EXCHANGE STUDENT HANDBOOK

Information about the courses from the IBC programme (undergraduate track)
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I. PRACTICAL INFORMATION:

IBC = International Bachelor Certificate

Language of tuition: English.
Level required: B1 minimum / B2 recommended according to the CEFRL (or equivalent)

Course load for exchange students:
PURPAN follows the European Credit Transfer System (ECTS): The International Bachelor Certificate programme thus amounts to 60 ECTS, out of which 52 ECTS correspond to courses available to exchange students. The remaining 8 ECTS correspond to a final internship that is not open to exchange students.

Consequently, exchange students usually choose 26 ECTS for one semester, or 49 ECTS maximum for 1 academic year. They should thus verify their Home Institution requirements, and check if/how they can reach them.

Course choice:
This programme is at undergraduate level (end of BSc/ 3rd of 4th year) and gives students knowledge in Agriculture from Animal Productions to Food and Wine Technology.
Semester 1 focuses on Animal Productions while Semester 2 focuses on Food Sciences.

Students choosing IBC courses cannot mix them with courses from other programmes (for example “Ingénieur” courses) because it is technically impossible (timetable conflicts / courses overlapping).
Students thus choose courses from 1 programme.

The IBC offer is subject to sufficient enrolment (usually 5 students minimum per semester). This can only be confirmed once we have received all the applications, after the application deadlines (June 1st for Semester 1 / October 1st for Semester 2).

Grading system:
PURPAN follows the ECTS grading scale. Local examinations are graded from 1 to 20, and are translated into ECTS grades as described hereunder.

The minimum passing grade for students is 10/20.

Some courses may be validated with ECTS, without grade (based on attendance and work, with the mention “NC”).

<table>
<thead>
<tr>
<th>PURPAN grade/note</th>
<th>0 – &lt; 7.5</th>
<th>7.5 – &lt; 10</th>
<th>10 – &lt; 10.5</th>
<th>10.5 – &lt; 11.5</th>
<th>11.5 – &lt; 13.5</th>
<th>13.5 – &lt; 15.5</th>
<th>15.5 – 20</th>
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<tr>
<td>ECTS grade/note</td>
<td>F*</td>
<td>Fx*</td>
<td>E</td>
<td>D</td>
<td>C</td>
<td>B</td>
<td>A</td>
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<tr>
<td>ECTS definition</td>
<td>Fail</td>
<td>Fail</td>
<td>Sufficient</td>
<td>Satisfactory</td>
<td>Good</td>
<td>Very good</td>
<td>Excellent</td>
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</table>

* F - Considerable further work is required.
* Fx - Some more work is required before the credit can be awarded.
II. INTERNATIONAL BACHELOR CERTIFICATE IN ANIMAL PRODUCTIONS AND FOOD SCIENCES 2017/2018

Semester 1 (Fall 2017) with a focus in Animal Productions

Courses available to exchange students:

<table>
<thead>
<tr>
<th>CODE</th>
<th>NAME</th>
<th>ECTS</th>
<th>PAGE</th>
</tr>
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<tbody>
<tr>
<td>97FHC01</td>
<td>FRENCH LANGUAGE AND INTERCULTURAL ISSUES (LEVELS A1/A2 TO B1)</td>
<td>3</td>
<td>5</td>
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<td>97AAE01</td>
<td>GEOGRAPHIC INFORMATION SYSTEM / REMOTE SENSING</td>
<td>2</td>
<td>6</td>
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<tr>
<td>97GME01</td>
<td>STRATEGIC MANAGEMENT</td>
<td>2</td>
<td>7</td>
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<td>97ECM01</td>
<td>AGRICULTURAL POLICIES</td>
<td>2</td>
<td>8</td>
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<tr>
<td>97SPA01</td>
<td>ANIMAL PRODUCTIONS</td>
<td>12</td>
<td>9 &amp; 10</td>
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<tr>
<td>97SPA02</td>
<td>TUTORED WORK IN ANIMAL PRODUCTIONS</td>
<td>2</td>
<td>11</td>
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<tr>
<td>97STA03</td>
<td>WINEMAKING</td>
<td>3</td>
<td>12</td>
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</table>

