non-living and between plants and animals.              |  |  |  |  |  |  |
|    |  | 2   | The students will explain and compare the classification of animals and sexual and asexual reproduction.           |  |  |  |  |  |  |
|    |  | 3   | The students will have information about animal tissues  |  |  |  |  |  |  |
|    |  | 4   | The students will describe feeding mechanisms and digestion in animals   |  |  |  |  |  |  |
|    |  | 5   | The students will describe the types, structures and functions of circulation in animals.                          |  |  |  |  |  |  |
|    |  | 6   | The students will explain how and with what mechanisms animals realize gas exchange                                |  |  |  |  |  |  |
|    |  | 7   | The students will compare and explain excretory systems<br>and products in animals                                 |  |  |  |  |  |  |
|    |  | 8   | The students will explain the nervous systems and sensory mechanisms in animals with their structure and functions |  |  |  |  |  |  |
|    |  | 9   | The students will explain the structure and functions of the endocrine system                                      |  |  |  |  |  |  |

|          |  | 10         | The students will explain support and movement   |                               |                           |  |  |  |  |  |  |
|----------|--|------------|--|-------------------------------|---------------------------|--|--|--|--|--|--|
| 21       | Course Content:  | 1          |  |                               |                           |  |  |  |  |  |  |
|          | Course Content:  |            |  |                               |                           |  |  |  |  |  |  |
| Week     | Theoretical  |            | Practice   | Practice                      |                           |  |  |  |  |  |  |
| 1        | Differences between animate and ina and between plants and animals | animate    | Microscope and Parts, Measuring under the microscope   |                               |                           |  |  |  |  |  |  |
| 2        | Classification of living things                                    |            | Protista, Euglena, Plathelminthes  |                               |                           |  |  |  |  |  |  |
| 3        | Tissues and their features in animals                              |            | Cell concept, tongue and cheek epithelial cell, frog epithelial cell   |                               |                           |  |  |  |  |  |  |
| 4        | Tissues and their features in animals                              |            | Bone tissue, cartilage tissue  |                               |                           |  |  |  |  |  |  |
| 5        | Reproduction, fertilization and develo<br>animals                  | pment in   | Blood tissue, blood types, muscle tissue   |                               |                           |  |  |  |  |  |  |
| 6        | Reproduction, fertilization and develo<br>animals                  | pment in   | Mitosis and meiosis  |                               |                           |  |  |  |  |  |  |
| 7        | Respiratory system in animals                                      |            | Respiratory test   |                               |                           |  |  |  |  |  |  |
| 8        | Midterm Exam   |            | Midterm Exam   |                               |                           |  |  |  |  |  |  |
| 9        | Excretory system in animals  |            | Excretory organs   |                               |                           |  |  |  |  |  |  |
| 10       | Circulatory system in animals                                      |            | Frog dissection  |                               |                           |  |  |  |  |  |  |
| 11       | Nervous system in animals  |            | Earthworm examinatior  | 1                             |                           |  |  |  |  |  |  |
| 12       | Nutrition and digestion in animals                                 |            | Examination of fish inte   | ernal organs                  |                           |  |  |  |  |  |  |
| 13       | Endocrine system   |            | Studying the human model   |                               |                           |  |  |  |  |  |  |
| Activit  | es   |            | Number   | Duration (hour)               | Total Work<br>Load (hour) |  |  |  |  |  |  |
| Theore   | ivaterials:  |            | Gü <b>n</b> düz E., Demirsoy A   | ,2T@@kan İ) 6. Bask           | 2000, Palme               |  |  |  |  |  |  |
| Practic  | als/Labs   |            | 14   | 2.00                          | 28.00                     |  |  |  |  |  |  |
| Self stu | dy and preperation   |            | (Ceviri Ed. Ali Demirso  | <b>∕ 6∈0İ</b> 3 mail Türkkan) | 8610œ                     |  |  |  |  |  |  |
