# Universida<sub>de</sub>Vigo

Subject Guide 2014 / 2015

| IDENTIFYIN  | G DATA   |  |           |                 |                          |
|-------------|--|--|-----------|-----------------|--------------------------|
| Compleme    | nts for the Teaching of Drawing  |  |           |                 |                          |
| Subject     | Complements for  |  |           |                 |                          |
|             | the Teaching of  |  |           |                 |                          |
|             | Drawing  |  |           |                 |                          |
| Code        | P02M066V12242  |  |           |                 |                          |
| Study       | (*)Máster  |  |           |                 |                          |
| programme   | Universitario en   |  |           |                 |                          |
|             | Profesorado en   |  |           |                 |                          |
|             | Educación  |  |           |                 |                          |
|             | Secundaria   |  |           |                 |                          |
|             | Obrigatoria,   |  |           |                 |                          |
|             | Bacharelato,   |  |           |                 |                          |
|             | Formación  |  |           |                 |                          |
|             | Profesional e  |  |           |                 |                          |
|             | Ensino de Idiomas.   |  |           |                 |                          |
|             | Especialidade: Arte.   |  |           |                 |                          |
|             | Debuxo   |  |           |                 |                          |
| Descriptors | ECTS Credits   |  | Choose    | Year            | Quadmester               |
|             | 8  |  | Mandatory | 1st             | 2nd                      |
| Teaching    | Spanish  |  |           |                 |                          |
| language    | Galician   |  |           |                 |                          |
|             | English  |  |           |                 |                          |
| Department  |  |  |           |                 |                          |
| Coordinator | Seoane Suárez, Ana   |  |           |                 |                          |
| -           | González Diéguez, Horacio  |  |           |                 |                          |
| Lecturers   | González Diéguez, Horacio  |  |           |                 |                          |
|             | Seoane Suárez, Ana   |  |           |                 |                          |
| E-mail      | horaciogd@edu.xunta.es   |  |           |                 |                          |
| -           | anaseoane@uvigo.es   |  |           |                 |                          |
| Web         |  |  |           |                 |                          |
| General     | Complementary skills for Art Educat  |  |           |                 |                          |
| description | Secondary Education Master, throug<br>different educational levels in which  |  |           | ctice of severa | professionals working at |
|             | The subject seeks to highlight exam Visual Education through real class proposals and methodologies.   |  |           |                 |                          |
|             | Finally, Complementary skills for Art Education addresses a number of topics required for teaching Art tend to be forgotten or neglected in the development of Fine Arts degree, such as Technical Drawing pedagogical applications of different artistic techniques or the set of tools, which are commonly used educational resources. |  |           |                 | hnical Drawing,          |

## Competencies

Code

- A32 (\*)Coñecer o valor formativo e cultural das materias correspondentes á especialización.
- A33 (\*)Coñecer os contidos que se cursan nos respectivos ensinos.
- A34 (\*)Coñecer a historia e os desenvolvementos recentes das materias e as súas perspectivas para poder transmitir unha visión dinámica das mesmas.
- A35 (\*)Coñecer contextos e situacións en que se usan ou aplican os diversos contidos curriculares
- A36 (\*)Coñecer os desenvolvementos teórico-prácticos do ensino e a aprendizaxe das materias correspondentes.
- A37 (\*)Transformar os currículos en programas de actividades e de traballo.
- A38 (\*)Adquirir criterios de selección e elaboración de materiais educativos.
- A39 (\*)Fomentar un clima que facilite a aprendizaxe e poña en valor as achegas dos estudantes.
- A40 (\*)Integrar a formación en comunicación audiovisual e multimedia no proceso de ensino-aprendizaxe.

