DESCRIÇÃO DO CURSO *COURSE DESCRIPTION*		
ADM 1 - Career in Business Administration	When Where Brief description	8-10th Aug, 1-4pm Sciences Center, AUD 2 Career in Business Administration, Personal Branding, Professional and Personal Path, Personal Strenghts, Future View, The Superstar Effect, Personal Slogan, Pitch, Storytelling, Job Search, LinkedIn SEO, Brazilian Market, Worldwide Job Market Trends.
ADM 3 - Public Policies Assessment	When Where Brief description	17-20th Jul, 9-1pm Sciences Center, AUD 3 In this introductory course in program evaluation, you will learn how to use appropriate research methods to evaluate public programs/policies, develop strategies for doing evaluation, and manage evaluation projects. It takes a step-by-step approach starting with problem identification (understanding the problem), formulation of questions, program description, developing a logic model, and the designing of different types of evaluation. In so doing, you should become aware of the methodological, administrative, and political problems associated with evaluating public and private sector policies and/or programs. You should also learn to judge when it is feasible to do an evaluation, what methods are appropriate to address particular evaluation questions and issues, and how to fit the evaluation effort to the resources and time available. Throughout the course, the emphasis is practice as students take hands-on approach to doing evaluations. The course is designed to help students determine the effectiveness of policies and programs for national, state, and local levels with emphasis on evaluating an existing policy or program. The approaches described in this syllabus will help those with little or no experience in program evaluation to: (1) identify and document the outcomes, (2) activities, and indicators to be evaluated, and (3) assess the quantity and quality of a program's achievements.
CPT 1 - The Grand Challenge of IoT, Big Data, Distributed and Parallel Computing, Energy-Aware, Context-Aware Paradigms	When Where Brief description	7-10th Aug, 9am-12pm Sciences Center, AUD 1 IoT, Big Data, Distributed and Parallel Computing, Energy-Aware, Context-Aware
LAW 1 - Police and Society in Brazil	When Where Brief description	3 & 6th Aug, 9-11am Sciences Center, AUD 2 & AUD 1 The course aims to discuss the relationship of Police and society in Brazil. The following topics will be adressed during the classes: 1 - the organization of police in Brazil; 2 - Police violence and corruption in Brazil; 3 - Police and Community Relations in Brazil; 4 - Police Reform and Public Policy.
ECO 1 - Theoretical and computational aspects of the Black-Scholes formula	When Where Brief description	23-27th Jul, 9am-12pm Sciences Center, AUD 1 The course has the purpose to discuss about theoretical and computational aspects of the Black-Scholes formula (see the program below) and is in line with the Asset Pricing course offered at PPGE/UFJF, which in turn is part of applied finance, in the area of action within the PPGE's research line of applied microeconomics. It will also serve to attract to the PPGE students of other areas of social sciences, such as business administration and accounting sciences as well as students from the exact sciences, among which we could highlight: mathematics, statistics, physics, computer science and engineering. 1. A brief introduction to stochastics process: from Brownian motion to Itô's lemma; 2. The Black-Scholes partial differential equation; 3. A closed-form solution to the Black-Scholes-Merton partial differential equation, through the heat equation: the Black-Scholes-Merton formulae; 4. Extensions of the Black-Scholes-Merton formulae; 5. Hedging portfolios: the Greeks;

		6. Computational implementations in Python and in an Android app to calculate option prices (based in the Black-Scholes type formulas) and the Greeks (to hedging purposes); 7. A brief discussion on the limitations of the Black-Scholes-Merton formula (such as volatility smile among others) and further extensions to more precise models to predict option pricing. Course webpage: http://pccoimbra.weebly.com/black-scholes-global-july-2018.html
ECO 2 - A brief introduction to the theory of non-cooperative games and to strategic thinking.	When Where Brief description	30th Jul – 3rd Aug, 9am-12pm Sciences Center, AUD 1 About the theory of non-cooperative games: The theory of non-cooperative games can be understood as the basic tool for the strategical thinking. The start point is to note that the theory of non-cooperative games can help you in strategic considerations that should be taken into account when you make a decision in an interdependent context. The basic idea is that it helps you to predict how people and institutions behave when they are in strategic situations. In 1994 John C. Harsanyi, John F. Nash Jr and Reinhard Selten were awarded The Sveriges Riskbank Prize in Economic Science in Memory of Alfred Nobel “for their pioneering analysis of equilibria in the theory of noncooperative games”. Aims: The course is in an undergraduate level, it is self contained and has no pre-requisits. It has the purpose to offer a brief introduction to the theory of non-cooperative games and to strategic thinking. Related concepts, methods and terminology will be introduced such as: strategic-form, dominated strategies, the notion of rationality in an interdependent environment, common knowledge, iterated strict dominance, Nash equilibrium, pure-strategy equilibrium (example of the non-existence pure-strategy equilibrium), Nash equilibrium and Pareto optimality, existence of mixed-strategy Nash equilibrium, backward induction and subgame perfection (see more details in the program below). It is intended to students of different areas such as economics, mathematics, statistics, physics, computer science, engineering, business administration, law, social science, biology, psicology, sociology, politics science and history among others. Course webpage: http://pccoimbra.weebly.com/theory-of-non-cooperative-games-global-july-2018.html
ECO 3 - Valuation under Uncertainty	When Where Brief description	16 -18th Jul, 9am-13pm Sciences Center, AUD 1 Topics on valuation of any asset, firm value, fundamental analysis.
