Subject name : Image Processing	Code : EC-EII08-AI
Number of hours per student : 32 H	ECTS Number : 2
Reference Teacher(s) : Luce MORIN	

Generalities

Objectives *(2000 characters)*

This lecture aims at presenting main classical (not learning based) image processing principles and tools.

Targeted skills are:
- To know image processing principles and methods
- To translate state-of-the-art algorithms into C or Matlab code

Description *(2000 characters)*

1. Human vision properties and modelling: perception of light, photometry and colorimetry, the visual system, visual phenomena, monochrome vision model, colour vision model.

2. Frequential representation of images : 2D DFT, image spectrum, spatial frequencies.

3. Sampling: Shannon theorem, aliasing in images.

4. Quantization: scalar quantization definition, optimal quantifier (definition and properties), non-linear quantifier, quantifier enhancement criteria, vector quantisation.

5. Binary image processing: discrete topology elements, topological skeleton, mathematical morphology.

6. Image quality enhancement: Enhancement (Contrast manipulation, histogram correction, false-color).

7. Segmentation: basic primitive extraction (pixel, outline, line/shape), sequential segmentation, iterative segmentation.

8. Extraction and tracking of image features, Kalman filter.

Requirements *(2000 characters)*

Signal processing (EC-EII06-TS, EC-EII07-TSAN).

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

Revision of lecture notes.
Labs in groups of 2 students using the ImageINSA pedagogical software.

Number of hours per course type: *(2000 characters)*

CM : 16 H
TD :
TP : 16 H
PR :
CONF :
Autres :

Evaluation *(200 characters)*

Evaluation of labs.
Two-hour written examination

Bibliography

Bibliography *(2000 characters)*

1. KUNT M., GRANLUND R., KOCHER M., "Traitement numérique des images, traitement de l'information", Volume 2, Presses Polytechniques Romandes, 1993.
2. GONZALEZ R. C., WOODS R. E., "Digital image processing", Addison Wesley Publishing Company, 1992.
3. COSTER M., CHERMAN J. L., "Précis d'analyse d'images", Editions du CNRS, 1985.

Contacts

Contacts *(2000 characters)*

Luce MORIN

Other information

Other information

Target audience : 4EII

Subject name : Embedded Artificial Intelligence	Code : EC-EII08-IAE
Number of hours per student : 46 H	ECTS Number : 2
Reference Teacher(s) : Xiaoran JIANG	

Generalities

Objectives *(2000 characters)*

The objective of this course is to acquire theoretical and practical skills on artificial intelligence algorithms as well as their implementation on different architectures.

Description *(2000 characters)*

The course is composed of a theoretical part which reviews the mathematical background used in artificial intelligence algorithms: linear algebra, resolution of linear systems, least squares problem, matrices decomposition into eigen and singular values, classification and regression with SVM and SVR algorithms. The second part of the course is devoted to the study of different machine learning algorithms: introduction to deep learning, convolutional neural networks, autoencoders, recurrent neural networks and generative adversary networks.

Requirements *(2000 characters)*

Python programming, probability, linear algebra

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

The IAE courses are organized in lectures (50%) and practical works (50%); The practical work will allow the implementation of the various algorithms seen in lectures on CPU and GPU platforms.

Number of hours per course type: *(2000 characters)*

CM : 22 H
TD : 2 H
TP : 22 H
PR :
CONF :
Autres :

Evaluation *(200 characters)*

Three assessments are planned as following: two written exams on the two parts of the course, and an evaluation on the reports of the practical works or miniprojets which completes the final mark.

Bibliography

Bibliography *(2000 characters)*

MIT deep neural networks course

Contacts

Contacts *(2000 characters)*

Xiaoran JIANG

Other information

Other information

Target audience : 4EII

Subject name : Innov-R-Conception and implementation	Code : EC-EII08-INVR-CR
Number of hours per student : 80	ECTS Number : 6
Reference Teacher(s) : Lu ZHANG	

Generalities

Objectives *(2000 characters)*

Discovery of the research world and initiation to technology transfers and research valorisation.

Description *(2000 characters)*

The topics varying every year will be given by a teacher-reseracher or a PhD student (supervisor). Every proposed topic needs a reflection, a bibliographical study and a theoretical study of a complex problem.

Requirements *(2000 characters)*

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

Students work within specified time slots and have free access to facilities of the laboratory proposing the topics. Students need to have regular meetings with their supervisors to be followed up.

Number of hours per course type: *(2000 characters)*

CM :
TD :
TP :
PR :
CONF :
Autres :

Evaluation *(200 characters)*

a written report (6/20), an oral presentation (6/20) and evaluation on the conducted work (8/20).

Bibliography

Bibliography *(2000 characters)*

Contacts

Contacts *(2000 characters)*

Lu ZHANG

Other information

Other information

Subject name : Innov-R-FISP CONTRIBUTION	Code : EC-EII08-INVR-FISP
Number of hours per student : 62 H	ECTS Number : 1.5
Reference Teacher(s) : Lu ZHANG	

Generalities

Objectives *(2000 characters)*

Discovery of the research world and initiation to technology transfers and research valorisation.

Description *(2000 characters)*

The topics varying every year will be given by a teacher-reseracher or a PhD student (supervisor). Every proposed topic needs a reflection, a bibliographical study and a theoretical study of a complex problem.

Requirements *(2000 characters)*

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

Students work within specified time slots and have free access to facilities of the laboratory proposing the topics. Students need to have regular meetings with their supervisors to be followed up.

Number of hours per course type: *(2000 characters)*

CM :
TD :
TP :
PR :
CONF :
Autres :

Evaluation *(200 characters)*

a written report (6/20), an oral presentation (6/20) and evaluation on the conducted work (8/20).

Bibliography

Bibliography *(2000 characters)*

Contacts

Contacts *(2000 characters)*

Lu ZHANG

Other information

Other information

Subject name : Multidisciplinary project A	Code : EC-EII08-PROJ
Number of hours per student : 37 H	ECTS Number : 4.5
Reference Teacher(s) : Laurent BEDAT	

Generalities

Objectives *(2000 characters)*

- Focus on design, problem solving, teamwork, and practical experience through the development of a new multidisciplinary application.
- Put into practice skills previously acquired in other modules (project methodology and management, electronic systems, microprocessor systems, programming languages).
- Design and build a complex electronic application comprising an analog part and a digital part using a microcontroller and logic components.
- Write the corresponding technical file.

