

SUBJECT GUIDE
Food production

Academic year 2015-16

MODULE	CONTENT	YEAR	TERM	CREDITS	CREDITS
Food Science	Production of raw materials	2º	2º	6	Compulsory
PROFESSOR(S)			Postal address, telephone n, e-mail address		
<ul style="list-style-type: none"> Eduardo Ortega Bernaldo de Quirós 			Department of Pedology and Agricultural Chemistry First floor, School of Pharmacy Office 181 Phone number: 958 242096 Email: eortega@ugr.es		
			Tutorships hours		
			<i>Eduardo Ortega Bernaldo de Quiros:</i> 1º Four-month period Monday, (10.30 to 14.30 h.) and Tuesday (12.30 to 14.30 h.) 2º Four-month period Monday (10,30 to 13,30 h.) and Tuesday (10.30 to 13.30 h.)		
DEGREE WITHIN WHICH THE SUBJECT IS TAUGHT			OTHERS DEGREE		
Food Science and Technology			Areas of Health and Food from UGR(University of Granada)		
PREREQUISITES and/or RECOMMENDATIONS (if necessary)r					
<p><i>PREREQUISITES:</i> In particular this course requires successful completion of all the materials previously for the Common Basic Training module, and the subjects: Bioclimatology, Soil Science, Chemical Analysis, Biology, Botany; Vegetable, animal and human physiology. Also the knowledge of biostatistics is adapted; Also they are of interest for this discipline the knowledge of: microbiology, biochemistry and computer science, in order that the knowledge of the Program of the subject could be taken advantage adequately.</p>					



CONTEXT INSIDE THE QUALIFICATIONS:

RECOMMENDATIONS: Subject that it announces to the students of the Degree of Science and Technology of the Food, the origin of these three groups of food (vegetables, animals and fish), the technologies adapted for his obtaining, conservation and commercialization, doing special emphasis on the production, quality and food safet.

The students have dealed the first course and we believe that they possess the basic knowledge adapted to deal the subject.

BRIEF ACCOUNT OF THE SUBJECT PROGRAMME (ACCORDING TO THE DEGREE)

NAME: Production of raw materials

CODE: YEAR OF PLAN OF STUDY: 2010

TYPE (main / obligatory / optional): Main

Total Credits 6 (LRU / ECTS): Credits theoretical LRU/ECTS: 4,5 Credits practical LRU/ECTS: 1,5 (4,5+1,5)

DEAL: 2 ° Deal

FOUR-MONTH PERIOD: 2 °

CYCLE: Degree

GENERAL AND PARTICULAR ABILITIES

COMPETITIONS

BASIC SKILLS:

Key

- CB1** Students demonstrate knowledge and understanding in the area of Science and Food Technology, part of the training base of the General Secondary Education and also includes cutting-edge knowledge in the field of food production.
- CB2** Students can apply their knowledge to their work in a professional manner and capable of defending and resolving problems within the area of production of raw food materials.
- CB3** That students are able to gather enough scientific review and discuss social and ethical aspects of food production in our country and in the vicinity of the EU, compared to the rest of the world and technical information.
- CB4** The students, are able to transmit information on the approach to problems and possible resolution in the studied field. Possibility of joining programs for R & D in business and administration.

COMPETITION STRANSVERSALES:

Key

- CT1** Know and practice a foreign language
- CT2** Ability to use the ICTs
- CT3** Job search capacity and have entrepreneurial ability



CT4 Knowing production models of seafood plant and animal.
GENERAL SKILLS:

Key

- CG1 Express themselves correctly in the Spanish language, in the aspect that concerns the principles of the production of food commodities**
- CG2 Ability to solve problems. Training to meet natural resources and useful raw materials for food production.**
- CG3 Ability to teamwork by providing incentives for work in groups**
- CG4 Apply to practice the theoretical knowledge as well as different types of livestock production, in addition to the fishing techniques, products and Aquaculture(Continental and marine).**

OBJECTIVES (EXPRESSED IN TERMS OF EXPECTED RESULTS OF THE TEACHING PROGRAMME)

OBJETIVES

The aims that are chased, it is a solid scientific and technical formation, which allows the futures Classified in Science and Technology of the Food confront the missions raised in previous paragraphs successfully and they make concrete in:

