

# MARINE METEOROLOGY

|      |   |   |
|------|---|---|
| 1    | Course Title:   | MARINE METEOROLOGY  |
| 2    | Course Code:  | DLIS216   |
| 3    | Type of Course:   | Optional  |
| 4    | Level of Course:  | Short Cycle   |
| 5    | Year of Study:  | 2   |
| 6    | Semester:   | 4   |
| 7    | ECTS Credits Allocated:                                 | 3.00  |
| 8    | Theoretical (hour/week):                                | 2.00  |
| 9    | Practice (hour/week):                                   | 0.00  |
| 10   | Laboratory (hour/week):                                 | 0   |
| 11   | Prerequisites:  | -   |
| 12   | Language:   | Turkish   |
| 13   | Mode of Delivery:                                       | Face to face  |
| 14   | Course Coordinator:                                     | Öğr. Gör. İBRAHİM SAPMAZ  |
| 15   | Course Lecturers:                                       | Meslek Yüksekokulları Yönetim Kurullarının görevlendirdiği öğretim elemanları.  |
| 16   | Contact information of the Course Coordinator:          | Uludağ Üniversitesi<br>Gemlik Asım Kocabıyık Meslek Yüksekokulu<br>Deniz ve Liman İşletmeciliği Programı<br>16600 Gemlik/Bursa<br>Telefon: 0 224 512 3491<br>E-Posta: emtacar@uludag.edu.tr   |
| 17   | Website:  |   |
| 18   | Objective of the Course:                                | Student -understands and describes the elements of meteorology - measures and evaluates the elements of meteorology -receives and assess weather forecasts, then takes appropriate action In port or during the course; By measuring meteorological elements, assessment, and will take appropriate action. |
| 19   | Contribution of the Course to Professional Development: | It makes evaluations about atmospheric conditions by making observations with weather forecast reports.   |
| 20   | Learning Outcomes:                                      |   |
|      | 1   | Understand the atmosphere and be able to explain its relation with sea and maritime activities.   |
|      | 2   | Describe the meteorological properties of Troposphere   |
|      | 3   | Understand and explain weather and sea interaction and meteorological conditions  |
|      | 4   | Forecast weather condition  |
|      | 5   | Present before an audience the results and outcome of any exercise  |
|      | 6   |   |
|      | 7   |   |
|      | 8   |   |
|      | 9   |   |
|      | 10  |   |
| 21   | Course Content:   |   |
|      | Course Content:   |   |
| Week | Theoretical   | Practice  |

|                            |  |        |                 |                        |
|----------------------------|--|--------|-----------------|------------------------|
| 1                          | METEOROLOGY - Atmosphere Description and Important Branch of Meteorology, Marine Meteorology, Marine Meteorology and Related Activities, A Description of the atmosphere, Atmospheric Composition, Atmospheric Floor, Standard Atmosphere  |        |                 |                        |
| 2                          | HEAT, TEMPARATURE Air Temperature, Measurement of Temperature, Temperature Changes, Vertical Air Motion Effects of Temperature, Temperature Measuring Instruments, The Control of The Thermometers And Thermography  |        |                 |                        |
| 3                          | ATMOSPHERIC PRESSURE Measurement of Pressure, Pressure Changes, Pressure Measurement Instruments, Isobar, Pressure Gradient, Low And High Pressure Centers   |        |                 |                        |
| 4                          | WIND Wind and Properties, Factors Affecting Wind, Wind Types, Measurement of Wind, Wind Measurement Instruments, True and Apparent Wind  |        |                 |                        |
| 5                          | EVAPORATION, INSOLATION, CONDENSATION, MOISTURE Evaporation, Evaporation Measurement Instruments, Insolation, Insolation Measuring Instruments, Condensation, Moisture And Moisture Types, Methods Used In Measuring Moisture, Humidity Measurement Instruments, Humidity Effect Cargo |        |                 |                        |
| 6                          | CLOUDS, PRECIPITATION AND METEORS  |        |                 |                        |
| Activites                  |  | Number | Duration (hour) | Total Work Load (hour) |
| Theoretical                | Measuring instruments, meteors   | 14     | 2.00            | 28.00                  |
| 7                          | VISIBILITY FOG METEOROLOGICAL  |        |                 |                        |
| Practicals/Labs            |  | 0      | 0.00            | 0.00                   |
| Self study and preparation | Classification, Mist, Haze, Meteorological Observation   | 14     | 4.00            | 56.00                  |
| Homeworks                  |  | 0      | 0.00            | 0.00                   |
| Projects                   |  | 0      | 0.00            | 0.00                   |
| 9                          | AIR MASSES Air Mass Formation.   |        |                 |                        |
| Field Studies              |  | 0      | 0.00            | 0.00                   |
| Midterm Exams              | Stable and Unstable Air masses, Air masses Affecting Turkey  | 1      | 1.00            | 1.00                   |
| Others                     |  | 1      | 5.00            | 5.00                   |
| Final Exams                | Structures, The Typical Structure of Fronts, Course of Formation of Fronts, Classification   | 1      | 2.00            | 2.00                   |
| Total Work Load            |  |        |                 | 92.00                  |
| Total work load / 30 hr    |  |        |                 | 3.07                   |
| ECTS Credit of the Course  |  |        |                 | 3.00                   |
|                            | Waves, Waves of Cracking, Tides, Currents  |        |                 |                        |
| 11                         | OCEANS, SEAS, WAVES, TIDES, CURRENTS Oceans And Seas, The Temperature And Salinity of Sea Water, Waves, Waves of Cracking, Tides, Currents   |        |                 |                        |
| 12                         | SYNOPTIC CODING, SYNOPTIC CHARTS Synoptic Coding In Voluntary Observation Ships, Synoptic Map And Processing Technique   |        |                 |                        |
| 13                         | WEATHER FORECAST How to Prepare the weather forecast? Weather Forecast In The Ship   |        |                 |                        |
| 14                         | WEATHER FORECAST How to Prepare the weather forecast? Weather Forecast In The Ship   |        |                 |                        |
|                            |  |        |                 |                        |

