# AY | 2016-2017



Doctoral School of Civil Environmental and Mechanical Engineering

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# [H2020 PROPOSALS WRITING]

## LECTURE SYLLABUS

- Course description
- Lesson Plan
- Class schedule
- Assessment method

### Module 2016-2017 – H2020 Proposal Writing

Leader: dott. Rudi Tranquillini (rudi.tranquillini@unitn.it)

Timing: Sept-Oct. 2017

**Duration**: 40h

**ECTS:** 5 (70% OF COMPULSARY ATTENDANCE) **Prerequisites:** PMP techniques or Prince2 methods.

#### **COURSE OBJECTIVES, METHODS AND CONTENTS**

The main purpose of the course is equipping students with practical skills concerning searching, identify, asses and effectively gathering feasible funding opportunities, encouraging them to develop a real writing exercise of proposal writing mainly based on Horizon2020 EU Programme. Some hints about other programs (such as Life+, and RFCS) will be also offered.

The course explores the key issues in planning, implementing, assessing and submitting a research project proposal for responding at a real open international call for proposal on H2020 programme and analyse the most common techniques for structuring the proposal and effectively write it, following the formal and substantial requisites defined by the European Commission.

The teaching methodology will be mainly based on a *learning by doing* approach specifically developing the organizational skills needed for searching, identify, asses and effectively present research ideas for responding at funding opportunities. A special emphasis will be At the end of the course, each student should develop an exercise of a simulated proposal, based on an open call selected from H2020, RFCS or LIFE programmes and, if possible, in collaboration with other students.

#### **LECTURE SYLLABUS**

The module begins with an examination of funding sources (Matrix of Funding Opportunities) and deeply explore the most important websites edited by the European Commission for research funding (Participant Portal, LIFE+ portal, ETI-KIC's, Technology Platform-JTIs, etc.). After examination of grant sources and effective use of fund searching tools (Websites, University services, External tools, etc.), it will be quickly passed in review the main tools, methodologies and techniques for writing proposals. Theoretical foundations of project management will be assumed as already acquired (PMP techniques or Prince2 methods). During the course three European funding schemes will be analysed:

- Research Innovation Actions (H2020)
- Support and Coordination Actions (H2020, Life+, RFCS).
- Marie Skłodowska-Curie Mobility schemes (IF & ITN)

The course is conceptually divided into three investigation areas:

#### A) Basics of Project Management(8h)

- · Project management approach: rationale and logical deployment;
- Project management techniques: Gantt, Pert, CPM
- Some nods to risk management and quality assurance:
- Quick hits to administrative tasks and financial reporting;
- Network management and organisational mechanisms.

#### B) European Project Management technicalities (8h)

- Fund searching and financial matrix;
- Pre-Assessment techniques for establishing proposal feasibility;
- Introduction to different European project techniques
  - Project Cycle management
  - Goal oriented Project Planning
  - Logical Framework matrix
- · Proposal writing methodologies;

#### C) Proposal Writing Exercise (following H2020 RIA funding scheme) (24h)

- Matching ideas, topics and calls;
- Develop a simulated proposal;
- Analysis of same practical examples;
- Tips and tricks on "how to write" and "what to write" with emphasis on EU proposals writing.

#### Recommended readings:

- H2020 Online Manual
  - o <a href="http://ec.europa.eu/research/participants/docs/h2020-funding-guide/index\_en.htm">http://ec.europa.eu/research/participants/docs/h2020-funding-guide/index\_en.htm</a>
  - http://ec.europa.eu/programmes/horizon2020/en/how-get-funding
  - https://ec.europa.eu/research/participants/portal/desktop/en/funding/reference\_docs.html#h2020call\_ptef-pt
- Templates
  - Standard proposal template RIA, IA
  - Standard proposal template CSA
  - Standard evaluation form RIA, IA, CSA
- Project administration LIFE (2014-2020)
  - http://ec.europa.eu/environment/life/toolkit/pmtools/index.htm
- A guide to the project management Body of knowledge (PMBOK® Guide) Fifth Edition
- · Slides distributed during the course

#### **EXPECTED PRACTICAL RESULTS**

Each student will produce a realistic proposal, based on an open call of H2020, LIFE+ or RFCS programme. On completion of the course, students should:

- Be equipped with a set of tools and frameworks that enable to effectively contribute at finding and writing funding proposals in the three
  main funding schemes presented;
- Obtain a clear understanding of the needs for design an appropriate governance structure and control system in delivering a research proposal for funding.
- To be put in a position to concretely contribute to the financial support of his scientific carrier.