- To know the principal characteristics of the raw materials of the food-processing industry (Vegetables, animals and fish from sea-coasts). As well as the conditions and forms of culture, baby or capture, as well as the more important principal cultivated, bred or captured kinds in the human consumption.**
- To endow the student the necessary knowledge in order that in the food-processing industry they are known and has the different kinds and species of cultivated plants, as well as a raw material of highquality, departing from the base that the quality begins in the culture.**
- Know the foundations of animal production, in order to the student body could relate the different factors of production of the animal species important in the human consumption, his typification and influence in their quality and health.**
- To know the fish farming production and his performance. Study and recognize marine systems members, identify capture technologies and fish farming, so much of species of sweet water as seacoasts that are more important for the supply and the food industry. Qualit analysis and food safety.**
- Identify and value the influence quality of the obtained Product once realized the culture, compilation and adequacy for his conservation and transport.**



DETAILED SUBJECT SYLLABUS

THEORETICAL AGENDA: GENERAL CONSIDERATIONS ON THE AGRICULTURAL PRODUCTION

Lesson 1

Supply and production of raw materials IS AFRAID Of general Considerations on the production of raw materials and the world population - Structure of the production would feed - Descriptive of the food: his origin - historical Development - related and related Sciences - Trends in the production of raw materials you would feed.

Lesson 2

Bioclimatología and agricultural climatology: The solar radiation - Luminous Radiation: Photojournalism - thermal Radiations: Termoperiodismo - Action of the cold: Vernalización - Action of the high temperatures - Indexes termoplumiométricos - Climatic Classifications - Rate of dampness and temperature of the soil - Climates of Spain.

Lesson 3

The soil like substrate for the growth of the plants: The soil system: Models of organization (structure and function) - Historical evolution of the conception of the soil for the agricultural production - Processes of soil formation - The soil like an energetically dynamic system - Components of the soil: Nature and dynamics.

Lesson 4

Types of soils and his agricultural use: Classifications of soils: Soil Taxonomy - Different orders of soils in the agricultural production - Alfisoles - Andisoles - Aridisoles - Entisoles - Gelisoles - Histosoles - Inceptisoles - Mollisoles - Oxisoles - Espodosoles - Ultisoles - Vertisoles.

Lesson 5

Agricultural labors: The working and the sowing characteristic personal details of the agricultural labors - Different types of labors - Modern Technologies of soil working - Fellings and plowings - Sowing and plantations: Characteristics of the soil and of the vegetable material - Fallows - Rotation of cultures - Artificial seeds.

Lesson 6

Cultures: Calculations of irrigation Quality of the water of irrigation - Relation of absorption of sodium - Effects for the utilization of saline waters in the irrigation - Recommendations for the culture, when saline waters use in the irrigation - Types of irrigations - Effect of the irrigation on the soil - The agricultural drainage - Drainage systems.

Lesson 7

Evaluation of soils: Characteristic personal details of the systems of evaluation of soils - Evaluation with general intentions - Evaluation with specific intentions - Application of the evaluation of soils in the obtaining of major agricultural performances.

PRODUCTION OF PRIME FOOD MATTERS OF VEGETABLE ORIGIN

Lesson 8

Sour fruit-juices: Characteristics of the sour fruit-juices - Origin and distribution of the sour fruit-juices in the world - The sour fruit-juices in the Mediterranean basin - Climate - Soil - Plant: Varieties of sour fruit-juices - Oranges: His types - Mandarinos: Classes - Lemons: Varieties - Grapefruits - Compilation, conservation and commercialization of the sour fruit-juices - Food value of the citrus fruits.

Lesson 9

The Olive tree: Cultivate, his oil Characteristic personal details of the olive tree - Historical Precedents - Production and distribution of the Spanish olive grove - Characteristics bioclimáticas - Soils of major production - Vegetative cycle and periods of culture - Vegetable material and plantation: Frames of plantation - Varieties of



olives - Fertilization - Pruning and agricultural labors usual mas - Plagues and diseases of the olive tree: Mechanisms of fight - Systems of compilation of olive.

Lesson 10

Roots, tubers and eatable bulbs: Turnip. Varieties, culture and composition would feed - Radishes: Types, sowing, vegetative cycle and compilation - Food use of the radish - Beet: Principal cultivated species - Vegetative cycle and compilation: his use - Carrots: cultivated Species - I Cultivate and principal anomalies that present the carrots - compilation, use, composition and conservation. Potato: Origin, and varieties cultivated in Spain - Sowing I cultivate and compilation - Composition and food use of the potato. Onion: morphologic Characteristics and Agricultural classification vegetative-Varietades-Ciclo: Bulbificación-Compilation, conservation, nutritional value and commercialization. I ruffle: general Characteristics and morphology - Distribution and economic importance.