ECO 4 - Historia del pensamiento económico	When Where Brief description	16-18th & 23-25th Jul, 2-5pm Sciences Center, AUD 2 Introducción a la historia de las principales escuelas de pensamiento económico.
STA 1 - Analysis of Longitudinal Data	When Where Brief description	6-10th Aug, 9am-12pm Sciences Center, AUD 3 Analysis of Longitudinal Data (exploratory longitudinal data analysis, marginal models, fixed effects models, random effects models).
STA 2 - Diagnostic tests: properties and use	When Where Brief description	24-27th Jul, 9am-12pm Sciences Center, INFO LAB Sensitivity, Specificity, Positive Predictive Value (PPV), Negative Predictive Value (NPP), Likelihood Ratio (LR) and ROC curves. Computer calculation with R and Stata. Contrast with screening and diagnostic testing also screening Infectious Diseases vs. chronic Non-Infectious Diseases.
ART 1 - Bamboo and laminated bamboo as materials for product design	When Where Brief description	6-8th Aug, 3-6pm Sciences Center, AUD 1 The main purpose of this course is to introduce students to the use of bamboo and laminated bamboo as materials for product design. Some specific topics will be:

		- general understanding of the bamboo plant and its characteristics, - historical overview of the use of bamboo in the fabrication of products, - examples of current use of bamboo in manufacturing industry and product design, - practice of treatment and basic manufacturing technics (only if there is availability of tools and materials)
BIO 1 - Advanced Topics in Neuroscience	When Where Brief description	16-20th Jul, 2-5pm Sciences Center, AUD 3 The main aim of this course is to present advances in neurosciences. Specifically, the course will provide a discussion on cut off issues as: neuroanatomy, neurophysiology, neurodegenerative diseases, multimodal integration, sleep and memory.
BIO 2 - Fonctions non-exécutives du système moteur et leurs applications pour la rééducation motrice	When Where Brief description	6-10th Aug, 2-5pm Sciences Center, AUD 3 Cette discipline aborde des topics des neurosciences cognitives appliqués à la réalisation des mouvements volontaires. L'objectif est de présenter les concepts relatifs aux processus non exécutifs du système moteur humain ainsi que ses applications dans le domaine de la rééducation. Un mouvement, même le plus simple et trivial qu'il soit, requiert un planification motrice sophistiquée que précède sa réalisation. Premièrement, seront abordés les aspects historiques et méthodologiques de la neurophysiologie du contrôle moteur à travers l'exemple de l'action d'atteinte et saisie d'un objet. La deuxième partie du cours est destinée à la présentation des évidences expérimentales de la participation du système moteur dans des processus de simulation implicite et explicite de l'action, à savoir: l'observation de l'action et l'imagerie motrice respectivement. La partie finale du cours explore les utilisations possibles de la simulation mentale du mouvement dans le domaine de la rééducation.
EXA 1 - 3D Geometric modeling with SketchUp	When Where Brief description	1-3rd Aug, 2-5pm Computer Engeneering Bulding, LAB 1 Geometric modeling with SketchUp 1 - Applications of the program. 2 - Acquisition and Installation. 3 - Access to documentation and tutorials. 4 - Concepts and Tools. 5 - Creating 3D models.