## **Lesson Plan**

WP	Lesson	Duration	Content	
1	1^ and 2^	4h + 4h	Course Introduction - Basics of PM - Map of EU funding  Essential readings H2020 - Work Programme; - Financial Guidelines; - H2020 online Grant Manual; - Use of open tools  Templates and documents - Std Proposal template (SPT) (Life, Marie Curie, IA) - Std Evaluation Form (SEF) - General Model Grant Agreement (MGA) - Annotated Model grant Agreement (AGA) - H2020 Model Consortium Agreements	
2	3^ and 4^	4h + 4h	Proposal development Process - Writing Tools and management - How to get support - Proposal Planning - Proposal writing methodology  European project techniques - Project Cycle management - Goal oriented Project Planning - Logical Framework matrix  Pre-proposal activities - Searching opportunities - Self-assessment method (IDEA vs. Proposal) - Tentative Position Paper - Project executive summary	
3	5^ and 6^	4h + 4h	Proposal writing exercise  1. EXCELLENCE  - Address a work programme topic - Describe specific objectives - Explain the overall concept of your project - Positioning your project - Related research and innovation activities - How describe and explain the overall methodology - Perform a gender analysis - Advance beyond the state-of-the-art - The innovation potential  Case study - presentation of a successful proposal (IA, RIA, MSCA IF, MSCA ITN)	

4	7^ and 8^	4h + 4h	Proposal writing exercise  2. IMPACT  - Expected impacts mentioned in the work programme - Substantial impacts not mentioned in the work programme - Barriers/obstacles, and framework conditions - Dissemination and exploitation of the project's results Business plan - Management of Open Research Data - Strategy for knowledge management and protection - Communication measures for promoting the project  Case study - presentation of a successful proposal (IA, RIA, MSCA IF, MSCA ITN)	
5	9^ and 10^	4h + 4h	Proposal writing exercise 3. IMPLEMENTATION  - Presentation of the overall structure of the work plan  - Timing  - Work package description  - Graphical presentations and tables  - Organizational structure and the decision-making mechanisms  - Effective innovation management  - Describe risks and countermeasures  - Describe the consortium  - Project contribution of each member  - Industrial/commercial involvement  - Countries and international organizations  - Resources (personnel, costs, equipment)  - Third parties involved  - Ethics and security   Case study  - presentation of a successful proposal (IA, RIA, MSCA IF, MSCA ITN)	

### **Class Schedule**

SeptOct. 2017	Time	Duration	Room
Monday, 04 September 2017	08:30-12:30	4	To be fixed
Thursday, 07 September 2017	08:30-12:30	4	To be fixed
Monday, 11 September 2017	08:30-12:30	4	To be fixed
Thursday, 14 September 2017	08:30-12:30	4	To be fixed
Monday, 18 September 2017	08:30-12:30	4	To be fixed
Thursday, 21 September 2017	08:30-12:30	4	To be fixed
Monday, 25 September 2017	08:30-12:30	4	To be fixed
Thursday, 28 September 2017	08:30-12:30	4	To be fixed
Monday, 02 October 2017	08:30-12:30	4	To be fixed
Thursday, 05 October 2017	08:30-12:30	4	To be fixed
Exercise deadline			
Sunday, 31 December 2017			Via e-mail to the class leader

In-class contributions (25%), Proposal draft exercise (75%) Assessment: Ten 4-hour sessions + homework (proposal draft) 70% compulsory Structure:

Attendance:

### **ASSESMENT**

FINAL ASSESMENT	CRITERIA
1. PE - Practical Exercises (Proposal draft exercise) (weight 75%) 2. CP - Class participation (weight 25%)  N.B.  Although the assessment system will rate the performance using a 100-point scale the final rating will consist in a synthetic judgment: PASSING (60 to 100 cum laude) or NON PASSING (0 to 59).	<ul> <li>PE (75%)</li> <li>Principals and methods define by the Standard Evaluation Form offered by the EU (RIA, IA, CSA) – (weight 25%)</li> <li>General practical organisation of project's information, use of techniques for planning and preparing the proposal. Knowledge and use of basic practical concepts (such as: Critical Path Chart, Gantt Chart, etc. and project feasibility, effectiveness and coherence (weight 25%).</li> <li>Capability to adequately describe objectives, tasks and deliverables linked to the scientific idea and foreseen critical issues organising all information in a coherent picture. (weight 25%)</li> <li>Criteria defined into the Self Evaluation Form (weight 25%).</li> </ul>
	<ul> <li>frequency and quality of the oral interventions done. Capability to grasp fundamental concepts, ability to analyse and critically evaluate topics. (weight 25%)</li> </ul>