

Nutritional Sciences		Spring Semester									Version catalogue 12/09/2018 10:42:09	
<b>Fiche pédagogique</b> <b>Cross cultural communication</b> (Cross cultural communication) Département : Langues											<b>LE0101</b> <b>2018-2019</b>	
RMO : M.REY	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 1	
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE		
		0h	2h	10h	0h	2h	0h	0h	0h	12h		
<b>Numerus clausus :</b>		-										
<b>Pré-requis (intitulé du ou des modules(s)) :</b>		no pre-requisite										
<b><u>A l'issue du module, l'élève sera capable de (objectifs) :</u></b>												
To raise awareness and develop skills around culture and its impact on behaviour in international teams. Students will draw on their own experience of learning within a multi-cultural team immersed in a host culture.												
<b><u>Programme :</u></b>												
1) Culture : definitions, metaphors; key concepts. Culture as a source of intercultural errors. Food / taste and culture 2) Cross cultural communication : "Talk to me" 3) Managing an international team : "When in Rome . . ." (case study; video) 4) Cultural perceptions of food : food marketing, management, negotiation, hiring; 5) Student reports: results of expatriate manager interview 6) Student presentations of x-cultural training packages 7) Independent/group work on assignments and projects												
<b><u>Intervenants :</u></b>		M.REY										
<b><u>Contrôle des connaissances (modalités et coefficients) :</u></b>												
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle				Titre du contrôle					
Contrôle n°1	Rapport	0h	30%				Reading response					
Contrôle n°2	Oral	2h	40%				Cross cultural oral presentation					
Contrôle n°3	Oral	0h	30%				class participation					

Nutritional Sciences		Spring Semester		Version catalogue 12/09/2018 10:42:32							
<b>Fiche pédagogique</b> <b>Introduction to french culture</b> (Introduction to french culture ) Département : Langues				<b>LE0102</b> <b>2018-2019</b>							
RMO : M.LUMMERZHE IM	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 1
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		4h	1h	4h	2h	2h	0h	0h	0h	0h	
<u>Numerus clausus :</u>		-									
<u>Pré-requis (intitulé du ou des modules(s)) :</u>		No prerequisites									
<b><u>A l'issue du module, l'élève sera capable de (objectifs) :</u></b>											
<p>Studying in a foreign country is both an exciting and a challenging experience. When international students come to France for the first time, it is important for them to get introduced to this country from several approaches so they can be able to adjust themselves to a new academic, cultural and institutional environment.</p> <p>What you will learn in this course:</p> <p>This course aims to introduce the international students to French culture/civilisation. Being as large as this topic can be and given the fact that students come from a wide range of countries, it is always interesting to start with a brain storming about France and the French. From this starting point and following the common and individual interests and reasons why they decided to come to France, we develop and widen together the knowledge of fields going from administrative organisation to symbolism in everyday life, from gastronomy to fine arts, from designers and luxury market to filmmakers, writers, musicians of several styles and eras. In a few words, this course is the opening door to the fascinating French heritage.</p>											
<b><u>Programme :</u></b>											
<p>The course comprises lectures on the following topics:</p> <ul style="list-style-type: none"> <li>• French Physical and Human Geography</li> <li>• French Institutions and Political trends.</li> <li>• The place of France in Europe and in the world</li> <li>• Beyond Da Vinci Code: Symbolism in French everyday life.</li> <li>• Doucement, s'il vous plaît... or how to start communicating in French language</li> <li>• The french way of life</li> <li>• An overview to the most representative French cuisine: outstanding recipes/ food products, region by region.</li> <li>• Typical market places and restaurants</li> <li>• Lost in wineslation? Find out the French wine that fits your palate the most with the interactive wine menu!</li> <li>• Travelling around France: picturesque places you can't miss in your stay</li> <li>• Paris melting pot and the intellectual heritage in Fine Arts.</li> <li>• Study of a film: Marie-Antoinette by Sofia Coppola.</li> </ul> <p>Participants will do a research work related with their own interests, focused on a concrete aspect of the course. Afterwards, they'll make a presentation using a Powerpoint in order to share with the rest of the class what they have just discovered.</p>											
<b><u>Intervenants :</u></b>		M.LUMMERZHEIM									
<b><u>Contrôle des connaissances (modalités et coefficients) :</u></b>											
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle				Titre du contrôle				
Contrôle n°1	Oral	1h	100%								



Nutritional Sciences		Spring Semester									Version catalogue 12/09/2018 10:42:55	
<b>Fiche pédagogique</b> <b>French bread and pastries</b> (French bread and pastries) Département : S.N.E.S.											<b>BE0112</b> <b>2018-2019</b>	
RMO : P.GADONNA	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 1	
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE		
		2h	0h	6h	0h	0h	0h	0h	0h	8h		
<b><u>Numerus clausus :</u></b>		-										
<b><u>Pré-requis (intitulé du ou des modules(s)) :</u></b>												
<b><u>A l'issue du module, l'élève sera capable de (objectifs) :</u></b>												
The students will learn how to prepare a crusty loaf of French bread with some basic knowledge about the use of fermentation in food processing												
<b><u>Programme :</u></b>												
The course comprises a lecture followed by practical application sessions:												
<ul style="list-style-type: none"> <li>• Lecture : What are the french artisanal bread techniques ?</li> <li>• Practical work in a bakery (How to prepare the poolish and the dough ? Why the yeast is so important ? How much salt is needed in bread baking ? What are the other ingredients ? How much gluten is needed in the flour ? Why do we need to knead the dough ? How much air should be left in the dough ? Which type of oven, and which type of cooking are needed to bake french bread ? How to get the best texture troughout the loaf ? how to get the best colour and texture of the crust ?</li> </ul>												
<b><u>Intervenants :</u></b>		P.GADONNA, L.INTERVENANT EXTERN										
<b><u>Contrôle des connaissances (modalités et coefficients) :</u></b>												
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle						Titre du contrôle			
Contrôle n°1	Rapport	0h	100%									