TOTAL FOR SEMESTER 1 .............................................................. 26 ECTS

Semester 2 (Spring 2018) with a focus in Food Sciences (provisional)

Courses available to exchange students:

<table>
<thead>
<tr>
<th>CODE</th>
<th>NAME</th>
<th>ECTS</th>
<th>PAGE</th>
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</thead>
<tbody>
<tr>
<td>97FHC06</td>
<td>FRENCH LANGUAGE AND INTERCULTURAL ISSUES (FOR SEMESTER 2 ARRIVING EXCHANGE STUDENTS ONLY: LEVELS A1/A2 TO B1)</td>
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<td>97FHC05</td>
<td>RURAL SOCIOLOGY</td>
<td>3</td>
<td>13</td>
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<tr>
<td>97STA01</td>
<td>FOOD SCIENCES</td>
<td>14</td>
<td>14 &amp; 15</td>
</tr>
<tr>
<td>97ECM02</td>
<td>INTERNATIONAL WINE BUSINESS &amp; COMMUNICATION</td>
<td>6</td>
<td>16 &amp; 17</td>
</tr>
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</table>

TOTAL FOR SEMESTER 2 .............................................................. 23 TO 26 ECTS

* for students arriving at Semester 1, you might not be able to sign on for the French course starting at Semester 2 if it is the same course.

The IBC Program may be subject to changes in ECTS and/or contents.
FRENCH LANGUAGE AND INTERCULTURAL ISSUES

Credits: 3 ECTS (either during Semester 1 or Semester 2, depending on your arrival)

Learning outcomes:

To give students a basic knowledge of French that enables them to deal with simple, everyday situations.
Level : A1/A2 to B1

To give students an understanding of cultural identity, of French cultural specificities and to reinforce their intercultural understanding. Finally, to facilitate their comprehension of PURPAN and what is expected of them, so as to facilitate their integration.

Content:

From introducing oneself or someone else, to expressing one’s tastes, but also asking questions and answering them in everyday life: at the supermarket, at the doctor’s, in restaurants, with roommates, when travelling etc.

Being able to describe simple events, in the past and in the future.

Cultural map of the group and reinforcing intercultural comprehension; French specificité; PURPAN culture.

Teaching method:

Using different teaching material (grammar books and progressive communication books, audio support media like radio/television extracts etc.) and real situations to build oral comprehension, interaction & fluidity in expression.

Survey and presentations.

Skills assessment:

Oral and written examination in the 4 competences: oral and written comprehension + oral and written expression.
Group presentations for the intercultural part.
Attendance and participation will go towards the final grade.

Prerequisite:

Some basic French is recommended but not compulsory.

Literature:

- Grammaire en dialogues (niveau débutant) / Grammaire progressive (niveau débutant) / Communication progressive (niveau débutants)
- Authentic documents
GEOGRAPHIC INFORMATION SYSTEM / REMOTE SENSING

Credits: 2 ECTS (Including the tutored work)

Educational objectives:

- Introduction to the principles of remote sensing and geographic information systems (GIS);
- To provide an overview of remote sensing and GIS applications related to land-cover and land-use;
- To develop the student’s ability to process and analyze digital remote sensing images and GIS layers.

Content of the EU:

- Fundamentals of geographic information systems (GIS)
- Spectral signatures and radiation interactions with earth surface features;
- Spatial, temporal, spectral and radiometric resolutions;
- Basic characteristics of remote sensing systems;
- Classification techniques for multispectral imagery;
- Land-cover / land-use mapping;
- Insight into precision viticulture based on unmanned aerial vehicle (UAV) imagery.

Teaching methods:

Each class will be a lecture followed by lab where you will be using GIS / remote sensing software. It is highly advised you finish all labs during designated lab time as instructor cannot guarantee additional access to computers and software necessary to complete lab activities outside of reserved course [although an attempt will be made to make such arrangements]. Avoid departing until you have fully finished lab activities.

