



## IDENTIFYING DATA

### (\*)Complementos para a Ensinanza do Debuxo

Subject	(*)Complementos para a Ensinanza do Debuxo			
Code	P02M066V12242			
Study programme	(*)Máster Universitario en Profesorado en Educación Secundaria Obligatoria, Bacharelato, Formación Profesional e Ensino de Idiomas. Especialidade: Arte. Debuxo			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	8	Mandatory	1st	2nd
Teaching language				
Department				
Coordinator	González Diéguez, Horacio			
Lecturers	González Diéguez, Horacio Seoane Suárez, Ana			
E-mail				
Web				
General description	Complementary skills for Art Education is a transversal subject that provides a review of all contents of the Secondary Education Master, through the perspective and teaching practice of several professionals working at different educational levels in which the Arts are present.			
	<p>The subject seeks to highlight examples of the implementation of different curricula about Arts, Drawing or Visual Education through real class exercises, and to relate the content of these curricula with tangible proposals and methodologies.</p> <p>Finally, Complementary skills for Art Education addresses a number of topics required for teaching Arts, that 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 to create educational resources.</p>			

## Competencies

Code	
A32	(*)Coñecer o valor formativo e cultural das materias correspondentes á especialización.
A33	(*)Coñecer os contidos que se cursan nos respectivos ensinados.
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	Typology	Training and Learning Results
To know different examples of the implementation of Plastic Education, Technical Drawing and Art Modules curricula.	know	A33 A35 A36 A37 A38 A41 A42 A44
To relate the content of the CBD to tangible working proposals.	know	A33 A35 A36 A37 A38 A41 A42 A44
To relate the each development stage of the adolescents to different classroom activities.	know	A35 A37 A38 A39 A44
To understand the working dynamics in ESO, Bachillerato and Professional Formation Modules.	know	A33 A35 A36 A37 A38 A41 A42 A44
To know real examples of course development and classroom management.	know	A33 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.	know	A33 A35 A36 A37 A38 A41 A42 A44
To develop didactic programs led by working projects.	Know How	A35 A36 A37 A38 A41 A44

To manage different tools for creating your own presentations and educational resources.	Know How	A38 A40 A42 B1 B2 B3
To develop public speaking skills.	Know How	A47 A48
To analyse and experiment with different ways of teaching and learning in the new cultural setups.	Know How	A40 A42 B1 B2 B3
To use appropriate web platforms to share, exchange and store different types of files.	Know How	A40 B1 B2 B3
To use 2.0 tools to support education and distance learning.	Know How	A35 A38 A39 A40 A42 B1 B2 B3
Teamworking.	Know How	B2 B3
To create informal learning networks to complement and support formal learning.	Know How	A40 A42 B1 B2 B3
To use Dynamic Geometry as a teaching resource.	Know How	A36 A38 A40 A42 A44
To acquire the ability to interpret, understand and demonstrate geometric constructions without memorising.	Know How	A36 A38
To combine Representation Systems and Dynamic Geometry to create animations.	Know How	A36 A38 A40 A42
To know the different historical approaches to perspective and to reflect on their implications.	know	A32 A34
To master projection mechanisms as key to transform the three-dimensional world into a two-dimensional representation.	know	A34 A36