Nutritional Sciences		Spring Semester									Version catalogue 12/09/2018 10:43:15	
<b>Fiche pédagogique</b> <b>Introduction to human nutrition</b> (introduction to human nutrition) Département : S.N.E.S.											<b>BE0102</b> <b>2018-2019</b>	
RMO : A.ILLNER	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2	
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE		
		16h	0h	4h	0h	4h	0h	0h	0h	16h		
<b>Numerus clausus :</b>		-										
<b>Pré-requis (intitulé du ou des modules(s)) :</b>		<p>This course is designed not only for students specialized in nutrition, but also for those majoring in agriculture, food science and marketing who wish to study it as a minor option.</p> <p>Nutrition plays a significant role in life. Food habits affect the body's health, but in spite of this, people usually choose foods for other reasons such as food preference.</p>										
<b><u>A l'issue du module, l'élève sera capable de (objectifs) :</u></b>												
<p>The aim of this course is to understand the science of nutrition so that the students can have an overview of this fascinating field. Nutrition is a young science which studies the effect of foods (nutrients and other substances) in the body. Prior to this, it is essential to study the chemical composition of food and understand where the essential and non-essential nutrients recommended to maintain a healthy body can be found.</p>												
<b><u>Programme :</u></b>												
<p>The course comprises lectures on the following topics:</p> <ul style="list-style-type: none"> <li>• The nutrient recommendations: The US and Canadian dietary reference intakes (DRI) and the French recommended dietary intakes (ANC) (2h)</li> <li>• The dietary balance: The three energy-yielding nutrients: Carbohydrates, proteins and fats (11h)</li> <li>• What governs people's food intake? (1h)</li> <li>• Dietary planning for individuals and groups; How to reach an appropriate dietary balance (2h)</li> </ul> <p>Participants will complete a multi-day food record or a food frequency questionnaire (FFQ) to assess their own dietary intakes. The FFQ will be developed and validated during the course (4h).</p>												
<b><u>Intervenants :</u></b>		E.INTERVENANT										
<b><u>Contrôle des connaissances (modalités et coefficients) :</u></b>												
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle				Titre du contrôle					
Contrôle n°1	Oral	4h	100%				restitution orale au cours du TD					

Nutritional Sciences		Spring Semester		Version catalogue 12/09/2018 10:43:35							
<b>Fiche pédagogique</b> <b>Gut flora nutrition immunity and health</b> (gut flora nutrition immunity and health) Département : S.N.E.S.				<b>BE0110</b> <b>2018-2019</b>							
RMO : P.ANTON-GAY	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		20h	2h	0h	0h	0h	0h	0h	0h	22h	
<b>Numerus clausus :</b>		-									
<b>Pré-requis (intitulé du ou des modules(s)) :</b>		Basics in immunity, intestinal physiology and biology									
<b>A l'issue du module, l'élève sera capable de (objectifs) :</b>											
At the end of the module, students will be able to : Understand homeostatic determinants to maintain a healthy intestinal system, interacting with the gut flora and the immune system. Understand the nutritional levers to design new healthy food based on known functional nutrition claims.											
<b>Programme :</b>											
- Gut physiology : Mechanical, enzymatic and microbial digestion ; Metabolism and absorption - Impact of early feeding and colonization of the digestive track on immune development ; Allergies ; Role of pre- and pro-biotics in maternal and infant milk - Impact of nutrition and modulation of the gut microbiota on pathology and health											
<b>Intervenants :</b>		P.ANTON-GAY, C.DELAYRE									
<b>Contrôle des connaissances (modalités et coefficients) :</b>											
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle				Titre du contrôle				
Contrôle n°1	Examen	2h	100%								

<b>Nutritional Sciences</b>	<b>Spring Semester</b>	Version catalogue 12/09/2018 10:43:53
<b>Fiche pédagogique</b> <b>Diet, nutrition and chronic diseases</b> (diet, nutrition and chronic diseases) Département : S.N.E.S.		<b>BE0104</b> <b>2018-2019</b>

<b>RMO : A.ILLNER</b>	<b>Type enseignement : Commun</b>	<b>Répartition des séquences :</b>									<b>Crédits ECTS : 2</b>
		<b>CM</b>	<b>EXA</b>	<b>TD</b>	<b>TP</b>	<b>AFP</b>	<b>AFNP</b>	<b>CC</b>	<b>EXT</b>	<b>TTE</b>	
		16h	2h	4h	0h	4h	0h	0h	0h	16h	

**Numerus clausus :** -

**Pré-requis (intitulé du ou des modules(s)) :** Cancer, cardiovascular disease, neurodegenerative diseases, osteoporosis and metabolic syndrome are the major causes of early death and disability. Over the past few years, features of our lifestyle such as diet have been recognized as important new risk factors for most pathologies. With other lifestyle factors such as physical inactivity, it is now well known that diet is strongly related to the main risk factors for degenerative and metabolic pathologies.

