



IDENTIFYING DATA

Experimental sciences teaching II

Subject	Experimental sciences teaching II			
Code	P02G120V01502			
Study programme	(*)Grao en Educación Primaria			
Descriptors	ECTS Credits	Choose	Year	Quadmester
	6	Mandatory	3rd	1st
Teaching language	Galician			
Department				
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General description We take in consideration the referents that in this moment exist in regard to the trends around the qualifications that marks the EEES, how are the study of the specific competitions of disciplinary training and professional of the White Book (ANECA) of the Title of Degree of *Maxisterio in the area of experimental sciences, observes that the most valued competitions allude to aspects linked directly with the didactic development of the area, beside the indispensable training and knowledge of the contained of the @propio curriculum of Sciences of the EP. The knowledges, attitudes and *destrezas specific stop the area of Experimental Sciences exposes in have of objectives in the proposal of University Title of second Degree RD 55/2005, of 21 of January of Teacher of EP. In this normative context, the vain universities follow being competent in the initial training of the teaching staff and vain follow contributing substantially to the professional profile of the novel teaching staff of EP. By another part, the science #go it to me part of the culture and characterizes, to a large extent, the society in the that live. The students of Primary Education owes to learn the possibilities of intervention in the middle of way that favour the sustainability of the forms of life and of the environment through a *achegamento to the physical world and @natural and of a *interrelación with the other areas of knowledge. It treats of one focus globalized of utilization of the science to form to the citizenship. The students of these qualifications, future teaching personnel, owes to promote a scientific education that help to think, to communicate , to do and the *autorregularse, having how referent the established in the curriculum of Primary Education of the Department of Education of the Xunta de Galicia.

The university teaching practice and the lines of didactic investigation, in this field, owe to contemplate methodologies and conceptual buildings, *procedementais and *actitudinais, always in interaction and with the skyline of the development of the basic competitions, relative to global problems of actuality such as them referred environment and to the sustainable development. Of this way, splitting of the own methodologies of the didactic of the sciences, can be used the approaches *C-*T-*S, them of the building of the knowledge around of global problems, them of scientific and technical literacy of the citizenship, or them of the Education in Global Science: it Owes to include the treatment of the *transversalidade, rendering special attention to the equality between men and women, inside a model *integrador.

In the present course will continue with the experimentation of the Project of Innovation: "DESIGN And IMPLANTATION OF PROCEDURES And INSTRUMENTS OF EVALUATION IN DEGREES And POSTGRADUATES Through The PLATFORM SUBJECT: QUESTIONNAIRES KPSI, *RÚBRICAS And CONCEPTUAL MAPS IN DIGITAL FORMAT" (Earring of Resolution *Reitoral), consistent in:

In this mark proposes the design and implantation of procedures that affect in the process of learning (formative evaluation and *formadora, in the that the students is *corresponsable) through the following instruments: Questionnaires or forms *Knowledge *and *Prior *Study *Inventory (KPSI), *Rúbricas or matrices of assessment and Conceptual Maps. All they are inserted in the combination go in the #cooperative work and the individual, so well the processes of learning take place socially, the learning is individual. In the case of the Conceptual Maps also use how proofs of execution or realization.

