



## Teaching Guide

| Teaching Guide      |                                                       |        |                        |           |
|---------------------|-------------------------------------------------------|--------|------------------------|-----------|
| Identifying Data    |                                                       |        |                        | 2016/17   |
| Subject (*)         | Collision Rules, signals, bouyage system and ISM Code |        | Code                   | 631G01303 |
| Study programme     | Grao en Náutica e Transporte Marítimo                 |        |                        |           |
| Descriptors         |                                                       |        |                        |           |
| Cycle               | Period                                                | Year   | Type                   | Credits   |
| Graduate            | 1st four-month period                                 | Third  | Obligatoria            | 6         |
| Language            | English                                               |        |                        |           |
| Teaching method     | Face-to-face                                          |        |                        |           |
| Prerequisites       |                                                       |        |                        |           |
| Department          | Ciencias da Navegación e da Terra                     |        |                        |           |
| Coordinador         | Río Romero, Joaquin Del                               | E-mail | joaquin.del.rio@udc.es |           |
| Lecturers           | Río Romero, Joaquin Del                               | E-mail | joaquin.del.rio@udc.es |           |
| Web                 |                                                       |        |                        |           |
| General description |                                                       |        |                        |           |

## Study programme competences

| Code | Study programme competences                                                                                                                                                                                                                                                                    |
|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1   | Controlar as boas prácticas de seguridade e saúde no traballo.                                                                                                                                                                                                                                 |
| A11  | Empregar o inglés, falado e escrito, aplicado á navegación e ao negocio marítimo.                                                                                                                                                                                                              |
| A17  | Adoptar as medidas axeitadas en casos de emerxencias.                                                                                                                                                                                                                                          |
| A29  | Responder correctamente ás diferentes situacións de emerxencia.                                                                                                                                                                                                                                |
| A35  | Organizar e dirixir a tripulación.                                                                                                                                                                                                                                                             |
| B2   | Resolver problemas de xeito efectivo.                                                                                                                                                                                                                                                          |
| B4   | Comunicarse de xeito efectivo nun ámbito de traballo.                                                                                                                                                                                                                                          |
| B6   | Traballar de forma colaboradora.                                                                                                                                                                                                                                                               |
| B11  | Capacidade de adaptación a novas situacións.                                                                                                                                                                                                                                                   |
| B14  | Capacidade de análise e síntese.                                                                                                                                                                                                                                                               |
| B16  | Organizar, planificar e resolver problemas.                                                                                                                                                                                                                                                    |
| B18  | Dominar a expresión e a comprensión de forma oral e escrita dun idioma estranxeiro.                                                                                                                                                                                                            |
| B19  | Utilizar as ferramentas básicas das tecnoloxías da información e as comunicacións (TIC) necesarias para o exercicio da súa profesión e para a aprendizaxe ao longo da súa vida.                                                                                                                |
| B22  | Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.                                                                                                                                                              |
| C6   | Valorar criticamente o coñecemento, a tecnoloxía e a información dispoñible para resolver os problemas cos que deben enfrontarse.                                                                                                                                                              |
| C11  | Que os estudantes sexan capaces de integrar coñecementos e enfrontarse á complexidade de formular xuízos a partires dunha información que, sendo incompleta ou limitada, inclúa reflexións sobre as responsabilidades sociais e éticas vencelladas á aplicación dos seus coñecementos e xuízos |
| C12  | Que os estudantes saiban comunicar as suas conclusións e os coñecementos e razóns últimas que as sustentan a públicos especializados e non especializados dun xeito claro e sin ambigüidades                                                                                                   |

## Learning outcomes

| Learning outcomes | Study programme competences |
|-------------------|-----------------------------|
|-------------------|-----------------------------|



|                                                                                                                                                                 |                         |                                                    |                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|----------------------------------------------------|------------------|
| Realizar eficazmente las maniobras del buque en navegación. Ser capaz de analizar la información de los aparatos del puente para una mejor toma de decisiones   | A11                     | B2<br>B4<br>B11<br>B14<br>B16<br>B18<br>B19<br>B22 | C6<br>C11<br>C12 |
| Conocer el Reglamento internacional para prevenir los abordajes en la mar, el sistema de Balizamiento IALA, el Código internacional de señales y el Código ISM. | A17<br>A29<br>A35       | B11<br>B14<br>B19                                  | C6               |
| Evaluar situaciones de peligro, aplicar las reglas de navegación.                                                                                               | A11                     | B6<br>B14                                          | C6               |
| Mejorar la gestión de la seguridad del buque, elaborar las listas de comprobación del sistema de gestión, elaborar informes de seguridad, accidentes etc        | A1<br>A17<br>A29<br>A35 | B2<br>B4                                           | C6               |