**A l'issue du module, l'élève sera capable de (objectifs) :**

Based on epidemiological and interventional studies, this course aims to better understand the impact of diet on the development of pathologies. The role of diet in the prevention of chronic diseases will also be discussed.

**Programme :**

- Free Radical Theory of Aging – 2 hours
- Hyperglycaemia and Glycation, another theory of aging – 2 hours
- Overweight, obesity and health: epidemiologic data, dietary and other environmental influences, obesity in childhood – 6 hours (and 4 hours of scheduled self-study on obesity and 4 hours of oral presentation)
- Diabetes : aetiology, epidemiologic data and complications – 3 hours
- Cancer and nutrition – 2 hours
- Alzheimer's disease : diet, nutrition and emerging risk factors – 3 hours

**Intervenants :** P.POUILLART, F.TESSIER

**Contrôle des connaissances (modalités et coefficients) :**

Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle	Titre du contrôle
Contrôle n°1	Examen	2h	60%	written exam
Contrôle n°2	Oral	2h	oral presentation	

Archives										Version catalogue 12/09/2018 10:44:12	
<b>Fiche pédagogique</b> <b>French family cooking</b>  (french family cooking) Département : S.N.E.S.										<b>BE0106</b> <b>2018-2019</b>	
RMO : P.POUILLART	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		0h	0h	0h	30h	0h	0h	0h	0h	0h	
<b>Numerus clausus :</b>		-									
<b>Pré-requis (intitulé du ou des modules(s)) :</b>		Nothing special technically speaking, to be in a good mood!									
<b>A l'issue du module, l'élève sera capable de (objectifs) :</b>											
<b>Programme :</b>		<p>The course comprises the following topics:</p> <ul style="list-style-type: none"> <li>• Basic cooking principles</li> <li>• What controls our eating pleasure ? How important is hedonism ?</li> <li>• Fundamental techniques of cooking : advantages and disadvantages</li> <li>• Healthy cooking workshop</li> <li>• Blind-eating workshop</li> <li>• Creative cooking workshop on the basis of a word (drawn lots) to transform into a dish</li> <li>• Picardis's recipes</li> <li>• Medieval French Healthy cooking</li> </ul>									
<b>Intervenants :</b>		P.POUILLART, M.POUILLART, P.CHESNAIS									
<b>Contrôle des connaissances (modalités et coefficients) :</b>											
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle						Titre du contrôle		
Contrôle n°1	Oral	2h	100%								

<b>Nutritional Sciences</b>	<b>Spring Semester</b>	Version catalogue 12/09/2018 10:44:12
<b>Fiche pédagogique</b> <b>French family cooking</b>  (French family cooking) Département : S.N.E.S.		<b>BE0106</b> <b>2018-2019</b>

RMO : C.BUCHE- FOISSY	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		0h	0h	3h	28h	0h	0h	0h	0h	0h	

**Numerus clausus :** -

**Pré-requis (intitulé du ou des modules(s)) :** Nothing special technically speaking, to be in a good mood!

**A l'issue du module, l'élève sera capable de (objectifs) :**

**Programme :**

The experiential learning (EL) programme comprises the following topics (4 hours a day):

- What controls our eating pleasure ? How important is hedonism ? Such questions are addressed through different workshops including blind-eating test, creative cooking test on the basis of a word (drawn lots) to transform into a dish.
- French medieval cooking: A medical historic concept correlated with modern healthy eating messages.
- Picardie traditional recipes.
- Mediterranean cuisine and the French paradox: Under "French Paradox", we understand the epidemiological observation that French people seem to have relatively low incidences of coronary heart disease, despite having a diet relatively rich in saturated fats. Specific traditional products and French recipes will be presented including wine tasting. We also investigate health benefits and sunny flavors from foods and culture adjacent to the mediterranean region.

• References:

1 - De Leiris, J., Boucher, F., Ducimetière, P., Holdsworth, M., Tunstall-Pedoe, H., 2008, « The French Paradox: Fact or Fiction? », Dialogues in Cardiovascular Medicine, 13 (3), 155-208.

2 - Mylène et Philippe Pouillart. Manger comme au Moyen Âge : 150 recettes adaptées aux cuisines d'aujourd'hui, Editions PRIVAT, 2010.

3 - [http://www.eatingwell.com/recipes\\_menus/collections/healthy\\_mediterranean\\_recipes](http://www.eatingwell.com/recipes_menus/collections/healthy_mediterranean_recipes)

**Intervenants :** P.POUILLART, C.BUCHE-FOISSY

**Contrôle des connaissances (modalités et coefficients) :**

Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle	Titre du contrôle
Contrôle n°1	Rapport	0h	33%	written report
Contrôle n°2	Oral	0h	33%	class participation
Contrôle n°3	Oral	0h	33%	oral presentation



<b>Nutritional Sciences</b>	<b>Spring Semester</b>	Version catalogue 12/09/2018 10:44:33
<b>Fiche pédagogique</b> <b>Paris International Agricultural show</b> (Paris International Agricultural show) Département : Agronomie		<b>AE0104</b> <b>2018-2019</b>

RMO : J.RODRIGUEZ- LOPEZ	Type enseignement : Commun	Répartition des séquences :										Crédits ECTS : 1
		CM 0h 30	EXA 12h	TD 0h	TP 0h	AFP 0h	AFNP 0h	CC 0h	EXT 12h	TTE 0h		

**Numerus clausus :** -

**Pré-requis (intitulé du ou des modules(s)) :**

**A l'issue du module, l'élève sera capable de (objectifs) :**

For the last half a century, the Paris International Agricultural Show has been the annual meeting place for all the key players of the agricultural world. It is the leading event of the sector, not only in France but all around the world.