Competencies

Code

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|--|
| A1 |
| A2 |
| A3 |
| A4 |
| A5 |
| B1 (*)Coñecer as áreas curriculares da Educación Primaria, a relación interdisciplinar entre elas, os criterios de avaliación e o corpo de coñecementos didácticos ao redor dos procedementos de ensino e aprendizaxe respectivos |
| B2 (*)Deseñar, planificar e avaliar procesos de ensino e aprendizaxe, tanto individualmente como en colaboración con outros docentes e profesionais do centro |
| B3 (*)Abordar con eficacia situacións de aprendizaxe de linguas en contextos multiculturais e plurilingües. Fomentar a lectura e o comentario crítico de textos dos diversos dominios científicos e culturais contidos no currículo escolar |
| B4 (*)Deseñar e regular espazos de aprendizaxe en contextos de diversidade e que atendan á igualdade de xénero, á equidade e ao respecto aos dereitos humanos que conformen os valores da formación cidadá |
| B5 (*)Fomentar a convivencia na aula e fóra dela, resolver problemas de disciplina e contribuir á resolución pacífica de conflitos. Estimular e valorar o esforzo, a constancia e a disciplina persoal nos estudantes |
| B6 (*)Coñecer a organización dos colexios de educación primaria e a diversidade de accións que comprende o seu funcionamento. Desempeñar as funcións de tutoría e de orientación cos estudantes e as súas familias, atendendo as singulares necesidades educativas dos estudantes. Asumir que o exercicio da función docente ha de ir perfeccionándose e adaptándose aos cambios científicos, pedagóxicos e sociais ao longo da vida |
| B7 (*)Colaborar cos distintos sectores da comunidade educativa e do contorno social. Asumir a dimensión educadora da función docente e fomentar a educación democrática para unha cidadanía activa |

- B8 (*)Manter unha relación crítica e autónoma respecto dos saberes, os valores e as institucións sociais públicas e privadas
- B9 (*)Valorar a responsabilidade individual e colectiva na consecución dun futuro sustentable
- B10 (*)Reflexionar sobre as prácticas de aula para innovar e mellorar o labor docente. Adquirir hábitos e destrezas para a aprendizaxe autónoma e cooperativa e promovela entre os estudantes
- B11 (*)Coñecer e aplicar nas aulas as tecnoloxías da información e da comunicación. Discernir selectivamente a información audiovisual que contribúa ás aprendizaxes, á formación cívica e á riqueza cultural
- B12 (*)Comprender a función, as posibilidades e os límites da educación na sociedade actual e as competencias fundamentais que afectan aos colexios de educación primaria e aos seus profesionais. Coñecer modelos de mellora da calidade con aplicación aos centros educativos
- C25 (*)Comprender os principios básicos e as leis fundamentais das ciencias experimentais (Física, Química, Biología e Xeoloxía)
- C26 (*)Coñecer o currículo escolar destas ciencias
- C27 (*)Susitar e resolver problemas asociados coas ciencias á vida cotiá
- C28 (*)Valorar as ciencias como un feito cultural
- C29 (*)Recoñecer a mutua influencia entre ciencia, sociedade e desenvolvemento tecnolóxico, así como as condutas cidadás pertinentes, para procurar un futuro sostenible
- C30
- D1
- D2
- D3
- D4
- D5
- D6 (*)Capacidade de xestión da información
- D7 (*)Resolución de problemas
- D8 (*)Toma de decisións
- D9 (*)Traballo en equipo
- D10 (*)Traballo nun equipo de carácter interdisciplinar
- D11 (*)Traballo nun contexto internacional
- D12 (*)Habilidades nas relacións interpersoais
- D13
- D14 (*)Razoamento crítico
- D15 (*)Compromiso ético
- D16 (*)Aprendizaxe autónoma
- D17 (*)Adaptación a novas situacións
- D18 (*)Creatividade
- D19 (*)Lideranza
- D20 (*)Coñecemento doutras culturas e costumes
- D21 (*)Iniciativa e espírito emprendedor
- D22 (*)Motivación pola calidade
- D23

Learning outcomes

Expected results from this subject

Training and Learning
Results

Comprise the basic principles and the fundamental laws of the experimental sciences (Physical, Chemical, Biology and Geology)	A3	B1	C25	D1
				D2
				D3
				D4
				D5
				D6
				D7
				D8
				D9
				D10
				D11
				D12
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				D14
				D15
				D16
				D17
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				D19
				D20
				D21
				D22
				D23

1. Analyse, comprise and evaluate the education like fact and like action-intervention from the theoretical frames that provide us so much the theory of the education like the history of the education.