- A41 (\*)Coñecer estratexias e procedementos de avaliación e entender a avaliación como un procedemento de regulación da aprendizaxe e estímulo ao esforzo.
- A42 (\*)Coñecer e aplicar propostas docentes innovadoras no ámbito da especialización cursada
- A44 (\*)Identificar os problemas relativos ao ensino e a aprendizaxe das materias da especialización e expor alternativas e solucións.
- A47 (\*)Acreditar un bo dominio da expresión oral e escrita na práctica docente.
- A48 (\*)Dominar as destrezas e as habilidades sociais necesarias para fomentar un clima que facilite a aprendizaxe e a convivencia.
- B1 (\*)Utilizar bibliografía e ferramentas de procura de recursos bibliográficos xenerais e específicos, incluíndo o acceso por Internet.
- B2 (\*)Xestionar de forma óptima o tempo de traballo e organizar os recursos dispoñibles, establecendo prioridades, camiños alternativos e identificando erros lóxicos na toma de decisións.
- B3 (\*)Potenciar a capacidade para o traballo en contornas cooperativas e pluridisciplinarios

| Learning aims  |                                  |
|--|----------------------------------|
| Expected results from this subject   | Training and Learning<br>Results |
| To know different examples of the implementation of Plastic Education, Technical Drawing and A     | Art A33                          |
| Modules curricula.   | A35                              |
|  | A36                              |
|  | A37                              |
|  | A38                              |
|  | A41                              |
|  | A42                              |
|  | A44                              |
| To relate the content of the CBD to tangible working proposals.                                    | A33                              |
| 3 31 1   | A35                              |
|  | A36                              |
|  | A37                              |
|  | A38                              |
|  | A41                              |
|  | A42                              |
|  | A44                              |
| To relate the each development stage of the adolescents to different classroom activities.         | A35                              |
|  | A37                              |
|  | A38                              |
|  | A39                              |
|  | A44                              |
| To understand the working dynamics in ESO, Bachillerato and Professional Formation Modules.        | A33                              |
|  | A35                              |
|  | A36                              |
|  | A37                              |
|  | A38                              |
|  | A41                              |
|  | A42                              |
|  | A44                              |
| To know real examples of course development and classroom management.                              | A33                              |
| To know real examples of course development and classroom management.                              | A35                              |
|  | A36                              |
|  | A37                              |
|  | A38                              |
|  | A41                              |
|  | A42                              |
|  | A44                              |
| To know the work of several education professionals in the field of Arts, Plastic Arts and Drawing |                                  |
| from their experience.   | A35                              |
| ··-··· -··-· -····   | A36                              |
|  | A37                              |
|  | A38                              |
|  | A41                              |
|  | A42                              |
|  | A44                              |