Breeders, local farmers, regions, professional organizations and agricultural professional syndicates, different ministries, research institutes: everybody contributes to present all the aspects of the sector and the perspectives of the evolution.

The Paris International agricultural Show is organized around 4 sectors: livestock breeding sectors, products and gastronomy, Crops, plants, nature and lifestyle, agricultural services and professions.

Main goals of this course:

- To provide an overview (to taste, to see, to smell) about French agriculture products coming from all the different regions of France.
- To understand how local food can be an added value for a region and how local companies can valorise their products with a regional identity. better equip students to approach cross cultural management as a form of knowledge transfer in a global economy.
- To evaluate how strong is the protection of products (brand, AOP...) and how large is the Food chain (the role of each one, from the farmer to the consumer)
- To appreciate how "health" is an argument in food marketing, within the French culture.
- To manage travelling by public transportation from Beauvais to Porte de Versailles in Paris

**Programme :**

Day 1 – Visit of the fair in Paris (students will have to prepare an assignment about a subject that will be done before the Fair, it could be to study a product or a company or a specific region).

Personal Work – Assignment to write and to send to the corector 3 weeks after the Fair

**Intervenants :** J.RODRIGUEZ-LOPEZ

**Contrôle des connaissances (modalités et coefficients) :**

Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle	Titre du contrôle
Contrôle n°1	Rapport	0h	100%	



Nutritional Sciences		Spring Semester									Version catalogue 12/09/2018 10:44:53
<b>Fiche pédagogique</b> <b>Epidemiology and nutrition</b> (Epidemiology and nutrition) Département : S.N.E.S.											<b>BE0113</b> <b>2018-2019</b>
RMO : A.ILLNER	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		14h	1h 30	16h	0h	0h	0h	0h	0h	0h	
<u>Numerus clausus :</u>	-										
<u>Pré-requis (intitulé du ou des modules(s)) :</u>	Graduate level, basics in nutrition, food science or any other related field										
<u>A l'issue du module, l'élève sera capable de (objectifs) :</u>											
At the end of this course the students will be able to: <ul style="list-style-type: none"> <li>• Define the concept of nutritional epidemiology, basic statistical concepts and terms used in nutritional epidemiology.</li> <li>• Differentiate among several study types.</li> <li>• Know the difference among several dietary assessment methods as well as which to use in specific epidemiological studies.</li> <li>• Critically evaluate and present data from scientific findings.</li> <li>• Gain experience in designing an epidemiologic study.</li> </ul>											
<u>Programme :</u>											

The course comprises lectures on the following topics:

- Basic concepts of epidemiology and study types
- Basic statistics for epidemiology
- Dietary assessment methods
- Analysing and presenting of dietary data and interpretation of results
- Specific epidemiological topics

Schedule of the courses:

First day: Introduction (CM1 4h)

- Introduction to epidemiology and nutritional epidemiology
  - Study design and examples (e.g. EPIC: European Prospective Investigation into Cancer and Nutrition)
- CM2: Basic statistics for epidemiology (2h, room with statistical software packages)
- Group activity - session 1: groups of 5-6 to fully design an epidemiological study that addresses a research question relevant to the population-level chronic disease burden related to nutrition (introduction in the group activity (2h)

Second day: CM3: Dietary assessment methods (4h)

- 24 hour recalls and food records (2 hours)
- Food frequency questionnaires/ reproducibility and validity (1 hour)
- Biomarkers in nutrition (1 hour)
- Group activity - session 2: designing an epidemiological study (3 hours),

Third day: CM4: Analysis of dietary intake (2h)

- Confounders in nutritional epidemiology
  - Presentation of dietary intake
- Group activity - session 3: designing an epidemiological study (2 h)
- CM5: Recent epidemiological findings (2h)
- Special topics: cancer and nutrition; genetics in dietary analyses, physical activity and nutritional epidemiology (2 hours)
- Group activity - session 4: designing an epidemiological study (2 h)

Fourth day: Recent epidemiological findings

- Group activity - session 4: designing an epidemiological study (3h)
- Oral presentation of group work and evaluation (4 hours)

Written exam (1,5hours) general easy and simple objective questions

**Intervenants :** C.NIAMBA, E.INTERVENANT, A.ILLNER

**Contrôle des connaissances (modalités et coefficients) :**

Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle	Titre du contrôle
Contrôle n°1	Oral	4h	60	
Contrôle n°2	Examen	1h 30	40	