Literature:


Assessment methods:

Grading:

60% Lab
20% Reviews / Discussions and related work
20% Final Project/Exam
STRATEGIC MANAGEMENT

Credits: 2 ECTS

Educational objectives:

Through lecture, class discussions, team consultations, oral and written reports, and examinations, students should demonstrate the following:
1. Introduce students to the nature of agribusiness firms and the role of the agribusiness manager.
2. Introduce students to the principles and practices used in the management of agribusiness industries.
3. Provide students with management tools that may be applied to the types of problems they are likely to encounter in an agribusiness management career.
4. Improve the student's ability to discuss agribusiness management ideas and concepts in both oral and written forms.

Content:

- Management principles relevant to agribusiness firms. In short, what does a manager need to know and do? The course will focus on the following topics:
  - Agricultural productivity
  - The key players of the agri-food system
  - Understanding Customer Needs to Make Money
  - The Agribusiness Manager (3 Es, 4 management functions, 6 steps of decision-making)
  - The Role of Marketing (marketing mission, nine functions of marketers, 5 utilities)
  - The need for competition and its monitoring
  - Marketing Management (the business plan, estimating market potential)
  - Understanding Consumer Demand (demand elasticity, cross-elasticity, income elasticity)
  - Staying Competitive, Strategic Plan
  - Forecasting
  - Budgeting
  - Organizational Structure

Teaching methods:

Lectures, videos, class discussion, homeworks, projects, and tutorials

Literature:

Principles of Agribusiness Management, 4th ed. by Beierlein, Schneeberger, and Osburn.

Assessment methods:

Written examination
AGRICULTURAL POLICIES

Credits: 2 ECTS

Educational objectives:
- Understand the ongoing globalization of the economy
- Highlight the main agricultural policies in the presence of the WTO and the reform process (particularly in France and Europe)
- Measuring the consequences of these policies for rural areas and territories
- Consider strategies for the future of agriculture

Content:
- Consumption or demand
- Production or supply
- The world grain market
- World trade and exporting countries
- World trade and importing countries
- Concept of Stocks
- Analysis of world prices, and price trends
- Concepts of food security
- The CAP. Why and how supporting agriculture
- Evolutions of the CAP in Europe
- Agriculture : from the GATT of 1948 to the WTO today
- Definition of strategies for agriculture and the rural world

Teaching methods:
Lectures

Assessment methods:
Written examination
Credits: 12 ECTS

Educational objectives:
- Knowing the different techniques and systems of animal production.
- Managing the techno-economic diagnosis of farms.

Content:

UNIT 1: INTRODUCTION TO ANIMAL PRODUCTION SCIENCE
- Introduction to animal production science
- Animal breeding and genetics
- Animal husbandry
- Housing & facilities
- Beef cattle management
- Dairy cattle management
- Swine management
- Poultry management
- Current issues
  + Farm visit examples:
    - dairy cow and laying hens
    - Pork: traditional and non-traditional farming systems
    - Meat chickens: traditional and free range systems

UNIT 2: REPRODUCTION
- Reproduction physiology
  - Reproduction of beef cattle
- Reproduction management
  - Reproduction management in pig production
  - Use of hormones
- Group work + presentations
  - One species/group (dairy cows, pigs, chickens, etc)
  - Reproductive physiology of the species
UNIT 3 : ANIMAL NUTRITION

- Digestion and metabolism
  - Digestive system : monogastrics and ruminants
  - Digestion : monogastric and ruminants
  - Nitrogen and energy metabolism in ruminants

- Feedstuffs
  - Concentrates, co-products and minerals : Grass (pasture, silage, hay)

- Monogastric feeding
  - Pork, poultry

- Ruminants feeding
  - Dairy cattle, beef cattle
  - French feeding systems
  - Introduction to software : INRAtion and PrévAlim
  - Practical use of diet formulation software

UNIT 4 : PRODUCT QUALITY

- Dairy products
- Meat products
- Egg products
- Product quality

UNIT 5 : ANIMAL INDUSTRIES

- General introduction
- Bibliography Report
- Dairy cattle, beef cattle, pork, or poultry industry

Teaching methods:
Lectures, Self-learning, Case-study, Field visits.