EXA 2 - Finite volume methods	When Where Brief description	16-25th Jul, 2-5pm Sciences Center, INFO LAB Prerequisites: One graduate level introductory course in Fluid dynamics. The knowledge of MATLAB programming is necessary. • Description: The course is divided into two parts. The first part introduces about conservation laws, types of partial differential equations (PDEs). General numerical techniques for PDEs finite difference method. The second part of the course introduces finite volume method. SIMPLE (Semi-Implicit Method for Pressure-Linked Equations) formulation for the Navier–Stokes equations will be fully described in the class. Students will be given chances to modify a program specially written for this course to solve some practical problems influid flow. • Hours: Total duration of the course is 24 hours. Each lecture is of 3 hours. • Text: S.V. Patankar, Numerical Heat Transfer and Fluid Flow, Hemisphere Publishing, 1980. • References: C.A.J. Fletcher, Computational Techniques for Fluid Dynamics, Volume I and II, Springer–Verlag Versteeg, H.K., Malalasekera, W., An Introduction to Computational Fluid Dynamics, The Finite volume method. Second edition, Pearson, 2007. Peric, M., Ferziger, J., Computational methods for fluid dynamics. Springer.

		• Course Outline: Part 1 • Introduction (One lecture) Conservation laws Classification of Partial Differential Equations • Finite Difference Method (One lecture) Discretization Approximation to Derivatives Convergence, Consistency, Stability and Accuracy • Solving system of linear and nonlinear equations (One lecture) Directs methods Iterative methods Non-linear Equations and their solutions Part 2 Finite Volume Method • Control Volume Formulation (One lectures) Diffusion Problems Non-linearity of the source term • Unsteady problems (One lectures) Explict method Implict method (Cranck-Nicolon method, Fully Implicit method) • Convection and Diffusion Problems (One lectures) Central difference scheme Four Basic Rules Upwind schemes Quick scheme • Calculation of Flow Field - (One lecture) Staggered Grid Simple Algorithm • Applications in Fluid Flow (One lectures) Lid driven cavity flow
HUM 1 - African-Brazilian Religion in Brazilian History: an overview	When Where Brief description	3rd Aug, 2-6pm Sciences Center, AUD 2 Brazilian history and its relation to afro-Brazilian religiosity: a view of senzala in the southeast and of the hidden meanings in the religious manifestations of the slaves. Afro-religiosity in contemporary Brazil. Intolerance discourses and reevaluations of the past.
PHI 1 - Nuove Sfide Nella Biosemiotica Contemporanea	When Where Brief description	9-10th Aug, 3-5pm Sciences Center, AUD 1 Il corso offre un`introduzione generale al panorama teorico ed epistemologico offerto dalla Biosemiotica contemporanea in rapporto alle scienze umane e alle scienze della vita
LIT 1 - Portuguese for foreigners	When Where Brief description	30th Jul - 10th Aug, 9am-12pm SCHOOL OF LANGUAGES AND LITERATURE Aims:

		This course is organized to provide students with basic skills in order for them to be able to: ▪ present themselves and talk about their routine; ▪ comprehend native speakers when they talk about previously known themes. (simple daily conversation) ▪ read small texts which contains information about known topics. ▪ understand some characteristics of Brazilian culture. This course has been planned to give priority attention to spoken language. Program Features: ▪ Clear design which makes activities easy to follow. ▪ Measured, step-by-step approach which builds skills and confidence. ▪ Grammar studies syllabus which introduces past, present, and future time. ▪ Vocabulary syllabus which focuses on key high-frequency items and avoids overload. ▪ Gradual introduction of simple skills work with manageable communicative activities. ▪ Pronunciation work, which is integrated at appropriate points. The course is focused on conversation, though there may be some writing requirements to be completed at home. Approximately 80% of class time is conducted in Portuguese. The first classes are going to be taught in English and we will progressively introduce Portuguese as the main language in class. Communication in a foreign language requires an understanding of the cultural context. The aim is to teach the living language through carefully selected textbooks, newspaper and magazine articles and other relevant materials.
LIT 2 - La producción literaria femenina en las letras hispanoamericanas	When Where Brief description	30th Jul-3rd Aug 2pm-6pm Sciences Center, AUD 3 En este curso estudiaremos de forma panorámica la producción literaria femenina en las letras hispanoamericanas. Estudiaremos algunas de las obras y escritoras más representativas del siglo XX. Abordaremos la relación texto/contexto, para así contrastar tendencias, influencias y géneros literarios. Por ello, complementaremos las lecturas de los textos literarios con trabajos críticos sobre las autoras y/o las obras.
LIT 3 - Critical reading and creative writing	When Where Brief description	1-2nd Aug, 9am-12pm Sciences Center, AUD2 This short course will focus on reading techniques and writing tasks to improve critical and creative thinking. The course will be task-based, with individual activities as well as in small groups.