Nutritional Sciences		Spring Semester									Version catalogue 12/09/2018 10:45:33
<b>Fiche pédagogique</b> <b>Clinical studies for the food industry</b> (Clinical studies for the food industry) Département : S.N.E.S.											<b>BE0105</b> <b>2018-2019</b>
RMO : F.DEPEINT	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		9h	3h	5h	0h	8h	0h	0h	0h	0h	
<b><u>Numerus clausus :</u></b>		-									
<b><u>Pré-requis (intitulé du ou des modules(s)) :</u></b>											
<b><u>A l'issue du module, l'élève sera capable de (objectifs) :</u></b>		<p>The consumer is often confused by the overwhelming number of messages carried by food products. There is an increasing need for the food industry to back up its health and nutritional claims on food products by unbiased scientific demonstration.</p> <p>Upon completion of this course, students will have acquired:</p> <ul style="list-style-type: none"> <li>- an understanding of the role of clinical trials for the food industry</li> <li>- the tools to design and conduct a clinical trial</li> <li>- the statistical basics applied to the different phases of a clinical trial</li> </ul>									
<b><u>Programme :</u></b>		<p>The following topics will be addressed during the lectures and workshops</p> <ul style="list-style-type: none"> <li>• Introduction to the module and details of the evaluation process</li> <li>• Introduction to functional foods and food supplements (market, consumer behaviour...)</li> <li>• Introduction to clinical studies               <ul style="list-style-type: none"> <li>- Legislation re: health claims for a food product. Why the food industry needs clinical studies</li> <li>- The different types of studies and differences with clinical studies for the pharmaceutical industry</li> </ul> </li> <li>• Practical steps of an intervention study               <ul style="list-style-type: none"> <li>- The players, from the clinical team to the regulatory bodies (France, EU, US)</li> <li>- Preparation of the protocol file; the legislation, the timeline, the documents</li> <li>- From recruiting the subjects to the last day of the study and beyond; good clinical practice, the role of the monitor, communication and marketing</li> </ul> </li> <li>• Dietary evaluation               <ul style="list-style-type: none"> <li>- how to collect and analyse dietary information and the impact during an intervention study</li> </ul> </li> <li>• Biostatistics               <ul style="list-style-type: none"> <li>- the tools in biostatistics and what questions they can help answer</li> </ul> </li> <li>• self-learning time is allocated so that students can work in groups and develop a protocol for a test ingredient; the results will be presented during a final oral presentation and will count as the course assessment.</li> </ul>									
<b><u>Intervenants :</u></b>		V.ACHA FUERTES, F.DEPEINT, C.NIAMBA, A.ILLNER									
<b><u>Contrôle des connaissances (modalités et coefficients) :</u></b>											
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle				Titre du contrôle				
Contrôle n°1	Oral	3h	100%				Group evaluation: study protocol				



<b>Nutritional Sciences</b>	<b>Spring Semester</b>	Version catalogue 12/09/2018 10:45:55
<b>Fiche pédagogique</b> <b>French paradox, Mediterranean diet and health benefits</b> (French paradox, Mediterranean diet and health benefits) Département : S.N.E.S.		<b>BE0107</b> <b>2018-2019</b>

<b>RMO : A.ILLNER</b>	<b>Type enseignement : Commun</b>	<b>Répartition des séquences :</b>									<b>Crédits ECTS : 2</b>
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		12h	2h	0h	0h	0h	0h	0h	0h	12h	

**Numerus clausus :** -

**Pré-requis (intitulé du ou des modules(s)) :** Many studies have found that the Mediterranean diet is one of the healthiest diets in the world. The mortality rate from heart disease is particularly low when a combination of Mediterranean ingredients are used in the diet. However there is not only one Mediterranean diet, but several, which are made up from the many cuisines and lifestyles of the various areas surrounding the Mediterranean. The most well-known are those from Crete, Greece and the south of France but more than 15 countries can claim to have their own Mediterranean diet which is influenced by culture, religion, economy and whatever food is grown or produced in that region.

**A l'issue du module, l'élève sera capable de (objectifs) :**

What you will learn in this course:  
 Participants will learn about the most recent studies which try to prove the link between the Mediterranean diet and the lower incidence of cardiovascular disease and cancer. In this course they will also have an overview of the traditional diets of the most representative countries that border the Mediterranean. Finally they will discuss whether or not it is possible to eat the "Mediterranean way" in industrialized countries.

**Programme :**

- The French Paradox – 4 hours (1)
- The traditional Cretan Mediterranean diet and food – 2 hours (2) ;
- The healthy diet of Greece – 2 hours (2) ;
- The Lebanese and other Middle Eastern versions of the Mediterranean diet – 2 hours (2) ;
- Is it possible to have a Mediterranean diet in North America and Northern Europe? How can the related populations cook healthily? Should health advisers recommend people to follow a Mediterranean-style diet? – 2 hours (2)

**Intervenants :** K.HELOU, A.ILLNER

**Contrôle des connaissances (modalités et coefficients) :**

Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle	Titre du contrôle
Contrôle n°1	Examen	2h	100%	