Description *(2000 characters)*

Based on the specifications provided, each team of four or five students must solve concrete problems like those they will encounter in an industrial environment.
The multidisciplinary project is divided into three phases:

- Phase 1: Preliminary design: Analysis of the specifications. This involves detailing different operating modes, developing a solution per team, and producing the specifications for the work to be carried out. Each team must produce a preliminary design file detailing the diagrams, the solutions selected, and the reasons for their choices.
- Phase 2: System implementation. This involves studying and implementing the analog and/or digital electronics hardware. This phase includes ordering the necessary components and subsystems. Finally, the chosen solutions must be implemented and validated.
- Phase 3: Programming and development, testing, verification.

Requirements *(2000 characters)*

See “Objectives”

Course requirements and assessments

Teaching Language *(2000 characters)*

Discussions in French and documentation in English

Teaching methods *(500 characters)*

Approximately 35h per team of 4/5 students.

Number of hours per course type: *(2000 characters)*

CM : 1 H
TD : 4 H
TP :
PR : 32 H
CONF :
Autres :

Evaluation *(200 characters)*

Evaluation is based on a marking grid that takes into account the following items: methodological specifications, preliminary draft report, and presentation of the hardware solution.

Bibliography

Bibliography *(2000 characters)*

See “Objectives”

Contacts

Contacts *(2000 characters)*

Laurent BEDAT

Other information

Other information

Target audience : 4EII

Subject name : Computer networks	Code : EC-EII08-RES
Number of hours per student : 24 H	ECTS Number : 1.5
Reference Teacher(s) : Laurent BEDAT	

Generalities

Objectives *(2000 characters)*

This module is aimed at students who have chosen not to specialise in networks. Explanation of the evolution of networks of all sizes (LAN/MAN/WAN and Telecom) and demonstration of how current and future infrastructures may be suitable for new applications. Focus on two main points: "quality of service" and "high-speed". Quality of service is defined by a set of parameters (data integrity, real-time, security, hierarchical organisation of data) that are exchanged between the software and the network. High-speed is analysed by making a comparison between classic protocols (Ethernet, Token Ring, RNIS, IP) and emerging protocols (ATM, IPv6). The spread of new network architectures and carefully chosen applied-examples demonstrates suitability.

Description *(2000 characters)*

1. Evolution of networks: Taxonomy of existing networks; PDH, SDH and cell based physical layers; optical and satellite links; Concept of Quality of service.
2. Protocols: Local Area Networks (Ethernet), Mid and High-range networks (IP).
3. Quality of Service: Data integrity, Security, Real Time applications, Current and future applications, Multimedia applications (text, sound, image, vide, etc.); LAN infrastructures, MAN, high-speed WAN.
4. Internet architecture: IPv4, IPv6, UDP, TCP protocols, DNS servers, Web Servers, Proxy servers, Firewalls.

Requirements *(2000 characters)*

None

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

Revision of lecture notes. Preparation of practical work.

Number of hours per course type: *(2000 characters)*

CM : 14 H
TD : 2 H
TP : 4 H
PR : 4 H
CONF :
Autres :

Evaluation *(200 characters)*

Evaluation is based on a marking grid that takes into account the following items: methodological specifications, preliminary draft report, and presentation of the hardware solution.

Bibliography

Bibliography *(2000 characters)*

1. TANENBAUM A., "Réseaux", Dunod 3ème édition, 1999

Contacts

Contacts *(2000 characters)*

Laurent BEDAT

Other information

Other information

Target audience : 4EII

Subject name : Systems on Programmable Circuits	Code : EC-EII08-SCP
Number of hours per student : 38 H	ECTS Number : 2
Reference Teacher(s) : Olivier DEFORGES	

Generalities

Objectives *(2000 characters)*

The integration of systems in programmable logic devices. Presentation of the different existing component families and their respective capabilities. Illustrations of the embedding of digital functions and systems. Presentation of synthetisable VHDL and its main concept.

Targeted competences are:
-> To be able to choose an adapted componant family, and use the corresponding design frameworks,
-> To be able to design a dedicated architecture, and perform optimized implementations.
-> To be able to synthesize a system into a FPGA from a VHDL description.

Description *(2000 characters)*

1. Simple PLD and CPLD.
2. FPGA : main concepts architectures, technonogies, functionnalities, ...
3. Present FPGA : STRATIX and VIRTEX families.
4. Design techniques: current methods and advanced ones based on SOC and IP.
5. Exercises : implementation of basic functions (convolution, FIR, ..) into CPLD and FPGA.
6. VHDL synthesis.
7. Link VHDL to design methodology: MCSE

Practicals are performed as a project.
Example of recent project : integration into an FPGA of a MLP (Muti-layers Perceptron) Neural Networks.

Requirements *(2000 characters)*

Methodology for Project Design and Management (EII07-MCPJ).
VHDL (EII07-VHDL)

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

Active pedagogy, preparing exercises during TD and validating the results in practicals

Number of hours per course type: *(2000 characters)*

CM : 10 H
TD : 8 H
TP : 10 H
PR : 10 H
CONF :
Autres :

Evaluation *(200 characters)*

Note based on the project performances.

Bibliography

Bibliography *(2000 characters)*

1. TAVERNIER, "Circuits logiques programmables", Dunod.
2. BROWN D., FRANCIS R. J., "Field-Programmable Gate-Arrays", Kluwer Academic Publishers.
3. Sites Web constructeurs.

Contacts

Contacts *(2000 characters)*

Olivier DEFORGES

Other information

Other information

Target audience : 4EII

Subject name : Embedded Operating Systems	Code : EC-EII08-SEE
Number of hours per student : 32 H	ECTS Number : 2
Reference Teacher(s): Thibaut MARTY	

Generalities

Objectives *(2000 characters)*

This course mainly aims at making the students comfortable with compiling and porting Linux to an embedded platform. Student compiles and prepares a Linux distribution and runs it on an embedded system based on a STM32MP1 containing ARM Cortex A7.

Targeted competences are:
- To configure, cross-compile and load a Linux kernel on an embedded platform
- To create executables and device drivers for embedded platforms
- To adapt rapidly to a new Linux-based target

Description *(2000 characters)*

1. Cross-compilation
3. Bootloading and board support package
2. Modules and device drivers

Requirements *(2000 characters)*

C Language (EC-ESM05-INFOC), Microprocessor-Based Systems (EC-EII06-SMC), C Language Level 2 (EC-EII05-LANG), Operating Systems (EC-EII06-SE).

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

Courses and practicals.

Number of hours per course type: *(2000 characters)*

CM : 8 H
TD :
TP : 10 H
PR : 14 H
CONF :
Autres :

Evaluation *(200 characters)*

Practical work.

