Subject name: Mechanical system analysis and representation	Code EC: GMA05-ARSM
Number of hours per student: 28h	ECTS Number: 2.5
Reference Teacher: Dominique GUINES	

Generalities

Objectives *(2000 characters)*

- Represent a product,
- Analyze and model simple mechanical systems,
- Introduce mechanical components and basic technological functions, enabling the acquisition of a technological culture necessary for mechanical design,
- Dimension constructive solutions for complete and pivot joints,
- Present the mechanisms for creating and modifying associative volumes to design mechanical parts in CAD.

Description *(2000 characters)*

1. Product representation and dimensional specifications.
2. Theory of mechanisms (elementary links, kinematic diagram, associations of elementary joints: equivalent joint, hyperstatism).
3. Complete joints (screw-nut connections, pins, keys, splines, conical assemblies, shrink-fitting, riveting, etc.).
4. Partial joints (constructive solutions for: pivot joints, sliding joints, ball-and-socket joints).
5. Gears: general study.
   - spur, helical, bevel, worm and wheel gears,
   - epicyclic gear trains.
6. Elastic connections.
7. Lubrication, greasing.
   - notions of tribology: lubrication regimes,
   - lubricants,
   - lubrication devices.
8. Sealing.
   - principles of sealing: direct contact, indirect contact, controlled leak rate, deformable elements,
   - sealing systems technology.
9. Getting started with 3D modeling CAD software (SolidWorks)
   - Creation methods for volume modeling,
   - Part assembly and mechanism simulation,
   - 2D drawing.

Requirements *(2000 characters)*

Statics and kinematics of rigid bodies : STP03-MECA
Industrial technology : STP01-SIND

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

TD teaching (2-hour sessions)

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

CM:
TD: 28
TP:
PR:
CONF: 2
Autres:

Evaluation *(200 characters)*

- One 2-hour long written examination
- One 1-hour long course evaluation

Bibliography

Bibliography *(2000 characters)*

- Construction mécanique, AUBLIN, CAHUZAC, FERRZA, VERNHER
- Eléments de machines, SZWARCMANN
- Construction Mécanique Transmission de Puissance, ESNAULT
- Mécanique du solide, AGATI P., BREMONT Y., DELVILLE G, Ed. Dunod
- Liaisons et mécanismes, AGATI P., ROSETTO M., Ed. Dunod, 1994
- Traité théorique et pratique des engrenages, HENRIOT G., tome 1, Ed. Dunod
- Mémotech Productique, Conception et dessin, BARLIER C., BOUGEOIS R., Ed. Casteilla

Contacts

Contacts *(2000 characters)*

Cliquez ou appuyez ici pour entrer du texte.

Other information

Other information

Cliquez ou appuyez ici pour entrer du texte.

Subject name: Automatons and Local Industrial Networks	Code EC: GMA05-AURES
Number of hours per student: 42	ECTS Number: 3
Reference Teacher: Patrick MAURINE	

Generalities

Objectives

Master the tools (PLCs and industrial local networks) used for the sequential control of automated production systems.

Description

- Synthesis and optimization of sequential logical systems.
  - Mealy machines and Moore machines.
  - Representation of sequential systems.
  - Flip flop and latches (SR, JK, D, T)
  - Synthesis of synchronous sequential systems - Huffman-Mealy method.
- Industrial Programmable Logic Controllers (PLCs)
  - Situation and role of the PLC within an Automated Production System.
  - Specificity, structure, operation of an PLC.
  - PLC peripherals and connectors.
  - PLC programming languages.
  - PLC networks.
- SFC: Sequential Function Chart
  - Definitions and standardization.
  - Basic elements. Rules of syntax and evolution. Basic and special structures.
  - Extension of representations: macro-actions.
  - SFC implementation: algorithm and equivalent equations.
  - Partition and situation of a SFC.
- Industrial Local Area Networks (Insdustrial LAN)
  - Functional structure of industrial Local Area Networks: CIM and 3-axis models.
  - Industrial networks: structure, OSI model (reduced). FIP, ASI and PROFIBUS networks.