Nutritional Sciences		Spring Semester									Version catalogue 12/09/2018 10:46:20	
Fiche pédagogique											BE0121	
Health catering and food services											2018-2019	
(Health catering and food services)												
Département : S.N.E.S.												
RMO : C.BUCHE- FOISSY	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2	
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE		
		12h	0h	3h	9h	4h	0h	0h	0h	12h		
<b>Numerus clausus :</b>		-										
<b>Pré-requis (intitulé du ou des modules(s)) :</b>		Introduction to human nutrition										
<b><u>A l'issue du module, l'élève sera capable de (objectifs) :</u></b>												
<p>To learn about food services and health catering in France as upcoming and innovative sectors and their challenges</p> <p>To be able to develop menus suitable for health catering</p> <p>To understand how menus need to be adapted to meet specific nutritional requirements of vulnerable population groups</p> <p>To understand the importance of audits to control and maintain quality in food services process and health catering</p>												
<b><u>Programme :</u></b>												
<p>Day 1: Lecture 1 (CM: 3h): Introduction to food services and health catering and the specific situation in France Afternoon (TP: 3h: Guided visit of a local food and health catering service</p> <p>Day 2: Lecture 2 (CM: 3h): Menu creation and update for healthy clients Afternoon (TP: 3h): Culinary skills practise: menu creation and development of meals' composition</p> <p>Day 3 Lecture 3 (CM: 3h): Creation of new concepts for health catering to meet specific nutritional requirements Afternoon (TP: 3h): Specifics diets for health catering (e.g. adapted to elderly personnes or cancer patients)</p> <p>Day 4: Lecture 4 (CM: 3h): Health food service organisation and action plan Afternoon (AFP: 4h): Self-Learning: How to organise an audit of health food service to improve their efficiency</p> <p>Day 5: TD (3h): oral présentation and discussion (results of the self-learning)</p>												
<b><u>Intervenants :</u></b>		C.BUCHE-FOISSY, E.MC KENZIE										
<b><u>Contrôle des connaissances (modalités et coefficients) :</u></b>												
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle						Titre du contrôle			
Contrôle n°1	Oral	3h	100%						oral presentation an behavior			



Nutritional Sciences		Spring Semester									Version catalogue 12/09/2018 10:46:40
<b>Fiche pédagogique</b> <b>Global Nutrition</b> (Global Nutrition) Département : S.N.E.S.											<b>BE0123</b> <b>2018-2019</b>
RMO : A.ILLNER	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		11h	0h	3h	0h	8h	0h	0h	0h	10h	
<b>Numerus clausus :</b>		-									
<b>Pré-requis (intitulé du ou des modules(s)) :</b>		Graduate level, basics in human nutrition, food sciences									
<b>A l'issue du module, l'élève sera capable de (objectifs) :</b>											
After completing this course the student should be able to: <ul style="list-style-type: none"> <li>• Identify the major nutritional deficiencies and their relative importance</li> <li>• Describe the synergistic relationship between infection and nutrition</li> <li>• Identify the major target groups for nutrition interventions</li> <li>• Identify the underlying and basic determinants of malnutrition</li> <li>• Identify nutrition impact and outcome indicators used in global nutrition programs</li> </ul>											
<b>Programme :</b>											
Schedule of the course: First day: Lecture 1 (3h): Introduction to the topic, introduction to the concept of nutritional transition, definition of malnutrition and its different types, nutrition and HIV Lecture 2 (2h): Millennium Development Goals, Rome Declaration on World Food Security, dietary assessment in developing countries Second day: morning: Self-Learning session (4h) on food security afternoon: lecture 3 (3h): presentation of the independent Non-Governmental Organisation (action against hunger), its mission, activities and evaluation methods Third day: morning: lecture 4 (3h): Nutrition in vulnerable societies (external lecturer) afternoon: Self-Learning session (4h): Preparation of the "golden rice" exercise (group work) Fourth day: TD (3h): Golden rice debate (group work which will be evaluated)											
<b>Intervenants :</b>		E.INTERVENANT, A.ILLNER, E.LANDAIS, L.LOGRE									
<b>Contrôle des connaissances (modalités et coefficients) :</b>											
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle		Titre du contrôle						
Contrôle n°1	Oral	3h	100%								



<b>Nutritional Sciences</b>	<b>Spring Semester</b>	Version catalogue 12/09/2018 10:47:00
<b>Fiche pédagogique</b> <b>Applied molecular biology techniques</b> (Applied molecular biology techniques) Département : S.N.E.S.		<b>BE0109</b> <b>2018-2019</b>

<b>RMO : N.BARBEZIER</b>	<b>Type enseignement : Commun</b>	<b>Répartition des séquences :</b>									<b>Crédits ECTS : 2</b>
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		6h	2h	4h	6h	8h	0h	0h	0h	0h	

**Numerus clausus :** -

**Pré-requis (intitulé du ou des modules(s)) :** Basics in molecular Biology, Genetics

**A l'issue du module, l'élève sera capable de (objectifs) :**

This is a course for students with a scientific background, who are interested in studying molecular biology techniques at both a fundamental and advanced level. Principles and applications will focus on nutrition and health research.

Upon completion of this course, students will acquire:

- Knowledge about molecular biology principles: replication, transcription and translation.
- Understanding of techniques that are currently being used in the biotechnology.
- Familiarity with concepts pertaining to basic molecular biology principles and techniques.
- Understanding of various contemporary areas of research and their applications.
- The ease for communication with associates in various areas of molecular biology.

**Programme :**

Molecular biology is the study of biology at a molecular level. The field overlaps with other areas of biology and chemistry, particularly genetics and biochemistry. Molecular biology chiefly provides a background appropriate for further work in the growing technologies of genomics, cell biology, biotechnology, microbiology, diagnostics and therapeutics, and Nutrigenomics. This course will shed light on the molecular biology techniques that are used in nutritional fields.

Course agenda:

- Introduction to molecular biology (DNA, RNA, Proteins and the central dogma)
- DNA Molecular Techniques
  - 1) Isolation and purification of DNA samples from different cell types and tissues
  - 2) Digestion and analysis
  - 4) DNA cloning and DNA library construction
  - 6) DNA sequencing
  - 7) PCR and qPCR
  - 8) RNAi and siRNA
  - 9) Microarrays
  - 10) Pratical work using molecular biology techniques (DNA analysis, PCR)
- Personal work Students will prepare a new molecular biology concepts, agreed on with the teacher.