LIT 4 - Análisis del Discurso Turístico	When Where Brief description	24-31st Jul, 9am-12pm Sciences Center, AUD 2 El curso ofrece una aproximación al estudio de la comunicación en el turismo, analizando las propiedades lingüístico-discursivas de los géneros textuales, físicos y digitales, vinculados a la promoción y comercialización de los destinos turísticos.
LIT 5 - The short plays of Samuel Beckett	When Where Brief description	23-24th & 26-27th Jul, 1-6pm Sciences Center, AUD 3 & AUD 2 The following course aims at analyzing the theatrical production of Samuel Beckett, especially the short plays, such as Not I, That time, A piece of monologue, Rockaby. It attempts to place the author at the end of modernity and the beginning of post-modernity.
LIT 6 - Brazilian Literature and Brazilian Studies	When Where Brief description	6th & 10th Aug, 4-6pm Sciences Center, AUD 2 National identity issues in Brazilian literature. 20th century: an overview of Modernism in Brazil. Contemporary Brazilian literature and violence narrative.
LIT 7 - Virginia Woolf's Political and Aesthetic Discourse	When Where	25-27th Jul, 2-6pm Sciences Center, AUD 3

	Brief description	The course offers an overview of the works of Virginia Woolf, including her essays *A Room of One's Own* and *Three Guineas* and her novels, especially *Mrs. Dalloway* and *To the Lighthouse* .
LIT 8 - Plato's philosophy of language: an introduction to Phaedrus	When Where Brief description	23-27th Jul, 3-6pm Sciences Center, AUD 1 The course aims at putting into debate the relationship between language and reality as it has been addressed by Plato in his dialogue Phaedrus. The main topics concerned in this course are: . The human soul and reminiscence of Forms . clashes between rhetorics and philosophy in the supremacy over language . Dialectics as a philosophic method . Dialectics and the art of writing.
LIT 9 - City of God: Urban Literature in Brazil	When Where Brief description	23 Jul, 9am-12pm Sciences Center, AUD 2 This one day seminar will introduce students to one of the most iconic works of literature from Brazil at turn of the 21 st century. The film City of God is known throughout the world, but few realize that the film is based on Paulo Lins' novel of the same title. Published in 1997, the novel City of God marked a watershed moment in contemporary Brazilian literature and culture as the literary text introduced the world to the experiences of residents living in Rio de Janeiro's favelas, or shantytowns. The instructor will provide a general overview of the novel, and students will have the opportunity to examine excerpts from the book. Our discussion of the novel will allow students to understand the role of contemporary urban literature in providing a critical lens of Brazilian society as well as giving visibility to marginalized communities frequently overlooked or portrayed in problematic ways in canonical Brazilian literature. Examining the novel will also give students a deeper understanding of how favelas developed in Rio de Janeiro during the 20 th century.
LIT 10 - Brazilian Hip Hop	When Where Brief description	7-10th Aug, 1-3pm Sciences Center, AUD 1 Using music, academic texts and video, this course introduces students to the political issues, history and style of Hip Hop in Brazil. By exploring the ways in which music and cultural productions frame ethnic identities and question social inequalities based on race in Brazil, students will have the opportunity to reflect on their personal experiences with race. Some topics of discussion will include subalternity, social justice, the legacy of slavery in Brazil, racial and class discrimination, the myth of Racial Democracy and questions surrounding citizenship in Brazil. This course will introduce students to the historical, political and aesthetic foundations of hip hop in Brazil. We will explore the musical, corporeal, visual, spoken word, and literary manifestations of hip hop in Brazil during the last three decades. For each unit, we will devote time to examining music and videos accompanied by academic readings. The instructor will being the course by giving students a brief overview of the history of hip hop in Brazil and seek to outline a working definition of what is hip hop. The first unit of the course, Aesthetics & Rhythms, will look at the poetics, sound and rhythm of Brazilian hip hop. The second unit, Politics & Race, will examine the social messages addressed in rap music as well as the social impact of hip hop culture in historically marginalized communities in Brazil, such as the periferias and the favelas. The final section, Poetics and Prose, will explore the literary aspects of hip hop culture, specifically rap artists as storytellers, the relationship between oral and written traditions and finally hip hop's connections to urban literary movements, such as Literatura Periférica and slam culture.
LIT 11 - Academic Writing Workshop I	When Where Brief description	3rd Aug, 3-6pm Sciences Center, AUD 1 This workshop will provide students with opportunities to develop a piece of persuasive, research writing. Topics covered will include: pre-writing methods, using key terms, thesis statements, and drafting. This workshop is for students at all levels.