|  |   |   |        |
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| 22   | Textbooks, References and/or Other Materials: | Öney, S., ve Yılmaz, A., 2000, Denizcilik meteorolojisi, Görsel Sanatlar Matbaacılık, 304 sayfa, İstanbul<br>Çevik Ü., 2005, Denizcilik Meteorolojisi Ders Çalışma Kılavuzu, Birsen Yayınevi, İstanbul, 171 sayfa |        |
| 23   | Assesment                                     |   |        |
| TERM LEARNING ACTIVITIES   |   | NUMBE<br>R  | WEIGHT |
| Midterm Exam   |   | 1   | 40.00  |
| Quiz   |   | 0   | 0.00   |
| Home work-project  |   | 0   | 0.00   |
| Final Exam   |   | 1   | 60.00  |
| Total  |   | 2   | 100.00 |
| Contribution of Term (Year) Learning Activities to Success Grade |   | 40.00   |        |
| Contribution of Final Exam to Success Grade                      |   | 60.00   |        |
| Total  |   | 100.00  |        |
| Measurement and Evaluation Techniques Used in the Course         |   | Measurement and evaluation is carried out according to the principles of Bursa uludag University Associate and Undergraduate Education Regulation.  |        |
| 24   | ECTS / WORK LOAD TABLE                        |   |        |

|  |  |     |              |     |                 |     |               |     |                    |      |      |      |      |      |      |      |
|--|--|-----|--------------|-----|-----------------|-----|---------------|-----|--------------------|------|------|------|------|------|------|------|
| <b>25</b>  | <b>CONTRIBUTION OF LEARNING OUTCOMES TO PROGRAMME QUALIFICATIONS</b> |     |              |     |                 |     |               |     |                    |      |      |      |      |      |      |      |
|  | PQ1  | PQ2 | PQ3          | PQ4 | PQ5             | PQ6 | PQ7           | PQ8 | PQ9                | PQ10 | PQ11 | PQ12 | PQ13 | PQ14 | PQ15 | PQ16 |
| ÖK1  | 4  | 0   | 3            | 0   | 0               | 0   | 0             | 0   | 0                  | 2    | 0    | 1    | 0    | 0    | 0    | 0    |
| ÖK2  | 3  | 0   | 1            | 0   | 1               | 0   | 0             | 0   | 0                  | 2    | 0    | 0    | 0    | 0    | 0    | 0    |
| ÖK3  | 2  | 0   | 3            | 0   | 0               | 0   | 0             | 0   | 0                  | 0    | 0    | 1    | 0    | 0    | 0    | 0    |
| ÖK4  | 0  | 0   | 4            | 0   | 0               | 0   | 0             | 0   | 0                  | 3    | 0    | 2    | 0    | 0    | 0    | 0    |
| ÖK5  | 0  | 0   | 3            | 0   | 3               | 0   | 0             | 0   | 0                  | 2    | 0    | 2    | 0    | 0    | 0    | 0    |
| <b>LO: Learning Objectives    PQ: Program Qualifications</b> |  |     |              |     |                 |     |               |     |                    |      |      |      |      |      |      |      |
| <b>Contribution Level:</b>                                   | <b>1 very low</b>  |     | <b>2 low</b> |     | <b>3 Medium</b> |     | <b>4 High</b> |     | <b>5 Very High</b> |      |      |      |      |      |      |      |