Lesson 11

Vegetable food material which utilization they are: leaves, stems and inflorescences. Leaves: Lettuce. Culture - Commercialization and food characteristics - Spinach beets. Varieties, culture and employment - Endive. I cultivate - Principal species - Employment in supply - Ruff: Varieties, culture and utilization would feed - Lettuce. Principal species - Employment in supply - Cabbage: Characteristics and culture - Production and food employment. Stems: Asparagus: general characteristics - Stages of growth - Varieties of asparagus - Conditions of culture: his culture - Compilation and commercialization - Composition, properties. - Inflorescences: Artichoke: Characteristics - Environmental factors, climate and soil - ÇVegetable Material: culture - Compilation and conservation.

Lesson 12

Vegetable food material which utilization they are the fruits. Fruits: Pepper, aspects very important - Characteristics of the culture - Vegetative cycle, compilation and conservation - Composition and food properties - Tomato. Morphologic characteristics and agricultural importance - Varieties - Culture - Quality, conservation and commercialization - Cucumber. General characteristics and morphology - Culture: vegetative development - Compilation, conservation, and food employment. Aubergine. Origin, distribution and importance in supply - Stages of culture: vegetative development - Withdrawal, and commercialization - Calabacino. Origin and characteristics - Stages of culture: vegetative development - Compilation, conservation and food employment.

Lesson 13

Not arboreal fruits: Strawberries. Varieties, culture and composition would feed - Melon. Principal species - Culture, commercialization - Nutritional characteristics - Watermelon: Varieties, culture and food employment - Grape. Principal species of table - Commercialization - **Arboreal Fruits:** Apricot. Varieties and culture - Properties related to the production - Cherry: Origin, culture - Types of cherries - food Employment - Apple. Culture and types - Conservation and employment - Peach. Aspects mas important - Characteristics of the culture - vegetative Cycle, compilation and conservation - Pear. Aspects mas important - His culture - Commercialization and conservation.

Lesson 14

Fungi:Eatable fungi Mushrooms. Varieties, culture and composition would feed - Toxic and eatable species - His employment in supply

Lesson 15

System of name of origin: The agricultural sector in Spain. The current situation of the agriculture in the EU. Names of origin of the vegetable products - INDO - Different types of vegetable products protected by the names of origin in Spain. General considerations and panoramic current of the sector - Climate and levels of production - Agricultural surfaces used in the food-processing sector of the Mediterranean basin - Principal cultures - Panoramic current of the Agricultural Spanish Sector - Surface, total production - Situation of the agricultural production in the EU: His relation with Spain.

Lesson 16

The Animal Production: The meat: cattle developments and factors that determine- Concept of Animal Production - Evolution of the Animal Production - Economic and Social Meaning - Relation with other Sciences - Technical Specialization - The Ranching in Spain and in Andalusia - The Spanish ranching in the EU of the 25



and his future - Bibliography and electronic recommended directions. The meat like raw material - Factors that concern the meat as raw material - The Cattle Developments: general Systems of exploitation - Systems of Exploitation Extensive: his characteristics and areas mas representative - Systems of Exploitation Intensive: his characteristics and areas mas representative - Costs of the cattle developments and factors that determine it.

Lesson 17

The animal feed like method of improvement of the productions: The food and his utilization for the cattle - Classification of the food and beginning that govern the composition of the shares for the different animal species - Animal feed: The shares - Formulation of the shares - compound Piensos: Cost of production - The antibiotics in the supply of the cattle - Defenders and detractors of the antibiotics in the animal feed.

Lesson 18

Bovine: His productive cycle general Concepts of the cattle - The bóvidos: His races - Barley dealers - Systems of upbringing and productive cycles - Production of meat - Dairy production - Classification of channels - Break-down of the bull - Sensory analysis of meats - Sensory profile of the raw veal - Production and quality of Spanish meats: types.