Requirements

1. Combinational logic
2. Study and optimization of combinational logic systems

Course requirements and assessments

Teaching Language

French

Teaching methods

Lectures, Supervised Works, Labs and Practicals

Number of hours per course type:

Lectures: 16
Supervised Works: 10
Labs and Practicals: 16

Evaluation

A two-hour written examination at the end of the semester.
Mark for reports on practical work in the laboratory.

Bibliography

Bibliography

1. GREPA, “Le Grafcet”, 2eme edition, 1995, Cepadues
2. CIAME, “Réseaux de terrain”, 1998, Hermes

Contacts

Contacts

patrick.maurine@insa-rennes.fr

Other information

Subject name: Méch. of continous and deformable media	Code EC: GMA05-MMC
Number of hours per student : 40 hours	ECTS Number: 3
Reference Teacher: Eric RAGNEAU	

Generalities

Objectives

The main objective is the acquisition of the essential notions for the understanding of the fundamental laws of Mechanics of Deformable Continuous Media. The course is focused on a modern presentation of general concepts (deformation kinematics, conservation and balance laws). It naturally leads to classical applications in linear thermo-elasticity and in the Strength of Materials (see 2nd semester course), while opening the way to the use of more elaborate models in Thermomechanics of Large Transformations.

Description

I Description of the motion of a continuous medium – Lagrangian and Eulerian description
II Geometry of deformations
- Intuitive notion of deformation
- Gradient de la transformation
- Convective transport
- Lagrangian and Eulerian tensors of Dilatations and Deformations
- Linearization Assumptions (H.P.P.)
- Compatibility equations in H.P.P.

III Kinematics
- Generalization of the notion of particle derivative to vector and tensor functions
- Particle derivatives of surface and volume linear elements
- Particle derivatives of integrals
- Introduction of Lagrangian and Eulerian deformation rates
- Special case of isochoric movements.

IV General Laws of Conservation
- Conservation of mass (local and integral form)
- Introduction of kinetic and dynamic torsors
- Fundamental law of dynamics
- Existence of the Cauchy stress tensor
- Consequences on the laws of momentum and angular momentum balances
- Lagrangian stress tensor
- Kinetic Energy Theorem
- Principle of Virtual Powers.

V Energy and entropy balance
- Integral and local form of the first law of Thermodynamics
- Internal energy balance
- Notion of strain energy
- Second law of Thermodynamics

VI Theory of linear elasticity
- Lamé relations and Hooke's law – decomposition of the stress tensor (spherical and deviatoric part)
- Navier's and Beltrami's equations
- Elastic strain energy
- Plasticity criteria for metallic materials – Use of the Mohr circle
- Planar elasticity – Airy function
- Solving classic problems

Requirements

Basic knowledge of General Mechanics, Differential Calculus, Matrix Calculus and Vector Analysis

Course requirements and assessments

Teaching Language

French

Teaching methods

The course is taught from a "fill-in-the-blank" document that students complete with the help of the teacher during the Course-Tutorial sessions.

The Tutorial and Practical Work sessions then allow students to implement the concepts and theories seen in the Course-Tutorial.

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

Course-Tutorial : 22 hours
Tutorial : 10 hours
Practical Work : 8 hours

Evaluation

A supervised assignment grade (coefficient 3) + a practical work grade (coefficient 1)

Bibliography

Bibliography

Jean COIRIER : Mécanique des Milieux Continus - Concepts de base. DUNOD (1997).
Georges DUVAUT : Mécanique des Milieux Continus. DUNOD (1998).
Paul GERMAIN : Cours de Mécanique des Milieux Continus. MASSON (1973).
D.S. DUGDALE et C. RUIZ : Elasticité à l'usage des Ingénieurs et Physiciens. Edisciences (1973).

Contacts

Contacts

Eric RAGNEAU, Adinel GAVRUS

Subject name: Rigid body dynamics	Code EC: GMA05-MSI
Number of hours per student: 34h	ECTS Number: 3
Reference Teacher: André BURGUIERE	

Generalities

Objectives

The main objective of this course is to make the student efficient in the use of rigid body dynamics tools for design in systems engineering. At the end of this course, the student-engineer must be able to :

- Propose a model appropriate to the mechanism and the application under study;
- independently, apply the principles and theories to obtain the equations of motion and determine the forces acting in a mechanism;
- Use multibody dynamics simulation software;
- Interpret the results and identify the influencing parameters.