Assessment methods:
Written tests, oral presentation
TUTORED WORK IN ANIMAL PRODUCTIONS

Credits: 2 ECTS

Educational objectives:
- Being able to analyze the European diversity of the main animal market chains and feed industries and their international evolutions.

Content of the EU:
- Concept and method for the market chains
- Future international market types
- Feed industry markets in Europe
- Dairy products chains in Europe
- Beef meat chains in Europe
- Pork meat chains in Europe
- Poultry meat chains in Europe
- Fish chains in the world

Teaching methods:
Lectures, Visits,

Assessment methods:
Report
WINEMAKING

Credits: 3 ECTS

Educational objectives:
- To appreciate the complex nature of wine;
- To develop knowledge of the chemical, microbiological and technological aspects of red and white winemaking;
- To develop basic knowledge of sensory analysis of grapes and wine and to familiarize with the major wine faults;

Content:
- Chemical composition of grapes during ripening. Parameters used to assess maturity.
- Soluble Solids, Ethanol, pH, Acids in Grapes & Wines
- Basic concepts of chemical analysis of grapes and wine: Equivalents, Normality & Titrations
- Red and white wine processing.
- Post fermentation process: fining agents, wine blending and wine aging
- Wine color and its stability
- Wine aroma and sulfur compounds

Teaching methods:
Lectures, tutored works, visits.

Assessment methods:
Tests, Lab. Reports, Quizzes
RURAL SOCIOLOGY
(Introduction to Rural and Agricultural France)

Credits: 3 ECTS

Educational objectives:

Presenting the evolution, the current characteristics and issues of French agriculture and rural areas from the perspective of the social sciences,

Introducing students to conduct field work (interviews, observations, oral presentation etc.)

Content:

This course combines lectures, labs and field visits and answers the following questions:

- What are the current characteristics of French rural and agricultural areas and how did they evolved during the past decades?
- What are the main characteristics of French agriculture and French farmers?
- Who are the different actors and policies existing in rural and agricultural areas?
- What are the specificities of the French agricultural model? (quality labels, agritourism, etc.)

Students will put into practice this knowledge through a day-field work in a rural region and a presentation of the results of their observations.

Pedagogy – terms and conditions

Lectures, labs, field visits and group work…

Literature:


Evaluation – terms and conditions

Oral presentation and paper.
**FOOD SCIENCES**

**Credits:** 14 ECTS (Including tutored works)

**Educational objectives:**
Learning the mechanisms involved in technological processes of food. Learning food quality and food safety management.

**Content:**

### INTRODUCTION TO FOOD TECHNOLOGY:

**Credits:** 2 ECTS – 01 Week

**Content**
Starting from the biochemical and nutritional composition of some solid (dairy and meat products) and liquid (fruit juice for example) foods, detailed the physico-chemical mechanisms involved in the technological process (Lab. works: Food biochemistry and microbiology)

- Technological function of food compounds: water, proteins, carbohydrates, lipids
- Food degradation: chemical and enzymatic degradation, physical degradation (water migration), microbial degradation,
- Food preserving method: water, temperature, pH, oxygen, chemical conservatives, fermentation, competitive flora

**Teaching methods:** Lectures, Tutored works, projects, lab. works.

**Evaluation:** Written Exam, Oral Project presentation, Lab reports

### MICROBIOLOGICAL QUALITY OF FOOD

**Credits:** 1 ECTS – 0,5 Week

**Content:**
Micro-organisms usually found in food processing

- Pathogenic and spoilage micro-flora
- Microorganisms useful in food technology,

- Basics in microbiology: prokaryotes, eukaryotes, virus, nutrition and growth, association to other living beings
- Food microbiology: microorganisms in food products, fermentation (why fermentation, different types of fermentation, example of fermented food products
- Initiation lab : identification
- Food microbiology lab : study of contaminated food products.

**Teaching methods:** Lectures, Lab work

**Evaluation:** Lab report
### PROCESSES IN FOOD TECHNOLOGY

**Credits:** 6 ECTS - 03 Weeks

**Content:**
Study of different food processes (cheese, yogurt, meat, vegetables, beverage, and bakery).

Small scale process and industrial process, unit operations, equipment.