Lesson 19

Pig and porcine production: The ham: Production, types and trying- Characteristic personal details of the pigs - Porcine Production in the EU, Spain and Andalusia - Origin of the pork: His races - Baby of the pork: Stages - Managing of the pigs - Break-down of the pork - Channel porcine: His classification - Factors that concern the quality of the meat of pork-The ham in Spain: Iberian and highland - Process of production of the Ham - Obtaining of the product: previous operations- Other operations: Wash, accession, dried and aging in warehouse - Final finished product - Cove and court of hams - Quality of the ham, factors on which it depends: Transport, genetics, supply, productive process and microclimate - Names of origin of hams - Sensory evaluation.

Lesson 20

Sheep: Origin, races and obtained products. Goats general Characters of the sheep - The sheep production - The sheep cabin in Spain: Different races - Reproduction and supply - Channel sheep: Systems of classification - Quality of the sheep canal- General characteristics of the goats - Supply in the explotaciones of caprino - The Spanish goats: Races - Production caprina: Meat and Lactéal.

Lesson 21

Aviculture: Characteristics of the poultry sector - Generalities of hens, chickens and roosters - The production of hens - Importance of the supply - Some aspects related to the races and his aptitudes - Production of eggs - Production of meat - Trends in Aviculture.

Lesson 22

PRODUCTION OF PRIME FOOD MATTERS OF MARINE ORIGIN:

Fish of materials of marine origin. The fishing, arts and used methods- It tells the history of the fish as food- Fishing, Fish farming and production of raw materials - The fishing in Spain: It consume in fresh air and conserves - The fish as food: Composition, Quality and characteristics like raw material - Fish of consumption and conserves of fish - Products of the fishing - Concentrates of proteins of fish: Surimi - Fish farming: an industry in expansion. The fishing sector in Andalusia: Fishing-grounds - Fishing production in Andalusia - Activities associated with the fishing - Typology of the fishing fleet - Arts used in the fishing of the different species.

Lesson 23

Species object of the fishing: Morphology and characteristics of the fish - Classifications of fish: His Types - Condrictios: Sharks and Stripes - Osteictios: Anguilla - Conger eel - Sardine - Kind of anchovy - Salmon - Trout Rainbow. Wing nut - Horse mackerel - Nice of the north - Mackerel - Fish sword. Osteictio:. Order Gadiformes: Blue whiting - Cod - Faneca - Order Lofiformes: Snuff - Order Perciformes: Sea bass - Mulletts - Mere - Bream - Dace - Toothy - Order Pleuronectiformes: Rooster - Turbot - Sourness - Sole - Order Scorpeniformes: Cabracho - Blond.

Lesson 24



Species object of the fishing: Crustaceans and Mollusks Order Decapoda: Carabineer - pink Shrimp - Crayfish - Ox of sea - Spider-crab - lobster - Sea crab - Camarón - Lobster - white Shrimp - Prawn - Swimming crab - Barnacle. Order Mesogasteropoda: Winkle - Order Mytiloidea: Mussel - Oyster - Pilgrim's scallop - Order Neogastropoda: Cañaílla - Order Octopoda: Octopus - Order Sepidae: I shock - Order Teuthoidea: Squid - Cuttlefish - Order Veneroidea: Cockle - Coquina - Razor - Clam dies - Yells.

Lesson 25

The quality of the fish: Conservation of the fish: Time of conservation in ice - Changes in the quality - Quality punctuation - Phases of deterioration of the fish - Differential aspects of the quality: The quality in relation with the different types of fishing productions

PRACTICE DIARY:

Seminars / workshops (Total 6 hours)

Seminary Program. –

- S1. - Bioclimatología. Risks of Frosts
- S2. - I Calculate of the date of nascencia of a seed
- S3. - Production of water balance sheets.
- S4. - Plastic in agriculture: Greenhouses
- S5. - Plantation of asparagus, peppers of the piquillo and Tudela's artichoke.
- S6. - The Ham: His quality and trying
- S7. - Nice of the North
- S8. - Fish farming. Marine cultures.

Laboratory practices (Total 12,5 hours)

Practical Classes and Seminars. - You practise in the Laboratory, in Edafología and Chemical Agricultural Department. It plants 1, Building B, Authorize of Drugstore (1 week of 5 days from 16,30 to 19,30, except last day that will be from 16,30 to 20,30 h).

* Group of 25/30 students.

* Passbook of practices that will be evaluated by the work realized at the end of Course (Seminars and Field practices).