LIT 12 - Academic Writing Workshop II	When Where	10th Aug, 9-11am Sciences Center, LAB INFO

	Brief description	This workshop will provide students with opportunities to revise a previously written piece of academic writing. Topics covered will include: logical structure, developing ideas, reverse outlining, and creating revision plans. This workshop is for students at all levels.
LIT 13 - Job Search Writing	When Where Brief description	6-9th Aug, 9-11am Sciences Center, LAB INFO During this workshop, you will develop a personal statement or cover letter. Course topics will include: appealing to an audience, establishing credibility, using supporting evidence and document design. Students will have opportunities to share and exchange work. This workshop is for students at all levels.
LIT 14 - Jorge Luis Borges Autor Del Quijote	When Where Brief description	17-20th Jul, 3-6pm Sciences Center, AUD 1 Este curso ofrece una relectura de los principales textos de Jorge Luis Borges en que éste dialoga con la obra maestra de Miguel de Cervantes. El objetivo es examinar la manera como el escritor argentino introduce nuevas aproximaciones a la obra y reinventa maneras de leer Quijote.
MAT 1 - A Short Glimpse on Optimization Theory	When Where Brief description	6-10th Aug, 10am-12pm Sciences Center, AUD 2 Nonlinear unconstrained optimization. Nonlinear constrained optimization. Necessary and Sufficient Karush-Kuhn-Tucker Conditions. Introduction to iterative methods for unconstrained optimization.
MAT 2 - Cinema, Science, Culture and Ethics	When Where Brief description	6-10th Aug, 2-6pm Sciences Center, INFO LAB We would like to discuss the relations between Cinema, Science, Culture and Ethics and the problems that are involved with this areas in the 21st century.
MED 1 - Evidence-based Chronic Illness Care: A Public Health Challenge for the 21st Century	When Where Brief description	16-20th Jul, 9-5pm Sciences Center, AUD 2 Care for Chronic Non-communicable Diseases (CNCD), such as cardiovascular disease (CVD), diabetes, cancer and chronic obstructive pulmonary disease (COPD) is a global health problem. Research demonstrates that the vast majority of people with CNCD do not receive adequate care. More than 70% of people who suffer from CNCD do not reach a good control. This is due in principle results from inadequate management, but it also related to lack of access to quality care and the existence of numerous financial barriers. This course describes a model of care to organize health services for CNCD within the framework of primary health care (PHC). The course provides a practical guide for administrators of health programs, policymakers and primary care teams on the planning and providing high-quality services for people with CNCD or their risk factors. Course Objectives At the conclusion of the course, participants will be able to: 1. Describe the need for and the justification for implementing quality improvement strategies based on primary health care. 2. Identify and describe different components of the Chronic Care Model (CCM). 3. Describe common interventions in order to improve quality of care for CNCD in particular those applicable to disadvantaged populations. 4. Develop an outline of a proposal to carry out interventions in order to improve the quality of care in a public health environment. Group Activities: 1. Completion of the ACIC Questionnaire and discussion of results

		2. Completion (or discussion) of the PACIC Questionnaire 3. Evaluation of international guidelines with the AGREE instrument 4. Produce an outline for a quality improvement proposal 5. Presentation and discussion of proposal outlines at the end of the course Main Topics 1. The Chronic Care Model (CCM) 2. The Health Care Organization 3. Delivery-Systems Design 4. Self-Management Support 5. Decision Support 6. Clinical Information Systems 7. Community: Resources and Policies
CHE 1 - Coordination compounds in the treatment of cancer diseases	When Where Brief description	31st Jul – 3rd Aug, 9am-12pm Sciences Center, AUD 3 This course will show an overview of the importance of the use of coordination compounds in the treatment of cancer diseases. Particular emphasis will be placed in those transition metal complexes which successfully arrived to the clinic. It will cover the chemistry of d-block metal, including coordination complexes and organometalic compounds. The most accepted mechanism of action of the approved platinum drugs will be discussed also by computational/theoretical point of view. In this context, the uses of some spectroscopic techniques and methods will be described in order to show how those metals can be quantified in the samples employed in clinical tests.
CHE 2 - Concepts of asymmetric homogenous catalysis	When Where Brief description	7-9th Aug, 4-6pm Sciences Center, AUD 2 Concepts of asymmetric homogenous catalysis. Different modes of activation considering metal and metal-free processes. Recent examples of organic reaction transformations; key intermediates as Well as transition states. Substrate Scope.