**Intervenants :** A.BODARD, N.BARBEZIER

**Contrôle des connaissances (modalités et coefficients) :**

Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle	Titre du contrôle
Contrôle n°1	Oral	2h	100%	



Nutritional Sciences		Spring Semester									Version catalogue 12/09/2018 10:47:18
<b>Fiche pédagogique</b> <b>Culinary field trip</b> (Culinary field trip) Département : S.N.E.S.											<b>BE0122</b> <b>2018-2019</b>
RMO : F.DEPEINT	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 1
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		0h	0h	0h	0h	0h	0h	0h	40h	0h	
<b><u>Numerus clausus :</u></b>		-									
<b><u>Pré-requis (intitulé du ou des modules(s)) :</u></b>		Basic knowledge about food transformation and preparation									
<b><u>A l'issue du module, l'élève sera capable de (objectifs) :</u></b>		Understand the food process from the field to the consumer with different exemples of local food products Assess cultural specialties of the target region									
<b><u>Programme :</u></b>		Field trip in a gastronomy region of France including visits to local producers for both traditional food and beverages as well as cultural visits									
<b><u>Intervenants :</u></b>		F.DEPEINT									
<b><u>Contrôle des connaissances (modalités et coefficients) :</u></b>											
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle		Titre du contrôle						
Contrôle n°1	Rapport	0h	100%		Evaluation of the interest and participation to the discussions shown as a group and as an individual						

<b>Nutritional Sciences</b>	<b>Spring Semester</b>	Version catalogue 12/09/2018 10:47:38
<b>Fiche pédagogique</b> <b>Nutritional loss during food processing</b> (Nutritional loss during food processing) Département : S.N.E.S.		<b>BE0111</b> <b>2018-2019</b>

<b>RMO : S.REGNAULT</b>	<b>Type enseignement : Commun</b>	<b>Répartition des séquences :</b>									<b>Crédits ECTS : 2</b>
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		4h	0h	16h	4h	8h	0h	0h	0h	12h	

**Numerus clausus :** -

**Pré-requis (intitulé du ou des modules(s)) :** basic coursework in nutrition and laboratory analytical techniques

**A l'issue du module, l'élève sera capable de (objectifs) :**

- To understand the need for nutritional quality control of processed foods.
- To understand how vitamins are damaged during food processing.
- To develop skills in laboratory analytical techniques adapted and used for food analysis.
- To demonstrate the interest of the chromatographic methods for food quality control

**Programme :**

Day 1 – Lesson (4 hours) on nutritional loss during food processing  
 Reading and review of scientific articles related to nutritional loss (4 hours )  
 From Day 2 to day 3 – From selected food matrices, students will set up various cooking experiments. The goal will be to quantify vitamin C loss by liquid chromatography coupled to fluorescence detection (PW : 4 hours in the lab.) (W : 12 hours)  
 Day 4 – Data analysis and poster preparation (W : 8 hours)  
 Day 5 - Review of scientific article (W : 4 hours) & Poster presentation, and discussion (W : 4 hours)

**Intervenants :** P.Jacolot, C.LERIDON, S.REGNAULT

**Contrôle des connaissances (modalités et coefficients) :**

Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle	Titre du contrôle
Contrôle n°1	Rapport	4h	30% review of scientific articles	
Contrôle n°2	Oral	4h	30% lab work	
Contrôle n°3	Rapport	4h	40% poster presentation	

<b>Nutritional Sciences</b>	<b>Spring Semester</b>	Version catalogue 12/09/2018 10:48:04
<b>Fiche pédagogique</b> <b>Introduction to Nutrigenomics</b>  (Introduction to Nutrigenomics) Département : S.N.E.S.		<b>BE0108</b> <b>2018-2019</b>

<b>RMO : F.DEPEINT</b>	<b>Type enseignement : Commun</b>	<b>Répartition des séquences :</b>									<b>Crédits ECTS : 1</b>
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		6h	2h	0h	0h	4h	0h	0h	0h	0h	

**Numerus clausus :** -

**Pré-requis (intitulé du ou des modules(s)) :**

**A l'issue du module, l'élève sera capable de (objectifs) :**

Diet is a key environmental factor that affects the incidence of many chronic diseases. Nutrigenomics is an emerging discipline that studies how diet influences the expression of genetic information, or how each individual interacts with, and responds to environmental factors. This course presents nutritional genomics concepts, as well as functional genomics techniques and strategies applied to nutritional disease prevention. Upon completion of the course, students will acquire fundamental concepts of technologies and strategies to understand nutritional genomics and epigenetics research approaches and the complex gene-nutrient or gene-gene interactions and their link with human diseases.

**Programme :**

Genome and genomics concepts  
 Genetics, genomics and epigenetics  
     Post-genomics tools and high-throughput technologies  
 Omics science: transcriptomics, proteomics and metabolomics

Gene – nutrient interactions for health and optimal diets  
 Genetic variability and genomics: impact of SNPs in nutrition  
 Functional foods, natural health products and nutrigenomics.  
     Nutrigenetics: SNPs and individual response to nutrients  
     Nutrigenomics: impact of nutrients on gene expression  
 Analysis of gene-nutrient interaction  
 Practice in individualized health assessment

Genome ethics and genetic privacy  
 Opportunities for food and health

Epigenetics overview  
 Epigenetics mechanisms and epigenome changes.  
 Diet, epigenetics and epigenome.  
 Report  
 Case study and report.