Bibliography

Bibliography *(2000 characters)*

Building Embedded Linux Systems Second Edition, Karim Yaghmour, Jon Masters, Gilad Ben-Yossef, Philippe Gerum, O'Reilly Media, 2008
Linux Device Drivers, 3rd Edition, Corbet Jonathan, Rubini Alessandro, Kroah-Hartman Greg, O'Reilly Media, 2005.

Contacts

Contacts *(2000 characters)*

Thibault MARTY

Other information

Other information

Target audience : 4EII

Subject name : Internship S8	Code : EC-EII08-STAGE
Number of hours per student : 280 H	ECTS Number : 8
Reference Teacher(s) : Jean-Gabriel COUSIN	

Generalities

Objectives *(2000 characters)*

Students in the Electronics and Computer Engineering (EII) department must complete an engineering internship at a host organisation between their fourth and fifth years. This internship must be at least eight weeks long and be covered by an internship agreement.

This internship enables students to:
- Gain practical experience in an industrial environment;
- Consolidate their communication and teamwork skills;
- Improve their ability to observe, adapt, and integrate into a professional context.

The internship is designed to help students:
- Discover a professional sector and how it operates;
- Gather, analyse and summarise information related to an assignment;
- Plan, propose and carry out the tasks required to complete the assignment;
- Learn how to take stock of the host organisation's activities.

Description *(2000 characters)*

- Duration: usually eight weeks
- Period: summer (typically mid-May to mid-September), depending on the university calendar
- Level: end of fourth year (Bac+4)
- The host organisation is a private company or public institution in the electronics or computer engineering sector.
- A member of the EII pedagogical team will act as a EII referent and evaluate the internship. During the internship, the EII referent will be the main point of contact for both the student and the host organisation's internship supervisor.
- For the internship to count towards the student's training, it must be evaluated positively (see "Evaluation" procedure).

Please note that:
- Students are responsible for finding an internship and contacting the host organisation;
- A written internship agreement must be signed by the host organisation, the student and INSA before the internship begins.

Requirements *(2000 characters)*

Course requirements and assessments

Teaching Language *(2000 characters)*

Teaching methods *(500 characters)*

Number of hours per course type: *(2000 characters)*

CM:
TD:
TP:
PR:
CONF:
Others: ~ 280 H

Evaluation *(200 characters)*

Typically:
- The internship supervisor and the EII referent complete an assessment form;
- The EII referent evaluates a written report and a short video.

Bibliography

Bibliography *(2000 characters)*

- Locations: West of France, Paris area, other parts of France and abroad
- Types of host organisation: SMB-SME, large companies, universities and research laboratories
- Fields of activity: electronics, computer science, automation, information processing (signal, image), embedded systems, artificial intelligence, telecommunications, ...

Contacts

Contacts *(2000 characters)*

Jean-Gabriel COUSIN

Other information

Other information

Cliquez ou appuyez ici pour entrer du texte.

Subject name : Real -Time Systems	Code : EC-EII08-STR
Number of hours per student : 28 H	ECTS Number : 2
Reference Teacher(s) : Jean-François NEZAN	

Generalities

Objectives *(2000 characters)*

Presentation of real-time systems specificities, main features of real-time operation systems, programmation of real-time systems, concept of Multi-Task on monocore and multicore processors.
Targeted competences are:
-> To know main features proposed by real-time operating systems
-> To program an application using a real-time operating system
-> To know the organisation of a real-time operating system

Description *(2000 characters)*

1. Introduction to real-time : reactive systems, time constraints, position in the design process, need for a real-time operating system
2. multi-task approach : notion of parallelism, task model, monoprocessor and multiprocessor multi-task execution
3. Real-time operating system : goals and features, programming model, task management, sheduling algorithms
4. Examples of application : deadlocks, message passing ...
5. Most popular real-time operating systems
6. Scheduling analysis

Requirements *(2000 characters)*

Programming in C (EC-EII05-PROGC)
Project and Methodology for Digital Sustainability (EC-EII06-PMND)
Digital Systems Design Methodology (EC-EII07-MCPJ)

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

lectures, preparing exercises during TD and validating the results in practicals

Number of hours per course type: *(2000 characters)*

CM : 10 H
TD : 6 H
TP : 12 H
PR :
CONF :
Autres :

Evaluation *(200 characters)*

Written examination of 3 hours, with documents.

Bibliography

Bibliography *(2000 characters)*

DORSEUIL A., PILLOT P., "Temps réel en milieu industriel : Concepts, environnements, multitâches", Dunod,1991.

Contacts

Contacts *(2000 characters)*

Jean-François NEZAN

Other information

Other information

Target audience : 4EII

Nom de la matière : Allemand	**Code EC: EC-HUMF08-ALL**
Volume horaire total par étudiant: 21heures	**Nombre crédits ECTS :**
	1,5 ECTS
Responsable(s) : Cecile Hölzner-Jacques	

Généralités

Objectives, aims *(2000 caracters)*

Targeted skills:
Mastering a foreign language
Ability to communicate/progress/work in an international and intercultural context
Cultural openness
Communicating/interacting with others, working in a team
Working autonomously
German Level A1: Acquiring the basics of the German language. Be able to understand and hold a simple conversation about everyday life.
German Level A2-B1: Be able to communicate in German, acquire intercultural skills, demonstrate cultural openness. Work in a group on a project, speak up.
German Level B2/C1: Work in a group on a project, speak up, communicate in German, acquire intercultural skills, acquire basic scientific and technical vocabulary. Ask questions, become a responsible engineer, think about the world of tomorrow in an international context.

Description *(2000 caracters)*

Practising written and oral comprehension. Developing oral expression through exercises in small groups and whole-class discussions. Acquire everyday German vocabulary for daily life and professional life.
German Level A2-B1: Grammar revision, consolidate knowledge. Practise reading and listening comprehension using multimedia resources. Develop oral expression skills through small group exercises, presentations or whole class discussions. Prepare students to progress independently in languages. Preparing mobility.
German B2-C1: Practise reading and listening comprehension using multimedia resources. Acquire technical and scientific German vocabulary. Develop oral expression skills through small group exercises, presentations or whole class discussions. Use and improve German language skills in the context of a project. Preparing mobility.

Pré-requis *(2000 caractères)*

German Level A1: none

German Level A2-B1: mastery of the basics of German (A2), second foreign language at secondary school (B1)

German B2-C1: good language skills, first foreign language or bilingual class at secondary school, ABIBAC

Modalités du cours et des évaluations

Langue d'enseignement *(2000 caractères)*

Cliquez ou appuyez ici pour entrer du texte.