| Contents                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Topic                                                                                                                                                                                                                                                                                                                         | Sub-topic                                                                                                                                                                                                                             |
| COLREGS<br>Part A - General<br>Part B - Steering and Sailing<br>Part C - Lights and Shapes<br>Part D - Sound and Light signals<br>Part E - Exemptions.                                                                                                                                                                        | Part B:<br>Section 1 - Conduct of vessels in any condition of visibility (Rules 4-10)<br>Section II - Conduct of vessels in sight of one another (Rules 11-18)<br>Section III - conduct of vessels in restricted visibility (Rule 19) |
| COLREGS<br>Annex I - Positioning and technical details of lights and shapes.<br>Annex II - Additional signals for fishing vessels fishing in close proximity.<br>Annex III - Technical details of sound signal appliances<br>Annex IV - Distress signals, which lists the signals indicating distress and need of assistance. | Same                                                                                                                                                                                                                                  |
| International Code of Signals<br>The Morse Code<br>International Flags and Pennants<br>Single letter signals                                                                                                                                                                                                                  | same                                                                                                                                                                                                                                  |
| IALA MARITIME BUOYAGE SYSTEM<br>Lateral Marks Region A<br>Lateral Marks Region B<br>Direction of Buoyage<br>Cardinal Marks<br>Isolated Danger Marks<br>Safe Water Marks<br>Special Marks<br>Chart symbols and abbreviations                                                                                                   | Types of Marks<br>Colours of Marks<br>Shape of Mark<br>Topmarks<br>Light colour and rhythm                                                                                                                                            |



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| INTERNATIONAL SAFETY MANAGEMENT CODE<br>Unit 1: Introduction to IMO and ILO.<br>Unit 2: Safety and security prevention and protection. ISM Code and ISPS Code.<br>Unit 3: Ship safety responsibilities.<br>Unit 4: ISM Code: definition, structure, safety policy, ship-owner communication, captain responsibilities.<br>Unit 5: ISM Resources and personnel, human factors- human error.<br>Unit 6: ISM Code: Preventive maintenance<br>Unit 7: ISM Code: Procedures (operation, emergency, non-conformities, accident report and accident investigation)<br>Unit 8: ISM Code: Company verification and certification. | same |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|

| Planning                                                                                                                        |                                                |                      |                               |             |
|---------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------|----------------------|-------------------------------|-------------|
| Methodologies / tests                                                                                                           | Competencies                                   | Ordinary class hours | Student's personal work hours | Total hours |
| Supervised projects                                                                                                             | A11 A17 A35 B4 B6<br>B14 B16 B18 B19 C6<br>C11 | 2                    | 20                            | 22          |
| Case study                                                                                                                      | A29 B22                                        | 4                    | 20                            | 24          |
| Directed discussion                                                                                                             | B2                                             | 2                    | 2                             | 4           |
| Oral presentation                                                                                                               | C12                                            | 2                    | 10                            | 12          |
| Completion exercises                                                                                                            | A1 B11                                         | 1                    | 1                             | 2           |
| Guest lecture / keynote speech                                                                                                  | A11 B4 B18                                     | 40                   | 40                            | 80          |
| Personalized attention                                                                                                          |                                                | 6                    | 0                             | 6           |
| (*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students. |                                                |                      |                               |             |

| Methodologies                  |                                                      |
|--------------------------------|------------------------------------------------------|
| Methodologies                  | Description                                          |
| Supervised projects            | Home work as required by teachers                    |
| Case study                     | Accident/incident reports review                     |
| Directed discussion            | Accident/incident reports review on class discussion |
| Oral presentation              | Class oral activities                                |
| Completion exercises           | Final exam                                           |
| Guest lecture / keynote speech | Teachers classes                                     |

| Personalized attention                                                                                                                  |                              |
|-----------------------------------------------------------------------------------------------------------------------------------------|------------------------------|
| Methodologies                                                                                                                           | Description                  |
| Guest lecture / keynote speech<br>Supervised projects<br>Directed discussion<br>Oral presentation<br>Case study<br>Completion exercises | As per teachers instructions |

| Assessment |
|------------|
|------------|



| Methodologies        | Competencies                                   | Description                  | Qualification |
|----------------------|------------------------------------------------|------------------------------|---------------|
| Supervised projects  | A11 A17 A35 B4 B6<br>B14 B16 B18 B19 C6<br>C11 | as per teachers instructions | 20            |
| Oral presentation    | C12                                            | same                         | 20            |
| Case study           | A29 B22                                        | same                         | 20            |
| Completion exercises | A1 B11                                         | Final exam                   | 40            |

#### Assessment comments

Oral and written activities throughout the course  
Final exams  
Los criterios de  
evaluación contemplados en los cuadros A-II/1, A-II/2, A-III/1 y  
A-III/2 del Código STCW y sus enmiendas relacionados con esta materia  
se tendrán en cuenta a la hora de diseñar y realizar su evaluación.

#### Sources of information

|                      |                                                                                                                                                                                      |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Basic</b>         | - IMO (). INTERNATIONAL REGULATIONS FOR PREVENTING COLLISIONS AT SEA.<br>- IALA (). MARITIME BUOYAGE SYSTEM. IALA<br>- IMO (). INTERNATIONAL CODE OF SIGNALS.<br>- IMO (). ISM CODE. |
| <b>Complementary</b> |                                                                                                                                                                                      |

#### Recommendations

Subjects that it is recommended to have taken before

Subjects that are recommended to be taken simultaneously

Subjects that continue the syllabus

Other comments

(\*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.