**Intervenants :** F.DEPEINT, E.INTERVENANT

**Contrôle des connaissances (modalités et coefficients) :**

Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle	Titre du contrôle
Contrôle n°1	Rapport	0h	100%	



<b>Nutritional Sciences</b>	<b>Spring Semester</b>	Version catalogue 12/09/2018 10:48:18
<b>Fiche pédagogique</b> <b>Value-based agrifood chains: organization &amp; marketing</b> (Value-based agrifood chains: organization & marketing) Département : S.N.E.S.		<b>BE0114</b> <b>2018-2019</b>

RMO : N.RAKOTONAN DRAINAINA	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE	
		10h	2h	8h	0h	6h	0h	0h	0h	0h	

**Numerus clausus :** -

**Pré-requis (intitulé du ou des modules(s)) :**

**A l'issue du module, l'élève sera capable de (objectifs) :**

Thanks to its agricultural diversity, gastronomy heritage and strong quality policy towards its agricultural territories and culinary know-how, the French agricultural and food sectors have always witnessed numerous examples of value-based agrifood chains. Value-based chains can be defined as strategic configurations where specific and inimitable characteristics of agricultural and food products are brought to the market. These chains show original organizational combinations of resources by individual and/or collective actors that allow competing efficiently, on globalized markets, with agricultural and food commodities.

The objectives of this module are

(i) To give a global view of these agrifood chains and notably for place-based products, products with culinary characteristics, organoleptic and nutritional attributes; as well as the links of these chains with history, culture, institutional and competitive environments.

To provide an analytical framework that can be applied in any situations to assess the opportunities and challenges of the development of these value-based agrifood chains.

**Programme :**

- 1- Introduction. The many faces of value in the French agriculture and food sectors: place, gastronomy, know-how etc.
- 2- Examples of value-based agrifood chains in France (presentation and case studies)
- 3-1 The PDO (Protected Designation of Origin) and PGI (Protected Geographical Indication) systems: the value of place-based products and the marketing of 'terroirs' (ex. of 'Comté' and 'Jambon de Bayonne')
- 3-2 The 'Label Rouge' system in the poultry sector: the marketing of the organoleptic value of food.
- 3-3 The TSG (Traditional Specialty Guaranteed) products : valorizing farmers' and food processors' know-how.
- 3-4 Nutrition-based attributes: the example of flax with the Bleu-Blanc-Coeur association and the Porcilin/Saveurs en Or products.
- 3-5 Adding service-value to agricultural products: farm-to-consumer marketing, e-commerce (www.amisdelaferme.fr), 'AMAP' networks etc.
- 3- Tools and framework to study value chains
  - The concept of value chain and value chain analysis
  - Value creation in marketing and organizational aspects: an analytical framework
- 4- Conclusion : perspectives of value-based agrifood chains in an era of globalization of agricultural and food markets.

**Intervenants :** N.RAKOTONANDRAINAINA, L.SAUVÉE, I.INTERVENANT

**Contrôle des connaissances (modalités et coefficients) :**

Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle	Titre du contrôle
Contrôle n°1	Examen	2h	50%	
Contrôle n°2	Rapport	0h	50%	



Nutritional Sciences		Spring Semester									Version catalogue 12/09/2018 10:48:38	
<b>Fiche pédagogique</b> <b>French as a Foreign Language</b> (French as a Foreign Language) Département : Langues											<b>LE0103</b> <b>2018-2019</b>	
RMO : M.REY	Type enseignement : Commun	Répartition des séquences :									Crédits ECTS : 2	
		CM	EXA	TD	TP	AFP	AFNP	CC	EXT	TTE		
		0h	2h	24h	0h	0h	0h	0h	0h	24h		
<b>Numerus clausus :</b>		-										
<b>Pré-requis (intitulé du ou des modules(s)) :</b>		No prerequisite for French 101 (elementary French)										
<b><u>A l'issue du module, l'élève sera capable de (objectifs) :</u></b>												
<p>French 101 is designed for students who have had little or no previous French instruction. Students will discover French and acquire some basic tools for real-life language use while they study and travel in France.</p> <p>Class will be conducted entirely in French, and students will be expected to participate actively, using the language skills they are learning inside and outside the classroom. In the end, students are encouraged to pursue the study of French once they return to their home institutions .</p>												
<b><u>Programme :</u></b>												
<p>Describe, narrate, and ask/answer questions in the foreign language in the present time about a variety of topics related to family, daily activities, eating, and traveling.</p> <p>Comprehend the foreign language with sufficient ability to grasp the main idea in short conversations pertaining to the topics mentioned above.</p> <p>Read and understand the main idea and some details of materials related to daily life and travel (maps, classified ads.)</p> <p>Write sentences and short paragraphs on familiar topics relating to personal interests and practical needs. (e.g. postcards)</p>												
<b><u>Intervenants :</u></b>		M.REY, I.AA4277										
<b><u>Contrôle des connaissances (modalités et coefficients) :</u></b>												
Nombre de contrôles	Modalités	Durée du contrôle	Pondération de chaque contrôle				Titre du contrôle					
Contrôle n°1	Oral	0h	30%				class participation					
Contrôle n°2	Examen	2h	40%				Final exam					
Contrôle n°3	Oral	1h	30%				oral comprehension					