Modalités d'enseignement *(500 caractères)*

1.5–2 hours of classes per week.
IAutonomous study time: 14-16 hours Total: 35 hours. Students are encouraged to read German newspapers regularly and watch videos, series and films, in addition to the work assigned between sessions.

Volume horaire par type de cours : *(2000 caractères)*

CM :
TD : 19 hours for the first cycle, 21 hours for the second cycle.
TP :
PR :
CONF :
Autres :
Autonomous study time: 14-16 hours
7 hours of optional project work in the second cycle

Modalités d'évaluation / coefficient *(200 caractères)*

Continuous assessment, oral examination

Bibliographie

Bibliographie *(2000 caractères)*

MOODLE course page
Deutsch für Ingenieure, Maria Steinmetz/Heiner Dintera, VDI/Springer Vieweg, 2014
Deutsch Perfekt, periodical
online: Deutsche Welle, ARD, Der Spiegel, FAZ, die Zeit, das Handelsblatt, VDI (Verein Deutscher Ingenieure), Nachrichten, ZDF Logo
French-German dictionary le visuel, Editions de la Martinière
Übungsgrammatik für die Mittelstufe Hueber-Verlag
Na also! Waltraud Legros, Ellipses
multimedia resources

Contacts

Contacts *(2000 caractères)*

Cecile Hölzner-Jacques : cecile.holzner-jacques@insa-rennes.fr

Autres

Autres informations

Cliquez ou appuyez ici pour entrer du texte.

ENGLISH	Code EC: EC-HUM08-ANGL
Total number of hours per student : 28h	ECTS : 2
Supervisor : Philippe LE VOT	

General information

Objectives and Purposes
General Objectives:
Acquisition of the linguistic tools necessary for work in a company. Achieving the required level (B2) for the awarding of the diploma.

Linguistic Objectives:
Achieve or strengthen the B2 level (required for the validation of the engineering degree and defined by the CEFR).

Cliquez ou appuyez ici pour entrer du texte.

Description

- **Action-oriented approach to language learning:** Learn by doing: speaking and listening, writing a document while leveraging problem-solving, construction, demonstration, and persuasion skills.
- **Expressing oneself with precision** through rigorous use of syntax and phonology. Activities that call on the creativity and responsiveness of students, such as debates, role-playing, individual oral presentations using PowerPoint or Canva, and projects, will focus on current, scientific, and societal topics.
- Writing letters and CVs.
- Syntax structures specific to scientific English.
- Exploring the professional world in an international context.
- Preparation for the TOEIC (2nd semester: specific course "TOEIC Booster").

Prerequisites:
English courses from the 1st, 2nd, and 3rd years or equivalent.

Course and Evaluation Modalities

Language of Instruction
English

Teaching Methods
The classes are two hours long and are held in rooms that are mostly equipped with projectors and sound systems. We have a multimedia language lab as well as computer rooms to provide students with a setting conducive to stimulating learning.

The educational resources used include press articles, audio and video materials (TV reports, excerpts from films or series), and the Internet is used as a documentary source.

Regular personal work is required. Students are expected to be curious and to continue practicing beyond the classroom

Hours by Course Type

- **Lectures (CM):**
- **Tutorials (TD):** 28 hours (14 sessions of 2 hours each)
- **Practical Work (TP):**
- **Research Projects (PR):**
- **Conferences (CONF):**
- **Others:**

Evaluation Methods / Coefficient

1 in-class presentation (see departments) + 1 continuous assessment grade (average of different graded assignments)

Bibliography

Bibliography

Any English-language materials, whether technical or otherwise.

Contacts

Contacts

plevot@insa-rennes.fr

Subject name: CHINESE LV2-LV3	**Code EC: EC-HUMF08-CHI**
Number of hours per student: 21 hours	**ECTS Number: 1,5**
Reference Teacher: Cécile Hölzner-Jacques	

Generalities

Objectives *(2000 characters)*

Targeted skills:

- Mastering a foreign language
- Ability to communicate/develop/work in an international and intercultural context
- Cultural openness
- Communicating/interacting with others, working in a team
- Working independently
- Acquiring the basics of the Chinese language, essential structures and vocabulary
- Comprehension, expression, pronunciation
- Using the language in everyday contexts.

Description *(2000 characters)*

Oral skills:
Corrective phonetics (pinyin system),
Listening to and analysing simple texts and complex sentences,
Oral exercises (learners with each other / learners with teacher)
Learning new characters (pronunciation and tone accentuation).

Written skills:
Theme/version
Written production of simple texts and complex sentences,
Learning and reinforcement of grammatical mechanisms and vocabulary for oral and written production,
Learning new characters (stroke order, keys),
Reading and analysis of texts, commentary on texts.

Requirements *(2000 characters)*

Chinese 1: None
Chinese 2: Completion of Chinese 1
Chinese 3: Completion of Chinese 2

Course requirements and assessments

Teaching Language *(2000 characters)*

Teaching methods *(500 characters)*

Reading lesson texts (in characters), rewriting new characters, exercises applying grammar points, lexical and morphological points, theme and version exercises...

Number of hours per course type: *(2000 characters)*

CM:
TD: 1h30
TP:
PR:
CONF:
Autres:

Evaluation *(200 characters)*

S1: Final mark
S2: Oral examination

Bibliography

Bibliography *(2000 characters)*

1. Chinese as spoken in China, Bernard Allanic, Presses Universitaires de Rennes, 2009
2. Contemporary Chinese, WU Zhongwei, Sinolingua, 2010
3. Experiencing Chinese, ZHANG Rumei, AI Xin, Higher Education Press, 2006
Chinese Language Method (Second Level), Zhitang Yang-Drocourt - Liu Hong – Fan Jianmin
Short Stories for Learning Mandarin Chinese, Zhang Xiaoli, 2025
Standard Course HSK Workbook, Jiang Liping
Other tools will complement these basic textbooks to provide students with a wide range of practical exercises.

Contacts

Contacts *(2000 characters)*

Other information

Other information

Learning Chinese isn't just about tones and characters. It's about connection — to a culture, to people, and to the stories that make language come alive.

Subject name: PHYSICAL EDUCATION (EPS) SEMESTER 8	**Code EC: EC-HUM08-EPS**
Number of hours per student: 20H	**ECTS Number: 1**
Reference Teacher: Gérard VAILLANT Yvan HINAULT Maïté LOSCHETTER	

Generalities

Objectives *(2000 characters)*

Aims
The program aims to contribute, through the practice of Physical, Sports, and Artistic Activities, to the education and development of future citizens. It seeks to foster individuals who are capable of managing their present and future health, communicating effectively, participating actively in group dynamics, demonstrating innovation, and showing adaptability in various contexts.
Learning Objectives
Upon completion, learners should be able to:

1. Manage their own learning and training processes in a structured and reflective manner.
2. Engage in and take responsibility for the organization and management of a group, a structure, or a collective project.
3. Take charge of their physical, mental, and social health as an ongoing process of well-being and self-regulation.