Description

1 - Classical mechanics
- Statics
- Kinematics
- Newton's second law (kinetics)

2 - Derivative form of kinetics
- Derivation of rigid body kinetic energy
- Virtual work of forces acting on a rigid body
- Lagrangian mechanics

3 - Methods of numerical simulation
- Use of multibody dynamics simulation software system (MSC Adams).
- Compute numerical approximations to solutions of systems of ordinary differential equations (Matlab - ODE)

Requirements

STP03-MECA3: rigid-body dynamics – static (force and torque), the laws of kinematics; the Newton's second law (kinetics)

Course requirements and assessments

Teaching Language

French

Teaching methods

- 2-hour session on energetics and Lagrange mechanics
- 10 x 2-hour tutorials including elements of the course introduced as it progresses + handouts available.
- 2 laboratory work : 1 introduction to MSC Adams (4 hours) and 1 case study (8 hours)
- Online content: course presentations, handouts, forms, tutorials and examples for methods of numerical simulation

Number of hours per course type:

CM: 2
TD: 20
TP: 12
PR: 0
CONF: 0
Autres: 0

Evaluation

- Laboratory work: Technical presentation of the case study + evaluation sheet (coefficient 1)
- 2-hour final exam (coefficient 3)

Bibliography

Bibliography *(2000 characters)*

- Course handout STP03-MECA3 – Mécanique du solide indéformable (Rigid body dynamics). INSA Rennes *(available in digital format – french version)*
- Luc Chevalier. Mécanique des systèmes et des milieux déformables. Nouvelle édition. Paris : Ellipses, 2004, page 544. isbn : 2-7298-18-59-6
- Sylvie Pommier et Yves Berthaud. Mécanique Générale. Paris : Dunod, 2010, page 268. isbn : 978-2-10-054820-0

Contacts

Contacts

andre.burguiere@insa-rennes.fr

Other information

Other information

Cliquez ou appuyez ici pour entrer du texte.

Subject name: Industrial Methods and Procedures	Code EC: GMA05-PMI
Number of hours per student: 44h	ECTS Number: 4
Reference Teacher: Frédéric SORRE	

Generalities

Objectives

This course unit aims to equip future Mechanical and Automation Engineering students with the essential skills required for the design, industrialization, and quality control of manufactured products.
It enables them to understand and master manufacturing processes (casting, forging, machining) and associated industrial methods, in order to ensure the production of mechanical parts under optimal conditions of quality, cost, and lead time.
At the end of the course, students will be able to:

- Design a complete manufacturing sequence for a metallic part by selecting the most appropriate process and corresponding setup parameters.
- Design an inspection sequence, interpret geometric specifications, and define suitable inspection tools and procedures.
- Integrate environmental considerations into the industrialization process, particularly in relation to product life cycles and the management of material and waste flows.

This module contributes to developing an engineering mindset capable of communicating effectively with all stakeholders along the industrial chain — from design offices to production — with a focus on overall and sustainable performance.

Description

The module addresses both industrial methods and manufacturing processes.
It is structured around two complementary components:

I – Industrial Methods:

- Analysis of geometric defects (dimension, position, shape, surface finish).
- Interpretation and verification of geometric specifications (GPS tolerancing).

II – Manufacturing Processes:

- Study of molding, forging, and stamping processes for metallic materials.
- Machining: tool geometry and materials, wear phenomena, calculation of cutting forces and parameters.
- Implementation of machining operations (turning and milling).
- Implementation of dimensional and geometric measurement and inspection methods.

The teaching approach emphasizes practical application through case studies, tutorials, and demonstrations on real or simulated machines.

Requirements

A solid understanding of the fundamental concepts of mechanical design and technical drawing (including blueprint reading) is expected.
Students should have basic knowledge of strength of materials and general mechanics.
An initial introduction to metallic materials and their technological properties is recommended.

These prerequisites aim to ensure that students are able to connect the theoretical aspects of manufacturing processes with industrial production realities and to understand the interactions between design, production, and quality control.

Course requirements and assessments

Teaching Language

French

Teaching methods

The module is based on a teaching approach that integrates theory, experimentation, and critical analysis.
The course alternates between lectures (conceptual foundations), tutorials (industrial problem-solving), and practical sessions (hands-on work with machines and measurement systems).
Case studies are used to illustrate the interconnections between manufacturing processes, industrial methods, and sustainability constraints.