**Teaching methods:** Tutored projects of food manufacturing. Support: lab. works based on 6 different products.

**Evaluation:** Projects evaluation, Production Lab report, oral exam.

### QUALITY PROCESS

**Credits:** 1 ECTS - 0.5 Week

**Content:**
- Food sector specificities
- Regulations
- Food Manufacturing and hygienic practices
- Food security, HACCP method

HACCP Method. Application to the products developed during the Lab. works.

**Evaluation:** Written Exam, Oral presentation

### INNOVATION

**Credits:** 4 ECTS - 01 Week + tutored work in group during spare time

**Content:**
Food product development: ideas generation, screening, feasibility, marketing test, commercialization and life cycle.

Industrial property - Good practices in Research & Development in food industry

Innovation project.

**Evaluation:** Written Exam, Oral presentation
INTERNATIONAL WINE BUSINESS & COMMUNICATION

Credits: 6 ECTS

Educational objectives:
Introduction to the principles of international wine business management including: global overview, principal tools and key to success.

Content:
First day
- General presentation
- Introduction to WINE BUSINESS STRATEGY
- Domestic vs Exports? A matter of balance.
- Optimizing Business Profits and Minimizing Investments
- Building a realistic Exports plan
- Cases studies

Second day
Morning: GETTING EXPORTS READY: FIRST STEPS
- International Wine business Logistics & Shipping
- Payment options
- Risk management
Afternoon: CULTURAL MANAGEMENT AND COMMUNICATION
- Exports = Doing business with different people, different countries, different cultures, different communication skills
- Cultural analysis: Introduction to Hofstede Tools
- Stereotypes, mistakes, conflict management

Third day
Morning: EXPORTS TEAM MANAGEMENT
- Hiring the right people
- Motivating and managing the exports team
- Salary and incentive strategy
- Managing external agents and abroad based employees
Afternoon: INTERNATIONAL WINE DISTRIBUTION OVERVIEW
- Interesting figures about Global Wine Business
- The USA Wine Market: The most competitive market in the world!
- The Bordeaux Wine Business Model: is it good for everyone?
- The Mutation of the Chinese Wine Market
- The New “Emerging” Markets: Eastern Europe, Central and South America and Africa.
Fourth day
All Day: PRACTICAL CASES AND TRAINING (by groups)
- Preparing, handling and shipping a purchase order for different countries: Air shipping, Sea shipping, dealing with insurance companies and payments issues.
- Proposing a comprehensive Exports strategy to a wine company (grower, wine merchant, cooperative…)
- Creating and managing and exports team: choosing the right candidates, building an effective organizational structure and incentive plan.
- Prospecting and managing an international distribution network: step by step process.
- Managing intercultural relationships and conflicts

Fifth day
Morning: INTRODUCTION TO WINE MARKETING STRATEGY
- Marketing Basics for wine industry
- Marketing Auditing
- Marketing Plan
- Evaluating Marketing Decisions
Afternoon: WINE MARKETING CASES STUDIES
- Yellow Tail and the success of a “Blue Ocean Marketing Strategy”
- Mouton Cadet, Château La Rose Trintaudon, Cellier des Dauphins and other French successful marketing strategies
- The 10 biggest mistakes in wine marketing
- The new “Above the Line” Marketing Tools: Social networking, FB, Twitter etc.
- The Future of Wine Marketing.

Sixth day
Morning: INTRODUCTION TO WINE COMPANY'S BUSINESS PLANNING
- Long Term versus Short Term business strategies
- What is a Financial Audit?
- Understanding the Winery and Vineyard cost structure
- Developing a comprehensive business plan in accordance to the marketing plan
Afternoon: BUSINESS PLAN CASES STUDIES
- Business Plan for an independently owned winery
- Business Plan for a wine merchant
- Business Plan for large winery, part of a financial holding

Seventh day
SEMINAR RECAPITULATION + QUESTIONS/ANSWERS
TEST EVALUATION / EXAM

Assessment methods