Description *(2000 characters)*

This course aims to develop students' motor, personal, social, and methodological competencies through the practice of physical, sports, and artistic activities. It fosters autonomy, adaptability, creativity, and responsibility in both individual and collective contexts.
Motor and Cultural Competencies: Master the technical and tactical fundamentals of the chosen activity. Adapt to varying play conditions, environments, and performance spaces. Develop specific physical qualities (endurance, flexibility, strength, speed) and psychological resources (focus, perseverance, stress management, confidence).
Personal Competencies: Take responsibility for one's long-term health and safety. Manage emotions and stress with self-control. Demonstrate innovation and creativity in practice. *Semester 8 focus : Participate in a creative process and generate innovative solutions. Understand one's motor preferences and identify the motivations driving one's practice to ensure long-term engagement throughout life;* Recognize one's strengths and weaknesses in order to use them most effectively.
Interpersonal and Social Competencies: Work effectively in teams—listen, communicate, motivate, and lead. Adopt an eco-citizen approach by respecting others, oneself, the environment, and equipment. *Semester 8 focus:* Demonstrate the appropriate behaviors to maintain group safety. Handle conflicts in a way that leads to constructive and mutually beneficial outcomes.
Methodological Competencies: Manage complex projects by setting objectives, planning, and evaluating outcomes. Make informed decisions through observation, reflection, and feedback. *Semester 8 focus:* Commit to a learning project (evaluate one's initial level, identify areas for progression, gather information, and self-assess). Plan practice to achieve realistic goals; Manage and oversee the progress of a collective project.

Requirements *(2000 characters)*

Cliquez ou appuyez ici pour entrer du texte.

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

Through original and varied situations, this course engages all of the student's resources — motor, cognitive, relational, emotional, and informational.
Through action and experience, students are confronted with complex problem-solving and decision-making processes.
This practice encourages students to take autonomous responsibility for their own health, understood as a state of well-being requiring continuous regulation. It also contributes to preventing risky behaviors, reducing sedentary lifestyles, and promoting social integration.
Enjoyment serves as a key source of motivation, ensuring sustained engagement in both practice and learning

Number of hours per course type: *(2000 characters)*

CM:
TD: 20
TP:
PR:
CONF:
Autres:

Evaluation *(200 characters)*

Assessment
Students are evaluated on their participation, progress, and mastery of the competencies developed throughout the cycle.
Grading:

- 10 points for motor and cultural competencies.
- 5 + 5 points for two additional competencies selected by the instructor from personal, interpersonal and social, or methodological competencies.

Bibliography

Bibliography *(2000 characters)*

Cliquez ou appuyez ici pour entrer du texte.

Contacts

Contacts *(2000 characters)*

Cliquez ou appuyez ici pour entrer du texte.

Other information

Other information

Cliquez ou appuyez ici pour entrer du texte.

Nom de la matière : Spanish	**Code EC: EC-HUMF08-ESP**
Volume horaire total par étudiant: 21h	**Nombre crédits ECTS :** 1,5 ECTS
Responsible(s) : Marine Amargos Guilleray	

Généralités

Objectifs, finalités *(2000 caractères)*

1 – Beginner Level:
Establish the grammatical and linguistic foundations of the Spanish language. Introduce students to Spanish and Latin American cultures. Be able to produce simple sentences related to everyday topics.

2 – Intermediate Level:
Maintain and strengthen linguistic skills, and deepen cultural knowledge (Hispanic culture, Spanish and Latin American civilization, social issues).

- Know how to manage a team around a project.
- Be able to integrate into a multicultural environment.

Be capable of taking into account the social, environmental, technological, and economic

3 – Advanced Level:
Consolidation of linguistic skills and deepening of cultural knowledge (Hispanic culture, Spanish and Latin American civilization, social issues).

- Know how to manage a team around a project.
- Be able to integrate into a multicultural environment.
- Be capable of taking into account the social, environmental, technological, and economic challenges of Spanish-speaking countries.

- challenges of Spanish-speaking countries.

Description

Speaking and writing skills, listening and reading comprehension.

Pré-requis *(2000 caractères)*

Spanish A1: None
Spanish A2: Must have A1 level
Intermediate Spanish: Must have B1 level
Advanced Spanish: Must have B2 level

Modalités du cours et des évaluations

Langue d'enseignement *(2000 caractères)*

Spanish

Modalités d'enseignement *(500 caractères)*

Face-to-face tutorials

Volume horaire par type de cours : *(2000 caractères)*

CM :
TD : 21 hours /semester
TP :
PR :
CONF :
Autres :

Modalités d'évaluation / coefficient *(200 caractères)*

Continuous assessment- Coefficient 1,5

Bibliographie

Bibliographie *(2000 caractères)*

"La grammaire active de l'espagnol", le livre de poche. Collection Les langues modernes + "El arte de conjugar en español" -Hatier+ "Passez-moi l'expression en espagnol", Belin + "El español en la prensa", Belin

Contacts

Contacts *(2000 caractères)*

Marine Amargos Guilleray : marine.amargos@insa-rennes.fr

Autres

Autres informations

Cliquez ou appuyez ici pour entrer du texte.

Subject name: French foreign language	**Code EC: EC-HUMF08-FLE**
Number of hours per student: 21 hours (or 2 x 21 hours for the Exchange programme)	**ECTS Number: 1,5**
	3 credits for the Exchange
Reference Teacher: FOURE Dominique	

Generalities

Objectives *(2000 characters)*

The various activities in the FLE and FOS (French for Specific Purposes) programme aim to develop optimal language proficiency and the use of language as a cultural and intercultural vehicle, a tool for work and communication adapted to the context. Students will develop their autonomy through group work and individual work.
Targeted skills/humanities (SHS): ▪ Knowing oneself, managing oneself physically and mentally▪ Working, learning and developing independently▪ Interacting with others, working in a team▪ Demonstrating creativity, innovation and initiative▪ Acting responsibly in a complex world▪ Developing in a professional and social environment▪ Working in an international and intercultural
context

Description *(2000 characters)*

Level A1/A2
1- Language, culture and communication: Help learners feel comfortable in all everyday situations. Language learning is organised around observing how the language works, practising a variety of activities in class and carrying out projects in real or simulated contexts to promote autonomy.