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

CM: 16h
TD: 20h
TP: 8h
PR:
CONF:
Autres:

Evaluation

Assessment is based on:

- Continuous evaluation (quizzes, exercises, case studies) assessing understanding and mastery of key concepts,
- A final exam lasting 3 hours.

Bibliography

Bibliography

LEFTERI, Chris, 2019. *Procédés de fabrication & design produit*. 2e éd. Paris : Dunod. ISBN 9782100789351.

CHARPENTIER, Frédéric, 2024. *Mémento de spécification géométrique des produits: les normes ISO-GPS*. Nouvelle éd. Malakoff : Dunod. ISBN 9782100865093.

DURSAPT, Michel, 2016. *Métrologie dimensionnelle*. Paris : « L'Usine nouvelle » Dunod. Aide-mémoire de l'ingénieur. ISBN 9782100760039.

DOUR, Gilles, 2023. *Fonderie*. 2e éd. Malakoff : Dunod. Aide-mémoire. ISBN 9782100855148.

GARA, Souhir, 2025. *Métrologie dimensionnelle et tridimensionnelle de fabrication*. Paris : Ellipses. Formations & techniques. ISBN 9782340098824.

GARA, Souhir, 2014. *Procédés d'usinage: tournage, fraisage, perçage, rectification*. Paris : Ellipses. Technosup. ISBN 9782729887865.

ARTS ET MÉTIERS PARISTECH (éd.), 2021. *Usinage des pièces mécaniques: théorie et pratique*. Paris : Éditions Eyrolles. ISBN 9782416001826.

Contacts

Contacts

frederic.sorre@insa-rennes.fr

Other information

Other information

Cliquez ou appuyez ici pour entrer du texte.

Course designation : Introduction to Systems & Signals Theories	**Code EC: GMA05-SIG**
Total amount of class sessions : 30h	**ECTS : 2**
Reference Teacher(s) : Maël MARQUER	

Généralités

Objectives :

Introduce and use mathematical tools convenient for control engineering, instrumentation, signal processing, modelling and analysis of dynamic systems.

• Introduce the definition of a signal and learn how to represent it ;

• Introduce a definition of a system, master the input/output representation, analyze and predict the system behaviour facing certain types of input.

Description *(2000 caractères)*

1. System Theory : definition, input/output representation,1st and 2nd order systems analysis.

2. Signal Theory : definition and usecases, signal classification, tests signals.

3. The science of modelling : what is a model ? How to considerate its limits and usecases ?

4. Mathematical tools : introduction to signal theory tools, applied to instrumentation and measurements., analysis of digital/analog differences and discretization impacts (sampling, windowing), introduction to system modelling (linear differential equations , Laplace Transform and Transfer Functions, block diagram and graphic analysis tools).

5. Introduction to system modelling via Matlab-Simulink

Prerequisites *(2000 caractères)*

None

Course modalities and evaluation

Learning Language *(2000 caractères)*

French

Learning Modalities *(500 caractères)*

Total amount of each type of class sessions : *(2000 caractères)*

CM : 12h
TD : 16h
TP : -
PR : -
CONF : -
Others : assignment 2h

Evaluation Methods *(200 caractères)*

One unique supervised assignment at the end of the semester.

Bibliography

Bibliography *(2000 caractères)*

- BLOT J., « Electronique linéaire – cours », Chapitre 2, Dunod Université, 1993.
- BOITE R., NEIRYNCK J., « Traité d'électricité, Théorie des réseaux de Kirchhoff », Georgi.
- BORNE P., DAUPHIN-TANGUY G., RICHARD J. P., ROTELLA F., ZAMBETTAKIS I., « Automatique, Analyse et régulation des processus industriels », Tome 1, Tecnip.
- COULON F., « Traité d'électricité, Théorie et traitement des signaux », Georgi.
- THOMAS M., LAVILLE F., « Simulation des vibrations mécaniques »

Contacts

Contacts *(2000 caractères)*

Maël MARQUER – mael.marquer@insa-rennes.fr

Other

Cliquez ou appuyez ici pour entrer du texte.