| To decide the Mide of a new control of the control  | et este  | 425          |             |
|--|--|--------------|-------------|
| To develop didactic programs led by working pro  | ojects.  | A35<br>A36   |             |
|  |  | A30<br>A37   |             |
|  |  | A38          |             |
|  |  | A41          |             |
|  |  | A44          |             |
| To manage different tools for creating your own  | presentations and educational resources.   | A38          | B1          |
|  |  | A40          | B2          |
| To decide and Personal Personal Plan   |  | A42          | B3          |
| To develop public speaking skills.   |  | A47<br>A48   |             |
| To analyse and experiment with different ways of teaching and learning in the new cultural setups  |  |              | B1          |
| To analyse and experiment with different ways t  | or teaching and learning in the new cultural setups  | A40<br>A42   | B2          |
|  |  | A72          | B3          |
| To use appropriate web platforms to share, exch  | nange and store different types of files.  | A40          | B1          |
| To use appropriate new platforms to share, exec  | ange and store amerem types or most  | 7.1.0        | B2          |
|  |  |              | В3          |
| To use 2.0 tools to support education and distant  | ice learning.  | A35          | B1          |
|  |  | A38          | B2          |
|  |  | A39          | В3          |
|  |  | A40          |             |
|  |  | A42          |             |
| Teamworking.   |  |              | B2<br>B3    |
| To create informal learning networks to complement and support formal learning.  |  | A40          | B1          |
| To create informational ing free works to complete   | ment and support formal rearrange  | A42          | B2          |
|  |  |              | В3          |
| To use Dynamic Geometry as a teaching resource   | ce.  | A36          |             |
|  |  | A38          |             |
|  |  | A40          |             |
|  |  | A42          |             |
| To a surface the surface to the form of the surface to the surface | and all and a second se | A44          |             |
|  | nd demonstrate geometric constructions without   | A36<br>A38   |             |
| memorising. To combine Representation Systems and Dynam  | nic Geometry to create animations  | A36          |             |
| To combine Representation Systems and Dynam  | ile deometry to create animations.   | A38          |             |
|  |  | A40          |             |
|  |  | A42          |             |
| To know the different historical approaches to pe  | erspective and to reflect on their implications.   | A32          |             |
|  |  | A34          |             |
| To master projection mechanisms as key to tran   | sform the three-dimensional world into a two-  | A34          | -           |
| dimensional representation.  |  | A36          |             |
|  |  |              |             |
| Contents   |  |              |             |
| Topic  |  |              |             |
| 1st ESO (Contents, teaching methodology and  | Curricular design, teaching unit development an  | nd classroon | n planning. |
| educational activities for Visual Education)   | Visual Education DCB for 1st ESO.  |              |             |
|  | Classroom Management.  |              |             |
|  | Structure of a Secondary school.   |              |             |
|  | •  |              |             |
|  | Methodologies and strategies to work with students of 1st ESO.   |              |             |
| Available resources for teachers.  |  |              |             |
|  | Visual Education activities for 1st ESO.   |              |             |
|  | Working by projects.   |              |             |
|  | Benefiting from class dynamics to educate in va  | lues         |             |
|  | -  |              |             |
|  | Online Software to create teaching resources.  |              |             |

| Online software for creating teaching resources.  | Tools to publish and exchange different file formats. Flickr, Soundcloud, Vimeo, Slideshare, Dropbox.  |
|---|--|
|   | Distant learning platforms. Moodle (http://moodle.org).  |
|   | Online resources for static image management and treatment.  |
|   | Online resources for dynamic image management and treatment.   |
|   | Online resources for text management and processing.   |
|   | Search and use of online generators of bibliographies and references.  |
|   | Search and use of online generators of teaching resources.   |
| 3rd ESO (Contents, teaching methodology and   | Curricular design, teaching unit development and classroom planning.   |
| educational activities for Visual Education)  | Visual Education DCB for 3rd ESO.  |
|   | Methodologies and strategies to work with students of 3rd ESO.   |
|   | Visual Education activities for 3rd ESO.   |
|   | Working by projects.   |
|   | y Curricular design, teaching unit development and classroom planning.   |
| and working by projects in Bachillerato)  | Technical Drawing DCB for 1st Bachillerato.  |
|   | Methodologies and strategies to work in the classroom.   |
|   |  |
| Techniques and tools to make presentations and  | Technical Drawing activities for 1st Bachillerato.   |
| to speak in public  | Offline Software to create presentations.  |
| to speak in public  | Strategies to use the interactive whiteboard.  |
|   | Oratory resources.   |
| 4th ESO (Contents, teaching methodology and educational activities for Visual Education)  | Curricular design, teaching unit development and classroom planning.   |
| educational activities for visual Education,  | Visual Education DCB for 4th ESO.  |
|   | Methodologies and strategies to work with students of 4th ESO.   |
|   | Visual Education activities for 4th ESO. Working by projects.  |
| 2nd Bachillerato (Contents, teaching  | Curricular design, teaching unit development and classroom planning.   |
| methodology and University access test in Bachillerato)   | Technical Drawing DCB for 2nd Bachillerato.  |
| Buchinerator  |  |
|   | Methodologies and strategies to work in the classroom.   |
|   | Technical Drawing activities for 2nd Bachillerato. University access test exercises.   |
| Personal Learning Networks, Social Learning and   | Connectivism and Social Learning.  |
| E-learning (Session I - Examples and theoretical basis)   | Network learning tools.  |
|   |  |
|   | Designing teaching resources for knowledge sharing.  |
|   |  |
| Ciclos Medios and Formación Profesional   | Social networks as an educational tool.  |
| Ciclos Medios and Formación Profesional (Contents, teaching methodology and structure of the education in Ciclos Medios and Formación | Social networks as an educational tool.  Curricular design, teaching unit development and classroom planning.  |
| (Contents, teaching methodology and structure of  | Social networks as an educational tool.  Curricular design, teaching unit development and classroom planning.  of  Ciclos Medios and Formación Profesional DCB.  Methodologies and strategies to work in Ciclos Medios and Formación |
| (Contents, teaching methodology and structure of the education in Ciclos Medios and Formación   | Social networks as an educational tool.  Curricular design, teaching unit development and classroom planning.  of  Ciclos Medios and Formación Profesional DCB.  |

