## GDYNIA MARITIME UNIVERSITY

# Faculty of Navigation Sea transport Erasmus Faculty Coordinator - Przemysław Wilczyński Courses in English

### **Semester III (Winter) ECTS 18**

Code	Name	Description/Content	ECTS	Teacher's name
1	English	General English: Maritime English- Weather Forecasts. Electronic Aids to Navigation. Navigating Techniques and Instruments. Types of Cargo. SMCP	3	mgr Bożena Foryś
13	Navigation	Dead Reckoning, Coastal Navigation, Position lines and Positions, Sailings, Information from charts, lists of lights and other publications, Chart work Exercises.	4	mgr inż. Kamil Formela
14	Celestial Navigation	The determination of position at sea from altitudes and azimuths of celestial bodies. The calculation of angles and Times of astronomical phenomena with help of The Nautical Almanac.	3	dr inż. Krzysztof Wróbel
16	Navigational Equipment	Satellite Navigation Systems: GPS, DGPS, SBAS, GLONASS, Galileo Compass, Terrestrial Radionavigation Systems, Reference Coordinate Systems, Time, Hydroacoustics, Echo sounder.	4	dr hab. inż. Tadeusz Stupak prof. AMG
18	Construction and Stability of Ship	Dimensions and hydrostatic dates, calculation of ship parameters, construction of ship	4	dr inż. Jacek Jachowski

# Semester IV (Spring) ECTS 21

Code	Name	Description/Content	ECTS	Teacher's name
1	English	General English: Maritime English- Cargo Handling Gear. Containerization. Standard Marine Communication Phrases. MarEng. SMCP	2	mgr Bożena Foryś
13	Navigation	Great Circle, Rhumb Line, Accuracy Standards for Navigation, Chart work Exercises.	3	mgr inż. Kamil Formela
14	Celestial Navigation	The algorithmization of computations on celestial navigation. The estimation of accuracy of astronomical observations and calculation of precision of celestial fix.	2	dr inż. Krzysztof Wróbel
16	Navigational Equipment	Basic radar principles, radar system - operational principles and controls, false and unwanted radar responses. Radar navigation, radar beacons, passive and active radar reflectors	4	dr hab. inż. Tadeusz Stupak prof. AMG
18	Construction and Stability of Ship	Ship strength, ship equipment.	3	dr inż. Jacek Jachowski
24	Ship Safety Management and Operation	LSA Code, Ship Grounding Analysis, Underway Shipboard Emergencies: Fire, Abandon Ship, Man Overboard, Drills at Sea, Search and Rescue	3	mgr inż. Paulina Krajewska
25	Sea Communication	International Code of Signals, Distress Message- obligation and Procedure, Marine radio communication facilities available for signalling and distress purposes	2	mgr inż. Karol Olszewski
30	GIS - ECDIS	GIS - Definition, Vector Data versus Raster Data, Data Display, International standards for ECDIS, Main Types of ECS, ECDIS Data, Main Functions of ECDIS, Presentation of ENC, Navigational sensors, Route Planning, Route Monitoring, Special Functions, Data Updating, Alarms and Indications, Malfunction of ECDIS, System Integrity, Back-up Arrangements, System Limitations	2	dr inż. Przemysław Dziula

## Semester V (Winter) ECTS 26

Code	Name	Description/Content	ECTS	Teacher's name
1	English	General English: Maritime English - Tides. Ship's Deck Logbook. Collision Regulations. Ship's Safety Equipment-Alarms and Drills. Sea Environment - Pollution Prevention. SMCP	2	mgr Bożena Foryś
13	Navigation	Magnetic Compass compensation, Magnetic Variation, Tides and Tidal Streams, Definition - Earth, Charts Datum's, Compass correction, Distances, Chart work Exercises.	4	mgr inż. Kamil Formela
16	Navigational Equipment	Target detection and radar range equation. Use of radar for anti-collision purposes, radar plotting aids, ARPA and ATA- specified and additional facilities.	4	dr hab. inż. Tadeusz Stupak prof. AMG
18	Construction and Stability of Ship	Statical and dynamical stability of merchant ships	4	dr inż. Jarosław Soliwoda
19	Cargo Handling and Stowage	Carriage of goods and port operations of bulk (Dry and Liquid) cargoes.	4	dr inż. kpt. ż.w. Przemysław Wilczyński
23	Ship handling	Basic manoeuvrability theory, ship manoeuvrability characteristics, major rules of ship handling, IMO manoeuvrability standards.	4	dr inż. kpt. ż.w. Andrzej Hejmlich
25	Sea Communication	Principles and Basic feature of the maritime mobile service, The Inmarsat system (standard B, C,M, Fleet F77), Global Maritime Distress and Safety System	4	mgr inż. Karol Olszewski

### Semester VI (Summer) ECTS 21

Code	Name	Description/Content	ECTS	Teacher's name
1	English	General English: Letter Writing. Maritime English- Electronic Charts. Medical Service at Sea. Communication-GMDSS. IMDG Code. Ports and Cargo Handling Facilities. SMCP	3	mgr Bożena Foryś
13	Navigation	Route Planning, Ocean Routes, Weather Navigation, Voyage Passage, Checklists, Restricted Waters, Route Optimization, Navigational Calculations, WGS-84, Integrated Navigational Systems.	4	mgr inż. Kamil Formela
16	Navigational Equipment	Use of radar for SAR purposes. INS, IBS and (S)VDR. VTS and SMS.	4	dr hab. inż. Tadeusz Stupak prof. AMG
18	Construction and Stability of Ship	Damage stability of ship	3	dr inż. Jarosław Soliwoda
19	Cargo Handling and Stowage	Stowage and securing different cargoes (general cargo, ro-ro, container's specialized cargoes, etc.) on board specialized vessel and organization of loading/discharging operations.	3	dr inż. kpt. ż.w. Przemysław Wilczyński
20	Ship Management	Ship documents, ship operation.	2	dr inż. kpt ż.w. Przemysław Wilczyński
25	Sea Communication	Maritime Safety Information, GMDSS satellite distress urgency and safety communication procedure, GMDSS terrestrial, distress, urgency and safety communication procedures.	2	mgr inż. Karol Olszewski