Excursions (Total 5,5 hours)

- Trip to visit Greenhouses of the West one of Almeria. Seedbed and horticultural Cooperative of products: Vegetables and Fruits. Practice Greenhouses, Dpto. of Agricultural Chemistry and Edafología, Almeria University.

- Trip to the Dairy of Lacteal production *Farm Loreto*, company PULEVA and also to *The Pastoreros*, a farm of porks.

READING

FUNDAMENTAL BIBLIOGRAPHY:

BIBLIOGRAPHY

FAO (1996). *Declaración sobre la Seguridad alimentaría Mundial y Plan de Acción de la Cumbre Mundial sobre la Alimentación*. Roma, 13 de noviembre de 1996.

- **FAO. (1997). *Informe de la Cumbre Mundial de Alimentos*. Roma: FAO**
- **FAO. (2000). Organización de las Naciones Unidas para la Alimentación y la Agricultura (2000). *The State of Food Insecurity in the World, 2000*. Roma: FAO.**
- **FAO (2001). *Tratado internacional sobre los recursos filogenéticos para la alimentación y la agricultura*. FAO Roma.**



- *F.A.O.(2006). World Reference Base for Soil Resources. ISSS.F.A.O. Roma.*
- *Food Choice, Diet and Health (1997). Diet and Tissue Integrity. Instituto de Investigación sobre Alimentación. Informe Anual de 1997.*
- *García Rollan, M. (1990). Alimentación humana Errores y consecuencias. Ed. Mundi Prensa libros. Madrid.*
- *Gruhn P, Goletti, F y Montague Y. (2000). Integrated Nutrient Management, Soil Fertility and Sustainable Agriculture: Current Issues and Future Challenges. 2020. Documento para Discusión 32. Washington, D.C.*
- *Rosabal, ; Asensio,C; Ortega,E; Lozano,F.J. (2003). Reutilización de aguas agroindustriales en el riego de suelos cubanos. Ed. Universidad de Almería. pp. 257. Almería.*
- *Soil Survey Staff. (2010). Keys to Soil Taxonomy. 11th Edition. NRCS 341 pp. USA.*

RECOMMENDED LINKS

- <http://www.biotech.bioetica.org/d97.htm>
- <http://www.ccma.csic.es/dpts/cons/humus/humuses.htm>
- <http://www.fao.org/docrep/w8594e/w8594e00.htm>
- <http://www.inra.fr/ea/>
- <http://www.nrcs.usda.gov/technical/agronomy.html>
- <http://www.greenpeace.org.ar>
- <http://edafologia.ugr.es/>
- <http://www.worldbank.org/poverty/data/trends/index/htm>

METODOLOGÍA DOCENTE

EDUCATIONAL METHODOLOGY

EDUCATIONAL TECHNOLOGIES (indicate with a X the technologies that it is going to use in the development of his subject. It can indicate more of one. Also it can replace them with others):

Academic theoretical Meetings X Exposición and debate: specialized X Tutorías: academic practical X Sesiones X Visitas and excursions:X

Others (to (specify): complementary Seminars to the field excursions. Total 8 seminars.

- 6 Seminars agree with the need of the theoretical agenda

- 2 Seminars (1 initially of the four-month period and other one at the end of the four-month period), The day previous to each of the Trips of Practices.

THEMATIC BLOCKS (to divide the agenda in big thematic blocks; there is neither minimal number nor maximum)

Vegetable Production

Animal Production

Fishing Production



CHRONOGRAM

CRONOGRAMA DE ACTIVIDADES DE LA ASIGNATURA: Producción de Materias Primas Grado de Ciencia y Tecnología de los Alimentos