Technical Drawing and Dynamic Geometry

Strategies and methodologies to draw on Dynamic Geometry programs. Creation of tools to work with the different representation systems. Definition of the different geometric elements using loci and macros.

Regular polygons, geometric transformations and relationships, curves and fractals.

Projection systems as basis for the different systems of representation.

Rotations, changes of plane and revolutions.

Relations between the Orthographic projection and other systems of representation.

History of Perspective, Perspective projection limitations, curved or irregular projection surfaces, stereoscopy.

Personal Learning Networks, Social Learning and E-learning (Session II - Practical exercise)

Connectivism and Social Learning.

Network learning tools.

Designing teaching resources for knowledge sharing.

Social networks as an educational tool.

Artistic education in the schools of art ( Contents teaching methodology and structure of the education in theschools of art)

Artistic education in the schools of art ( Contents, Curricular design, teaching unit development and classroom planning.

DCB of Bachillerato de Artes and Ciclos Artísticos.

Methodologies and strategies to work in Bachillerato de Artes and Ciclos Artísticos.

Activities for Bachillerato de Artes and Ciclos Artísticos.

| Planning                              |             |                             |             |
|---------------------------------------|-------------|-----------------------------|-------------|
|                                       | Class hours | Hours outside the classroom | Total hours |
| Previous studies / activities         | 0           | 20                          | 20          |
| Master Session                        | 10          | 20                          | 30          |
| Case studies / analysis of situations | 8           | 16                          | 24          |
| Classroom work                        | 5           | 10                          | 15          |
| Proceedings                           | 4           | 0                           | 4           |
| Practice in computer rooms            | 2           | 10                          | 12          |
| Practice in computer rooms            | 2           | 10                          | 12          |
| Presentations / exhibitions           | 1           | 2                           | 3           |
| Teaching and/or informatives events   | 8           | 40                          | 48          |
| Autonomous practices through ICT      | 0           | 20                          | 20          |
| Jobs and projects                     | 0           | 10                          | 10          |
| Self-assessment tests                 | 0           | 2                           | 2           |
|                                       |             |                             |             |

<sup>\*</sup>The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.

| Methodologies                         |  |
|---------------------------------------|--|
|                                       | Description  |
| Previous studies /                    | Individual tasks performed by the students before each class session, to get in touch with the   |
| activities                            | themes and contents to be treated.   |
| Master Session                        | Development of all themes and contents through explanations supported by examples and images.    |
| Case studies / analysis of situations | Review and analysis of work and class exercises from ESO and Bachillerato students.              |
| Classroom work                        | Exercises and guided practices with teaching resources, materials, and techniques for Arts,      |
|                                       | Technical Drawing or Visual Education education.   |
| Proceedings                           | Sharing, reflection and debate on the topics and contents developed during the keynote sessions. |
| Practice in computer                  | Dynamic Geometry Practice with Geogebra (http://www.geogebra.org).                               |
| rooms                                 |  |
| Practice in computer                  | Practices in creating teaching resources using online, opensource or freeware applications.      |
| rooms                                 |  |
| Presentations / exhibitions           | Presentations, public keynotes and practices with an interactive whiteboard.                     |