Know the school curriculum of the experimental sciences (Biology, Geology, Physical, Chemical)	A1	B1	C26	D1
	A2			D2
	A3			D3
	A4			D4
	A5			D5
				D6
				D7
				D8
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				D22
				D23

Rise and resolve problems associated with the sciences to the daily life	A1	B1	C27	D1
	A2	B2		D2
	A3	B3		D3
	A4	B4		D4
	A5	B5		D5
		B6		D6
		B7		D7
		B8		D8
		B9		D9
		B10		D10
		B11		D11
		B12		D12
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				D22
				D23
Value the sciences how a cultural fact	A1	B7	C28	D1
	A3	B8		D2
	A4	B9		D3
	A5	B12		D4
				D5
				D6
				D7
				D8
				D9
				D10
				D11
				D12
				D13
Recognize the mutual influence between science, society and technological development, as well as the citizen behaviours, to search a sustainable future	A1	B5	C29	D1
	A2	B6		D2
	A3	B7		D3
		B8		D4
		B9		D5
		B11		D6
		B12		D7
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		D23		

Develop and value contents of the curriculum by means of appropriate didactic resources and promote the acquisition of basic competitions in the and in the students

A1 B1 C30 D1
 A2 B2 D2
 A3 B3 D3
 A4 B4 D4
 A5 B5 D5
 B6 D6
 B7 D7
 B8 D8
 B9 D9
 B10 D10
 B11 D11
 B12 D12
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Contents	
Topic	
Introduction	The didactic of the experimental Sciences (Biology, Geology, Physical and Chemical) stop the Primary Education
The Curriculum	The official curriculum of the experimental Sciences (Biology, Geology, Physical and Chemical) stop the Primary Education
Methodologies and resources	The methodologies stop the education of the experimental Sciences (Biology, Geology, Physical and Chemical) stop the Primary Education The resources stop the education of the experimental Sciences (Biology, Geology, Physical and Chemical) stop the Primary Education
Evaluation	The evaluation of the experimental Sciences(Biology, Geology, Physical and Chemical) stop the Primary Education

Planning			
	Class hours	Hours outside the classroom	Total hours
Presentations / exhibitions	4	8	12
Classroom work	8	25	33
Projects	12	35	47
Laboratory practises	24	24	48
Group tutoring	5	5	10

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

Methodologies	
	Description
Presentations / exhibitions	Expositives activities of the teaching staff envelope the thematic fields of the subject. Manufacture and exhibition of presentations-summary envelope the works realized in the subject put students
Classroom work	Activities and tasks developed in the classroom of group form and tutorized pole teaching staff
Projects	Manufacture of projects integrated in the frame of the experimental Sciences in primary Education, where promotes the autonomous activity of the students
Laboratory practises	The students will develop experimental activities with the didactic equipment of the classroom - laboratory.
Group tutoring	Resolution of doubts, query and tracking of the works

Personalized attention	
Methodologies	Description
Classroom work	Resolution of doubts, covalue.
Laboratory practises	Resolution of doubts, covalue.

Projects	Resolution of doubts, covalue.
Presentations / exhibitions	Resolution of doubts, covalue.
Group tutoring	Resolution of doubts, covalue.

Assessment			
	Description	Qualification	Training and Learning Results
Presentations / exhibitions	Continuous evaluation through the manufacture and exhibition of individual works and/or of cooperative team.	10	C25 C26 C27 C28 C29 C30
Classroom work	Global evaluation of the process of learning and acquisition of competitions and knowledges showed through the works of classroom and of the daily of the students	30	C25 C26 C27 C28 C29 C30
Projects	Continuous evaluation through the tracking of the students in the design of one project related with the sciences for students of Primary	30	C25 C26 C27 C28 C29 C30
Laboratory practises	Continuous evaluation through the tracking of the realization of practical activities and of the fascicle of laboratory of the students	30	C25 C26 C27 C28 C29 C30

Other comments on the Evaluation

Sources of information

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Recommendations