Nom de la matière : Allemand	**Code EC: EC-HUMF05-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-HUM05-ANGL
Total number of hours per student : 28h	ECTS : 2
Supervisor : Philippe LE VOT	

General information

Objectives and Purposes

General Objectives:

Improve the ability to express oneself, understand, and interact in everyday situations, with a particular emphasis on professional and social life.

Linguistic Objectives:

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

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Description

- **Action-oriented approach to language learning:** Learning by doing: speaking and listening, writing documents while mobilizing the ability to solve, construct, demonstrate, and persuade.
- Express oneself with precision through rigorous use of syntax and phonology. Activities involving creativity and responsiveness, such as debates, role-playing, individual oral presentations with PowerPoint or Canva support, and projects, will be based on current, scientific, and societal topics.
- Development of specific skills related to the professional world:
    - Writing emails and abstracts linked to the EPA (Engineering Problem Analysis) course.
    - Notions of interculturality.
    - Sustainable development.

Prerequisites

A good mastery of the STPI program is essential: B1/B2 level.

Course and Evaluation Modalities

Language of Instruction

English

Teaching Methods

The classes are two hours long and take place in rooms equipped with projectors and sound systems. We also have two multimedia language labs and a Computer Resource Center to provide students with a stimulating teaching environment.

- Educational resources include press articles, audio, and video documents from the web.

- Regular personal work is required. Students are expected to remain curious and 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 + 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-HUMF05-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 5	**Code EC: EC-HUM05-EPS**
Number of hours per student: 24H	**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 5 focus:* comprehend the physiological principles for maintaining good health (preparation for effort, recovery, and regulation of exertion); manage emotions and stress during opposition, competition, performance, or uncertain situations
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 5 focus:* Train one's peers, demonstrate empathy, altruism, and leadership; Integrate into a team and contribute to its dynamism
Methodological Competencies: Manage complex projects by setting objectives, planning, and evaluating outcomes. Make informed decisions through observation, reflection, and feedback. *Semester 5 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

Requirements *(2000 characters)*

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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-HUMF05-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-HUMF05-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: Gestion des risques	Code EC: EC-HUM05-RISQ
Number of hours per student: 22h	ECTS Number: 1,5
Reference Teacher: Valérie HARDOUIN DUPARC	

Generalities

Objectives *(2000 characters)*

Raising awareness that the environment in which an engineer operates is fraught with uncertainties and dangers. Engineers must nevertheless remain in control of their choices and actions within limits defined by acceptable risk in the current context of sustainable development and ecological transition.

Description *(2000 characters)*

- Sulitest: A Sustainable Development Literacy Test assesses higher education students' level of knowledge regarding the 17 Sustainable Development Goals (SDGs).

- Conference on the Risk Society: Introduction to the concept of risk – evolution of risks and the changing relationship to risk (role of the engineer, procedures/freedoms, human error, controversies, etc.).

- Occupational Health and Safety Conference: Physical and psychological risks.

- INRS Training: Serious game in occupational health and safety (psychosocial risks, workplace accidents, occupational risk assessment, risk prevention, etc.).

Requirements *(2000 characters)*

None

Course requirements and assessments

Teaching Language *(2000 characters)*

French

Teaching methods *(500 characters)*

Hybrid training program alternating between in-person and online learning.
Self-study Sulitest
Introduction to engineers and their relationship to the 17 SDGs: 2 hours of lectures
Course on the social sector: 10 hours
Occupational Health and Safety Conference: 2 hours
Independent INRS training: 8 hours

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

CM: 22h
TD:
TP:
PR:
CONF:
Autres:

Evaluation *(200 characters)*

1 score from the Sulitest (1/5 final grade)
1 score from the INRS modules (2/5 final grade)
1 score related to the course on the Risk Society (2/5 final grade)
Final grade

Bibliography

Bibliography *(2000 characters)*

Cliquez ou appuyez ici pour entrer du texte.

Contacts

Contacts *(2000 characters)*

valerie.hardouin-duparc@insa-rennes.fr

Other information

Other information

Cliquez ou appuyez ici pour entrer du texte.

Subject name: ITALIAN LV2-LV3	Code EC: EC-HUMF05-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

INSA RENNES : 2025/2026

Subject name: Japanese	Code EC: EC-HUMF05-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-HUMF05-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-HUMF05-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-HUMF05-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