## Contents

### Topic

1st ESO (Contents, teaching methodology and educational activities for Visual Education)	Curricular design, teaching unit development and classroom planning. 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 values.  Online Software to create teaching resources.
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Online software for creating teaching resources.	Tools to publish and exchange different file formats. Flickr, Soundcloud, Vimeo, Slideshare, Dropbox.
	Distant learning platforms. Moodle ( <a href="http://moodle.org">http://moodle.org</a> ).
	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 educational activities for Visual Education)	Curricular design, teaching unit development and classroom planning.
	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.
1st Bachillerato (Contents, teaching methodology and working by projects in Bachillerato)	Curricular design, teaching unit development and classroom planning.
	Technical Drawing DCB for 1st Bachillerato.
	Methodologies and strategies to work in the classroom.
	Technical Drawing activities for 1st Bachillerato.
Techniques and tools to make presentations and to speak in public	Online software to create presentations.
	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.
	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 methodology and University access test in Bachillerato)	Curricular design, teaching unit development and classroom planning.
	Technical Drawing DCB for 2nd Bachillerato.
	Methodologies and strategies to work in the classroom.
	Technical Drawing activities for 2nd Bachillerato.
	University access test exercises.
Personal Learning Networks, Social Learning and E-learning (Session I - Examples and theoretical basis)	Connectivism and Social Learning.
	Network learning tools.
	Designing teaching resources for knowledge sharing.
	Social networks as an educational tool.
Ciclos Medios and Formación Profesional (Contents, teaching methodology and structure of the education in Ciclos Medios and Formación Profesional)	Curricular design, teaching unit development and classroom planning.
	Ciclos Medios and Formación Profesional DCB.
	Methodologies and strategies to work in Ciclos Medios and Formación Profesional.
	Activities for Ciclos Medios and Formación Profesional.

Technical Drawing and Dynamic Geometry	<p>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.</p> <p>Regular polygons, geometric transformations and relationships, curves and fractals.</p> <p>Projection systems as basis for the different systems of representation.</p> <p>Rotations, changes of plane and revolutions.</p> <p>Relations between the Orthographic projection and other systems of representation.</p> <p>History of Perspective, Perspective projection limitations, curved or irregular projection surfaces, stereoscopy.</p>
Personal Learning Networks, Social Learning and E-learning (Session II - Practical exercise)	<p>Connectivism and Social Learning.</p> <p>Network learning tools.</p> <p>Designing teaching resources for knowledge sharing.</p> <p>Social networks as an educational tool.</p>
Artistic education in the schools of art ( Contents, teaching methodology and structure of the education in the schools of art)	<p>Curricular design, teaching unit development and classroom planning.</p> <p>DCB of Bachillerato de Artes and Ciclos Artísticos.</p> <p>Methodologies and strategies to work in Bachillerato de Artes and Ciclos Artísticos.</p> <p>Activities for Bachillerato de Artes and Ciclos Artísticos.</p>

## 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

\*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 / activities	Individual tasks performed by the students before each class session, to get in touch with the 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 rooms	Dynamic Geometry Practice with Geogebra ( <a href="http://www.geogebra.org">http://www.geogebra.org</a> ).
Practice in computer rooms	Practices in creating teaching resources using online, opensource or freeware applications.
Presentations / exhibitions	Presentations, public keynotes and practices with an interactive whiteboard.

Teaching and/or informatives events	Talks with professional teachers, that work in different educational levels in the Comunidad Autónoma of Galicia.
Autonomous practices through ICT	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.

### Personalized attention

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 common 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 common 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 practices through 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 common 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 common 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 common 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.	15
Classroom work	In general, a positive contribution to debates, participation during lessons and classroom work will be considered positively to assess the students.	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,  
 Kuniyiko 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. Rodrigo, **Mosaicos**, Colección 2 puntos, Cuadernos para el aula de Matemáticas, Proyecto Sur e Ediciones,  
 J. A. Mora y J. Rodrigo, **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  
 (\*)Estratexias Didácticas II: Autoavaliación, Crítica e Análise/P02M066V12244  
 (\*)Innovación e Investigación na Ensinanza Secundaria: Música e Debuxo/P02M066V12241

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

(\*)Desenvolvemento Psicológico da Aprendizaxe no Ensino Secundario/P02M066V12102  
 (\*)Deseño Curricular e Organización de Centros Educativos/P02M066V12103  
 (\*)Orientación e Función Titorial/P02M066V12101  
 (\*)Sistema Educativo e Educación en Valores/P02M066V12104