2- Scientific and academic French: Facilitate integration into scientific studies, student life and social life.

Level B1/B2
1- Language, culture and communication: Help learners express themselves fluently in writing and orally on a wide range of general and specialised topics.
Key themes: Studying and living in France/ Understanding and exercising critical thinking in various fields: current affairs/history/art/science and technology, urban planning, the environment, etc.
Social sciences and humanities: socio-ecological transition, business and innovation.

2- Preparation for DELFB2 or DALFC1, compulsory French language diploma required to obtain an engineering degree**.**

Level B2/C1
1- Interculturality - Study of European and international current affairs and in-depth exploration of issues related to SHS
- Communicate and interact
- Decode intercultural references in speech, attitudes and behaviour
- Put one's values, beliefs and behaviour into perspective
- Integrate cultural diversity into group work

2- Professional French
- Prepare effectively for finding an internship or job
- Understand complex issues within the company
- Master societal, political, economic, environmental, ethical and philosophical aspects, etc.
- Act responsibly in the professional world

Requirements *(2000 characters)*

None
Courses range from beginner to advanced levels.
Each student will be placed in a group corresponding to their level and needs
- based on a test at the beginning of the year for new entrants
- based on the level acquired and assessed the previous year for existing students

Course requirements and assessments

Teaching Language *(2000 characters)*

Learners are trained and assessed on the five skills recognised by the Common European Framework of Reference for Languages (CEFR).

Teaching methods *(500 characters)*

Language, communication and intercultural skills are tailored to the target level and the needs of the group (indicated in the group code).

Number of hours per course type: *(2000 characters)*

CM:
TD:
TP:
PR:
CONF:
Autres:

Evaluation *(200 characters)*

Continuous assessment in line with the skills to be validated: CE, CO, PE, PO
INSA student programme: 21 hours/semester (1.5 credits)
Exchange programme: Students studying for a semester at INSA Rennes have the opportunity to obtain a total of 4 credits
- 1 Language Project (7 hours/semester) = 1 ECTS
- 2 FLE courses (2X21 hours/semester) e.g. Language, Culture and Communication + Interculturality

Bibliography

Bibliography *(2000 characters)*

Materials selected by the teacher based on the level and objectives to be achieved

Contacts

Contacts *(2000 characters)*

Dominique.foure@insa-rennes.fr

Other information

Other information

https://fle.insa-rennes.fr/

Subject name: ITALIAN LV2-LV3	Code EC: EC-HUMF08-ITA
Number of hours per student: 21h	ECTS Number: 1,5
Reference Teacher: Cécile HÖLZNER-JACQUES	

Generalities

Objectives *(2000 characters)*

Targeted skills:
Mastering a foreign language
Ability to communicate/develop/work in an international and intercultural context
Cultural openness
Communicating/interacting with others, working in a team
Working independently

Level 1 beginner: Introducing Italian language and culture, expressing ideas in writing and orally.
Level 2 advanced beginner: By the end of the course, students should be able to converse and write in Italian.
Level 3 intermediate: Give students the opportunity to explore topics related to art, civilisation, literature and cinema in greater depth.

Description *(2000 characters)*

Oral expression and comprehension: reading the course material with phonetic and grammatical corrections with the teacher, reading the situations found in the text, watching films and reading literary texts and press articles.
Written expression and comprehension: doing the exercises in the text with particular attention to difficulties, summarising the situations without the text available and the films studied.

Requirements *(2000 characters)*

Beginner level: none.
Advanced beginner level A2: must have attended the beginner Italian course.
Intermediate level B1/advanced level B2: must have a good knowledge of the Italian language.

Course requirements and assessments

Teaching Language *(2000 characters)*

Italian language

Teaching methods *(500 characters)*

The course will cover:.
Grammar concepts;.
Exercises to understand basic linguistic mechanisms;.
Building vocabulary using keywords and translations;.
Presentations and discussions on given topics;.
Asking questions and knowing how to respond;.
Creating dialogues, stories, and discussions based on given keywords;
(All of this will be adapted to the average level of the course.)

1.5 hours of face-to-face lessons per week, 21 hours per semester.
Personal work: 14 hours Read the texts provided in the handouts; 7 hours create a dialogue or short story using the keywords provided and express yourself with them.

Number of hours per course type: *(2000 characters)*

CM:
TD: 21h
TP:
PR:
CONF:
Autres:

Evaluation *(200 characters)*

S1: Final mark
S2: Oral examination

Bibliography

Bibliography *(2000 characters)*

Loesher Archivio di Grammatica, https://italianoperstranieri.loescher.it/archivio-di-grammatica

Harraps, Italian Express Method, Vittoria Bowles and Paul Coggle

Texts taken from Italian novels, poems, essays, daily and weekly newspapers, and films by famous directors

Contacts

Contacts *(2000 characters)*

Paolo Procesi: Paolo.Procesi@insa-rennes.fr

Other information

Other information

Subject name: Japanese	**Code EC: EC-HUMF08-JAP**
Number of hours per student:	**ECTS Number: 1.5**
Reference Teacher: Cécile Hölzner-Jacques	

Generalities

Objectives *(2000 characters)*

Targeted skills:

Mastering a foreign language
Ability to communicate/develop/work in an international and intercultural context
Cultural openness
Communicating/interacting with others, working in a team
Working independently

Beginner level (A1):

-Awareness of specific features (phonetics, syntax)
-Discovering Japanese culture, traditions and customs
-Learning two writing systems (Hiragana and Katakana)
-Mastering spoken Japanese in everyday situations.

Intermediate level (A2):

- Introduction to ideograms (30-60 kanji)
- Reading simple texts (using manga, etc.)
- Writing simple texts
- Mastering spoken Japanese in everyday situations.

Advanced level (B1, B2):

- Learning kanji (60-200)
- Acquiring four skills (reading, listening, writing and speaking) for travelling and studying in Japan.

Description *(2000 characters)*

Description (2000 characters)
Level 1 beginner (A1):
- Improvement of Hiragana and Katakana
- Mastery of Japanese in everyday situations (Marugoto A1).
Lesson 3: Me_ Nice to meet you
Lesson 4: Me_ There are three of us in my family
Lesson 5: Food_ What kind of food do you like?
Lesson 6: Food_ Where shall we eat?
Lesson 7: The house_ It's a three-room flat
Lesson 8: The house_ What a beautiful room you have!