| Homew    | vorks  |            | 0  | 0.00                          | 0.00                      |  |  |  |  |  |  |
| Project  | 6  |            | Hacettepe Üniversitesi Yayooları A/52. 19850Aookara  |                               |                           |  |  |  |  |  |  |
| Field S  | tudies   |            | 0  | 0.00                          | 0.00                      |  |  |  |  |  |  |
| Midtern  | R exams  | NUMBE      |  | 10.00                         | 10.00                     |  |  |  |  |  |  |
| Others   |  |            | 0  | 0.00                          | 0.00                      |  |  |  |  |  |  |
| Minateer | nafren   | 1          | 40100  | 16.00                         | 16.00                     |  |  |  |  |  |  |
| Total W  | /ork Load  |            |  |                               | 128.00                    |  |  |  |  |  |  |
| Homew    | workloadjeso hr  | 0          | 0.00   |                               | 3.93                      |  |  |  |  |  |  |
| ECTS (   | Credit of the Course   |            |  |                               | 4.00                      |  |  |  |  |  |  |
| Total    |  | 2          | 100.00   |                               |                           |  |  |  |  |  |  |
|          | ution of Term (Year) Learning Activitiess Grade                    | es to      | 40.00  |                               |                           |  |  |  |  |  |  |
| Contrib  | ution of Final Exam to Success Grade                               | 9          | 60.00  |                               |                           |  |  |  |  |  |  |
| Total    |  |            | 100.00   |                               |                           |  |  |  |  |  |  |
| Course   |  | sed in the | In the teaching of the course, an instruction method,<br>including scientific process skills such as making<br>observations in the laboratory, collecting data, recording<br>data and making conclusions, will be used. There will be a<br>midterm and a final exam in the semester. Exam grades<br>will be subjected to relative evaluation by entering the<br>automation system. |                               |                           |  |  |  |  |  |  |
| 24       | ECTS / WORK LOAD TABLE   |            |  |                               |                           |  |  |  |  |  |  |

| 25                         |     |     | CON   | TRIE | BUTIC    | N O   |      | LEARNING OUTCOMES TO PROGRAMME<br>QUALIFICATIONS |      |          |             |         |          |      |      |         |
|----------------------------|-----|-----|-------|------|----------|-------|------|--|------|----------|-------------|---------|----------|------|------|---------|
|                            | PQ1 | PQ2 | PQ3   | PQ4  | PQ5      | PQ6   | PQ7  | PQ8  | PQ9  | PQ1<br>0 | PQ11        | PQ12    | PQ1<br>3 | PQ14 | PQ15 | PQ16    |
| ÖK1                        | 5   | 5   | 4     | 4    | 5        | 5     | 4    | 4  | 4    | 3        | 2           | 2       | 1        | 1    | 1    | 1       |
| ÖK2                        | 5   | 5   | 4     | 5    | 5        | 5     | 4    | 4  | 4    | 3        | 2           | 1       | 1        | 1    | 1    | 1       |
| ÖK3                        | 4   | 5   | 4     | 5    | 5        | 5     | 5    | 5  | 4    | 3        | 2           | 2       | 1        | 1    | 1    | 1       |
| ÖK4                        | 4   | 5   | 3     | 5    | 5        | 5     | 5    | 4  | 5    | 3        | 2           | 1       | 1        | 1    | 1    | 1       |
| ÖK5                        | 4   | 5   | 4     | 5    | 5        | 4     | 4    | 5  | 4    | 3        | 1           | 2       | 1        | 1    | 1    | 1       |
| ÖK6                        | 4   | 5   | 4     | 5    | 5        | 4     | 4    | 4  | 5    | 4        | 2           | 1       | 1        | 1    | 1    | 1       |
| ÖK7                        | 4   | 5   | 4     | 5    | 5        | 5     | 5    | 4  | 4    | 3        | 2           | 1       | 1        | 1    | 1    | 1       |
| ÖK8                        | 4   | 5   | 4     | 5    | 5        | 5     | 4    | 4  | 4    | 3        | 2           | 1       | 1        | 1    | 1    | 1       |
| ÖK9                        | 4   | 5   | 4     | 5    | 5        | 5     | 4    | 4  | 4    | 3        | 2           | 1       | 1        | 1    | 1    | 1       |
| ÖK10                       | 4   | 5   | 4     | 5    | 5        | 5     | 5    | 5  | 4    | 4        | 2           | 2       | 1        | 1    | 1    | 1       |
|                            |     | ı I | LO: L | earr | ning (   | Dbjed | tive | s P  | Q: P | rogra    | ım Qu       | alifica | tions    | 5    |      | <b></b> |
| Contrib<br>ution<br>Level: | on  |     |       |      | 3 Medium |       |      | 4 High   |      |          | 5 Very High |         |          |      |      |         |