| Teaching and/or      |
|----------------------|
| informatives events  |
| Autonomous practices |

through ICT

Talks with professional teachers, that work in different educational levels in the Comunidad Autónoma of Galicia.

Finding online information, publishing and sharing teaching resources, and participating in forums, blogs or other 2.0 platforms, to encourage the development of personal learning networks.

| Methodologies                          | Description  |
|--|--|
| Practice in computer rooms             | To enhance the development of the individual capabilities of each Secondary Education Master student and to respond to their different interests and specialisation profiles, personalised attention will be given to resolve doubts, to advise on strategies to improve oral expression, to correct commor errors when making public presentations, and to suggest references for expanding or reinforcing all topics covered. If the development of a lesson allows it, especially during the different guided practices, individualised attention will be provided by pooling doubts, making individual corrections and encouraging participation in class. In any case, students would always be able to request support via Internet, for which agile communication channels such as forums, blogs or email will be facilitated |
| Presentations / exhibitions            | To enhance the development of the individual capabilities of each Secondary Education Master student and to respond to their different interests and specialisation profiles, personalised attention will be given to resolve doubts, to advise on strategies to improve oral expression, to correct commor errors when making public presentations, and to suggest references for expanding or reinforcing all topics covered. If the development of a lesson allows it, especially during the different guided practices, individualised attention will be provided by pooling doubts, making individual corrections and encouraging participation in class. In any case, students would always be able to request support via Internet, for which agile communication channels such as forums, blogs or email will be facilitated |
| Autonomous<br>practices through<br>ICT | To enhance the development of the individual capabilities of each Secondary Education Master student and to respond to their different interests and specialisation profiles, personalised attention will be given to resolve doubts, to advise on strategies to improve oral expression, to correct commor errors when making public presentations, and to suggest references for expanding or reinforcing all topics covered. If the development of a lesson allows it, especially during the different guided practices, individualised attention will be provided by pooling doubts, making individual corrections and encouraging participation in class. In any case, students would always be able to request support via Internet, for which agile communication channels such as forums, blogs or email will be facilitated |
| Practice in computer rooms             | To enhance the development of the individual capabilities of each Secondary Education Master student and to respond to their different interests and specialisation profiles, personalised attention will be given to resolve doubts, to advise on strategies to improve oral expression, to correct commor errors when making public presentations, and to suggest references for expanding or reinforcing all topics covered. If the development of a lesson allows it, especially during the different guided practices, individualised attention will be provided by pooling doubts, making individual corrections and encouraging participation in class. In any case, students would always be able to request support via Internet, for which agile communication channels such as forums, blogs or email will be facilitated |
| Tests                                  | Description  |
| Jobs and projects                      | To enhance the development of the individual capabilities of each Secondary Education Master student and to respond to their different interests and specialisation profiles, personalised attention will be given to resolve doubts, to advise on strategies to improve oral expression, to correct commor errors when making public presentations, and to suggest references for expanding or reinforcing all topics covered. If the development of a lesson allows it, especially during the different guided practices, individualised attention will be provided by pooling doubts, making individual corrections and encouraging participation in class. In any case, students would always be able to request support via Internet, for which agile communication channels such as forums, blogs or email will be facilitated |