2º Cuatrimestre

	Sobre 15 semanas 45-40 clases 3 clases /semana 40 h	12,5 h. Prácticas 12,5 h	8 h. seminarios S empleando clases teoría	5,5 h. visitas Empresas 5,5 h	6h/semana Tutorías	Debates en clase de temas preparado:	Horas para corrección de trabajos y los exámenes 2 h	Temas /Semanas Total= 25 temas
Presentación								
1ª semana	Guía y 2 h.				6	0,5		Guía y1
2ª semana	3 h.		1		6	0,5		2, S y 3
3ª semana	3 h.				6	0,5		3, 4 y 5 (Evaluación)
4ª semana	3 h.				6	0,5		5, 6 y S
5ª semana	3 h.		1	Visita 1ª	6	0,5		6, 7 y 8
6ª semana	3 h.				6	0,5	5	S, 9 y 10 (Evaluación)
7ª semana	3 h.		1		6	0,5		11,11 y 12
8ª semana	3 h.	12,5			6	0,5	5	13, S y 14 (Evaluación)
9ª semana	3 h.	12,5	1		6	0,5	10	15,15 y 16 (Evaluación P)
10ª semana	3 h.	12,5			6	0,5		17,18 y S
11ª semana	3 h.				6	0,5	5	19,20 y 20 (Evaluación)
12ª semana	3 h.		1	Visita 2ª	6	0,5		21, S y 22
13ª semana	3 h.				6	0,5		22,23 y 24
14ª semana	3 h.		1		6	0,5	5	25,S y 25 (Evaluación)
15ª semana	3 h.				6	0,5	10	(Evaluación Final)
Total.-							50 h.	

Evaluación.- Evaluación secuencial

Evaluación P.- Evaluación parcial

Evaluación Final.- Recoge evaluaciones promedios

S.- Seminario

Horas :- Teoría (40 h.) + Prácticas (12,5 h.) + Visitas empresas (5,5 h) + Corrección (2 h) = 60 horas

Creditos totales.- 4 + 12,5 + 0,55 + 0,2 = 6 Creditos

Cronogram General of Educational Activities during the Course 2015-16

EVALUATION (INSTRUMENTS OF EVALUATION, CRITERIA OF EVALUATION AND PERCENTAGE ON THE FINAL QUALIFICATION, ETC.)

TECHNOLOGIES OF EVALUATION (to enumerate, taking as a reference the catalogue of the correspondent Guía Común).

- Evaluation with written exam 6,5
- Autonomous Work on 2,0
- Evaluation of assistance 1,5 -
- Evaluation of oral examination from 0 to 10 of agreement with a battery of questions designed previously Criteria of evaluation and qualification (recounted to the competitions worked during the course):

The criteria of evaluation can be summarized as it continues:

First and partial Second of vegetable, animal and marine production.

- In agreement with the assistance (controlled by signature in every class) 0-1,5 points (A)
- Of the written examinations 0-6,5 points (B)
- Of autonomous work 0-2 points (C)
- Oral Examination 0-10 points (E)

ADDITIONLA INFORMATION



NUMBER OF WORKING HOURS OF THE STUDENT:

THE SECOND FOUR-MONTH PERIOD: (February 15 - June 8, 2016)

Total Calculation = 40-45 h (theory) + 12,5 h. (5x2,5 = 12,5h. You laboratory practise) + 5,5 h. (Visits you practise I stand out, greenhouse and companies) + 2 hours Seminars = 60 total hours

- Theory Classes:40-45 hours
- Practice Classes:12,5 hours
- Exhibitions and Seminars*:8 h. seminars with resolution of problems and demonstrations, (with videos of production, commercialization and quality control).

Specialized tutorials (attend them or virtual): 6 h a week.

A) Common: In agreement with the needs that the pupils demand.

B) Individual: The ruled ones for the course 2013/14:

1° Four-month period: Monday (10.30-14.3 h.), and Tuesday: 12.30 to 14.30 h.

2° Four-month period: Monday (10,30 to 13,30 h.) and Tuesday (10.30 to 13.30 h.)

- Accomplishment of Academic Directed Activities:

A) With presence of professor: Orientation in the production of autonomous works.

B) Without presence of the professor: Production of different types of reports.

- Other one. Personal Autonomous work:

A) Hours of study: According to the student

B) Preparation of Personal Work: According to the students.

- Evaluation:

A) sequential Evaluations: Chronogram of the subject.

B) written Exam: First partial that eliminates matter; Final exam (1º and 2º, or only 2º)

C) oral Exam (control of the Personal Work): Final exam(1º and 2º, or only 2º).

THE ONLY FINAL EVALUATION According to the Regulation of Evaluation and of Qualification of the Students of the University of Granada (Approved by Advice of Government in his extraordinary session of May 20, 2013), contemplates the accomplishment of the only final evaluation in which there will be able to take refuge those students who could not expire with the method of continuous assessment for labor motives, bill of health, disability or any other due well-taken reason that prevents them from following the regime of continuous assessment. To take refuge in the only final evaluation, the student, in the first two weeks of after registering of the subject, it will request it the Director of the Department who will give movement to the corresponding professorship, invoking and accrediting the reasons that they attend him