Lesson 9: Everyday life_ What time do you get up?
Lesson 10: Everyday life_ When are you available?
Level 2 Intermediate (A2):
- Continuation of the Marugoto textbook (Lessons 11 to 18)
- Learning new basic grammar points (past tense, potential tense, volitional tense, etc.)
- Improving and discovering new particles (で、に、から/まで, etc.)
- Discovering and learning 30-60 kanji
- Reading and writing simple texts
- Learning to communicate in everyday situations.

Intermediate level (B1, B2):

- Reading manga
- Acquiring four skills (reading and listening comprehension, writing and speaking).

Requirements *(2000 characters)*

Beginner level A1: none.
Beginner level A2: completion of beginner level A1.
Intermediate/advanced level: completion of beginner levels A1/A2.

Course requirements and assessments

Teaching Language *(2000 characters)*

Teaching methods *(500 characters)*

Teaching takes the form of tutorials. Each session consists of an explanation of concepts, which are then illustrated with examples and conversation exercises in which the students participate.

Number of hours per course type: *(2000 characters)*

CM:
TD:21h
TP:
PR:
CONF:
Autres:

Evaluation *(200 characters)*

A1
S1 and S2: Final mark

A2 and B1
S1: Final mark
S2: Oral examination

Bibliography

Bibliography *(2000 characters)*

Level 1 beginner (A1): Margoto A1, Japan Foundation, 2013, Japan.

Level 2 beginner (A2): Margoto A2, Japan Foundation, 2014, Japan.

Contacts

Contacts *(2000 characters)*

Other information

Other information

Nom de la matière : Language Project	Code EC: EC-HUMF08-LV2P
Volume horaire total par étudiant: 7 hours /semestre	Tous semestres
	Nombre crédits ECTS : 0,5
Responsable(s) : C.Hölzner, M.Amargos, D.Fouré	

Généralités

Objectifs, finalités (2000 caractères)

German Project: Mastering a foreign language Ability to communicate/develop/work in an international and intercultural context Cultural openness Communicating/interacting with others, working in a team Working independently Using and improving German language skills within the framework of a project.
Spanish Project: 1- Prepare for the Spanish language certification: the DELE Spanish Project
2- Facilitate oral expression and build students' confidence before studying abroad in a Spanish-speaking country - Acquire fluency and enjoy expressing oneself in Spanish without being constrained by grammar rules.
French as a Foreign Language (FLE) Project: 'International Student Short Film Festival' in conjunction with the Interculturality course. An educational outing (or field study) is proposed to study an issue in social sciences and/or TSE that interests them. The aim is to produce an audiovisual report that may consist of interviews, particularly with experts and professionals, to address the issue on the programme. These meetings will enable them to exchange views and refine their analysis. Finally, students will be asked to present their findings to the public. The reports will be screened at an International Festival on an intercultural theme studied in class.

Description (2000 caractères)

German Project:
- Preparation for the Goethe Institute's 'Zertifikat' exam, level B2 or C1 (external certification)
- Thematic courses: cultural awareness
- Project related to the industrial world: international economics: Germany
- Preparation for mobility
- Preparation: study trip

Spanish Project:
Spanish Project 1
- Written and oral tests
- Written and oral work in preparation for the exam
Spanish Project 2
- Oral expression: debates on current affairs and discussions on the main concerns of students

FLE Project:
- Oral expression, confidence in front of an audience
- Creation of an audiovisual report
- Preparation for oral expression to obtain the DELFB2/DALFC1

Pré-requis *(2000 caractères)*

German Project: German Level B2

Spanish Project: Baccalaureate Level

FLE Project: Levels B1 to C1

Modalités du cours et des évaluations

Langue d'enseignement *(2000 caractères)*

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Modalités d'enseignement *(500 caractères)*

German Project: 7 hours/semester in class 10 hours of independent and group work Class hours are intended to review students' independent work and project progress. Most of the work is done outside of class, preferably in groups of 2 or 3 students (exception: 'Zertifikat' project with methodological assistance during class).
Spanish Project: Regular training with DELE workbook

Volume horaire par type de cours : *(2000 caractères)*

German Project: 7 hours of tutorials per semester
Spanish Project: 7 hours of tutorials per semester
FLE Project: 7 hours of tutorials per semester

Modalités d'évaluation :

German Project: Semester 1: Final Mark - Semester 2: Final Mark

Spanish Project: Written

FLE Project: Oral/Public presentation as part of an international short film festival

Coefficient: 0.5 (1 for Erasmus exchange students)

Bibliographie

Bibliographie *(2000 caractères)*

German Project: Zertifikat Project: Goethe-Institut exam papers (B2 and C1) in the INSA library
Spanish Project: Books related to the DELE

Contacts

Contacts *(2000 caractères)*

Cliquez ou appuyez ici pour entrer du texte.

Autres

Autres informations

Cliquez ou appuyez ici pour entrer du texte.

Subject name: Intercultural Modul	**Code EC: EC-HUMF08-LV2-OI**
Number of hours per student: 21h par semestre	**ECTS Number: 1.5**
Reference Teacher: Cécile Hölzner-Jacques	

Generalities

Objectives *(2000 characters)*

The course aims to develop students' fluency in both written and spoken communication while fostering philosophical reflection. It not only enhances reading, listening, and expressive skills but also cultivates critical thinking and confident public speaking. Particular emphasis is placed on rigorous reasoning, clear argumentation, and the ability to connect philosophical inquiry with linguistic precision.

Description *(2000 characters)*

Each semester is devoted to a specific philosophical concept. For the first semester of 2025, the theme is *violence*.
The course is divided into two distinct parts. The first part focuses on language development. Each session begins with a warm-up activity designed to encourage oral participation and group interaction. Students engage in creative writing exercises — such as recounting a memory or imagining a story — to stimulate imagination and improve expressive skills. Regular reading of newspaper articles helps strengthen reading comprehension, pronunciation, and vocabulary.
The second part of the course is dedicated to project work, which constitutes the final graded assignment. Through these projects, students synthesize language practice and philosophical reflection, applying both to a concrete and personally meaningful topic.

Requirements *(2000 characters)*

Students should be able to express themselves in English with a reasonable degree of confidence. Mistakes in grammar or pronunciation are not a problem, but a solid foundation in vocabulary and basic grammar is necessary to follow the course. The class usually includes both bilingual students and others with more limited proficiency, so the activities are designed to allow everyone to participate meaningfully and progress at their own pace.

Course requirements and assessments

Teaching Language *(2000 characters)*

The course is conducted primarily in English, although French may occasionally be used for clarification or discussion when necessary.

Teaching methods *(500 characters)*

This is not a traditional lecture-based course but an interactive class built around students 'interests. It is designed as a space for expression and reflection. Written and video materials are regularly used, and students are encouraged to take an active role through role-playing activities and short theatrical performances.