| Assessment                    |  |               |
|-------------------------------|--|---------------|
|                               | Description  | Qualification |
| Previous studies / activities | The individual tasks, requested in advance of each class session to get in touch with the themes and contents to be treated, will be evaluated and considered for the final grade. The proper and punctual materialisation of such tasks will be considered fundamental to obtain a positive qualification.  |               |
| Classroom work                | In general, a positive contribution to debates, participation during lessons and classroom work will be considered positively to assess the students.  | n 5           |
| Practice in computer rooms    | To evaluate the guided practices with Geogebra, all geometric constructions elaborated during the lessons will be submitted, students will create and exchange small tutorials related with the software used, and enquiring about difficulties encountered during the independent study or participation in the class will be taken into account. | 5             |

| Practice in computer rooms  | To evaluate the guided practices with software to create teaching resources, all resources elaborated during the lessons will be submitted, students will create and exchange small tutorials related with the software used, and enquiring about difficulties encountered during the independent study or participation in the class will be taken into account. | 5  |
|-----------------------------|---|----|
| Presentations / exhibitions | Students will give small keynotes and public presentations to practice speaking skills.   | 5  |
| Jobs and projects           | As a final work for the subject, students will elaborate and present a teaching resource specifically designed to respond to a particular educational need.   | 60 |
| Self-assessment tests       | Upon completion of the course, there will be an evaluation survey of the subject along with a small self-examination test about the knowledge acquired during the course, which will also be taken into account for the final grade.  | 5  |

#### Other comments on the Evaluation

If a student doesn't get a positive final grade on the first call, it will be necessary to repeat or correct the final work as instructed by the teachers of the subject, to be able to re-submit it in second call in order to obtain a positive evaluation.

#### Sources of information

Ken Robinson, Out of Our Minds: Learning to be Creative, Capstone Publishing Limited,

Fernando Izquierdo Asensi, Geometría Descriptiva, Editorial Paraninfo,

Navarro Buitrago, Félix; Zayas Manero, Ramón; Meléndez Gil, Francisco, E-learning: visión y tendencias, Génesis XXI,

Metodología de la enseñanza abierta y a distancia, Torres Toro, Sebastián, Ediciones La Montaña,

Nick Rovinson, Enciclopedia de Origami, Ed. Acanto,

Kunihiko Kashaara e Toshie Takahana, Papiroflexia << Origami>> para expertos, Ediciones EDAF,

F. Javier Rodríguez de Abajo e Victor Álvarez Bengoa, **Dibujo técnico, 2o bachillerato**, Ed. Donostiarra,

William Lidwell, Kitrina Holden e Jill Butler, Principios universales de diseño, Ed. Blume,

J. A. Mora y J. Rodrígo, **Mosaicos**, Colección 2 puntos, Cuadernos para el aula de Matemáticas, Proyecto Sur e Ediciones,

J. A. Mora y J. Rodrígo, **Mosaicos II**, Colección 2 puntos, Cuadernos para el aula de Matemáticas, Proyecto Sur e Ediciones,

Kaj Johansson, Peter Lundberg, Robert Ryberg, Manual de producción gráfica, recetas, Ed. Gustavo Gili,

Bruno Munari, **Design e comunicação visual**, Edições 70,

Preston Blair, **Dibujos animados, el dibujo de historietas a su alcance**, Evergreen,

Luke Herriott, The packaging and design templates sourcebook, Rotovision,

Michael Langford, Fotografía Básica, Ediciones Omega,

VVAA, Fotografía Estenopeica, Nº 15 da revista Photovision,

#### Recommendations

### Subjects that are recommended to be taken simultaneously

(\*)Estratexias Didácticas I: O Ensino/P02M066V12243

Didactic Strategies II: Self-Assessment, Review and Analysis/P02M066V12244

Innovation and Research in Secondary Education: Music and Drawing/P02M066V12241

#### Subjects that it is recommended to have taken before

Psychological Development of Learning in Secondary Education/P02M066V12102

Curriculum Design and the Organisation of Educational Centers/P02M066V12103

Guidance and Tutorial Function/P02M066V12101

An Educational System and Education in Values/P02M066V12104