Number of hours per course type: *(2000 characters)*

CM:
TD: 20 h par semestre
TP:
PR:
CONF:
Autres:

Evaluation *(200 characters)*

Assessment is based on attendance and participation, but mainly on a creative end-of-term project demonstrating linguistic skills and critical thinking, completed individually or in groups

Bibliography

Bibliography *(2000 characters)*

Books

Camus, Albert. *The Stranger*. Translated by Stuart Gilbert. New York: Vintage Books, 1942.
Dostoevsky, Fyodor. *Crime and Punishment*. Translated by Constance Garnett. New York: Modern Library, 1866.
Flock, Elizabeth. *The Furies: Women, Vengeance, and Justice*. New York: Harper, 2024.
Malm, Andreas. *How to Blow Up a Pipeline: Learning to Fight in a World on Fire*. London: Verso Books, 2021.
Manne, Kate. *Down Girl: The Logic of Misogyny*. Oxford: Oxford University Press, 2017.
Motz, Anna. *If Love Could Kill: The Myths and Truths of the Women Who Commit Violence*. New York: Knopf, 2024.
Thoreau, Henry David. *Civil Disobedience*. Boston: David R. Godine, 1849.
Zinn, Howard. *A People's History of the United States*. New York: Harper & Row, 1980.

Articles and Essays

King, Martin Luther, Jr. "Letter from Birmingham Jail." April 16, 1963.
Schwartz, Alexandra. "When Women Commit Violence." *The New Yorker*, 2024.
Zinn, Howard. "The Problem is Civil Obedience." Speech delivered at Johns Hopkins University, Baltimore, November 1970.

Films and Television

Bong Joon-ho, dir. *Parasite*. Seoul: Barunson E&A, 2019.
Coen, Joel, and Ethan Coen, dirs. *Fargo*. Los Angeles: PolyGram Filmed Entertainment, 1996.
Coen, Joel, and Ethan Coen, dirs. *No Country for Old Men*. Los Angeles: Miramax Films, 2007.
Demme, Jonathan, dir. *The Silence of the Lambs*. Los Angeles: Orion Pictures, 1991.
Fincher, David, dir. *Gone Girl*. Los Angeles: 20th Century Fox, 2014.
Fincher, David, dir. *The Girl with the Dragon Tattoo*. Culver City: Columbia Pictures, 2011.
Fincher, David, dir. *Zodiac*. Los Angeles: Paramount Pictures, 2007.
Gilligan, Vince, creator. *Breaking Bad*. Los Angeles: AMC, 2008–2013.
Kelly, Richard, dir. *Donnie Darko*. Los Angeles: Newmarket Films, 2001.
Lanthimos, Yorgos, dir. *The Killing of a Sacred Deer*. London: A24, 2017.
Lynch, David, and Mark Frost, creators. *Twin Peaks*. Los Angeles: CBS Television Distribution, 1990–1991, 2017.
Martin, Steve, and John Hoffman, creators. *Only Murders in the Building*. Los Angeles: Hulu, 2021–.
Miller, George, dir. *Furiosa: A Mad Max Saga*. Burbank: Warner Bros., 2024.
Miller, George, dir. *Mad Max: Fury Road*. Burbank: Warner Bros., 2015.
Penhall, Joe, creator. *Mindhunter*. Los Gatos: Netflix, 2017–2019.
Pizzolatto, Nic, creator. *True Detective*. Los Angeles: HBO, 2014.
Tarantino, Quentin, dir. *Kill Bill: Vol. 1* and *Kill Bill: Vol. 2*. Los Angeles: Miramax Films, 2003–2004.
Wan, James, dir. *Saw*. Santa Monica: Lions Gate Films, 2004

Contacts

Contacts *(2000 characters)*

Other information

Other information

Subject name: Russian	**Code EC: EC-HUMF08-RUS**
Number of hours per student: 21h	**ECTS Number: 1,5**
Reference Teacher: Cécile HÖLZNER-JACQUES	

Generalities

Objectives *(2000 characters)*

Russian beginner : acquire A1 level
Russian intermediary : acquire A2/B1 level

Description *(2000 characters)*

Acquisition of grammatical basis and commonplace vocabulary.
Training of the 5 skills, oral and written comprehension, oral and written expression, interaction.
The stress is put on written and oral communication, firstly in the frame of daily situations, then with a progressive introduction of other themes and opening on the professional communication.
Training with varied media (written, audio, video)
Individual exercices and works in groups, talks from the intermediate level on.
Grammar program depending on the level.
(Inter) cultural opening

Requirements *(2000 characters)*

Course requirements and assessments

Teaching Language *(2000 characters)*

Teaching methods *(500 characters)*

Number of hours per course type: *(2000 characters)*

CM:
TD: one hour -and-a-half courses per week in SUPELEc
TP:
PR:
CONF:
Autres:

Evaluation *(200 characters)*

Final grade (overseen by SUPELEC).

Bibliography

Bibliography *(2000 characters)*

To be seen with the teacher

Contacts

Contacts *(2000 characters)*

Other information

Other information

Subject name: Economic, legal and social issues	Code EC: EC-HUM08-TEJS
Number of hours per student: 10	ECTS Number: 1
Reference Teacher: Adeline Le Mabec	

Generalities

Objectives *(2000 characters)*

The module's main objective is to raise students' awareness of economic, legal, and social issues. Key learning outcomes include: developing analytical skills for understanding current economic, legal, and social topics; grasping the underlying logic and mechanisms; and cultivating curiosity and critical thinking skills.

Description *(2000 characters)*

The topics covered may vary depending on the speakers and current events.

Some examples include: the financial and monetary system, discrimination and inequality, quality of work life (QWL) – leadership and responsible management, legal status of businesses and public subsidies, media and information, wealth and common goods...

Requirements *(2000 characters)*

none

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

Lectures/Conferences/Tutorials or mini-projects. References to current issues using a variety of media (press articles, videos, MOOCs, serious games, world café, etc.). Particular attention will be paid to the use of active learning methods.

Number of hours per course type: *(2000 characters)*

CM:
TD: 10
TP:
PR:
CONF:
Autres:

Evaluation *(200 characters)*

Continuous assessmen

Bibliography

Bibliography *(2000 characters)*

Presentation materials and bibliographic references will be made available by the speakers on the Moodle platform.

Contacts

Contacts *(2000 characters)*

Adeline Le Mabec : adeline.le-mabec@insa-rennes.fr

Other information

Other information

Cliquez ou appuyez ici pour entrer du texte.