Academic Programme
2nd Semester **2023**

COURSE

Introduction to financing systems in Social Security

Start date:
September 12th

Limited availability

Programme
description

People with investment, auditing, actuarial or mathematical functions in social security institutions need to analyse the results of annual operations and the actuarial balances. In those balances, indicators on the viability of social security systems are reported.
To achieve this, it is required to delve deep into the understanding of the structure of these financing systems.

This structure may be divided into three categories: the traditional pay-as-you-go and the multipillar system, and a combination of both schemes. In addition, it will be important to understand how they may coexist in short, medium, and long term in order to promote systemic feasibility.

Students will access elements to analyse, evaluate and make proposals in their institutions. They will address relevant concepts and practical aspects of the financing of social security systems such as: models that integrate economic, legal, and actuarial aspects, as well as best practices, perspectives and international recommendations that allow the proper functioning of the systems.

The course will comprise as follows:
Study different types of benefits of Social Security;
- Learn how to build the cost curve that defines the optimal financing systems;
- Identify the practical utility of capital distribution and accumulation systems: from actuarial approach, health care insurance financing, pension insurance, occupational risk insurance;
- Understand actuarial valuations as a tool for determining adequate benefit funding;
- Learn to evaluate the operation of financing systems over the time, in accordance with the result of the operation and the theory of the actuarial balances.

General data

COURSE MODALITY	Online
COURSE CLASSIFICATION	Professional education
ADRESSED TO	• People performing investment, auditory, actuary or mathematical activities in social security institutions who need to analyse the results of the annual operations and the actuarial balances of the organizations. • Those in charge of areas of economic benefits, pensions, finances, budgets and administration
SCOPE	Students will understand the function of the financing systems in social security by analysing, evaluating an making proposal in their institutions.
GENERAL OBJECTIVE	Learn about and assess the two basic financing systems of social security and their different strands by learning about their practical value according to the type of benefit to be funded.
SPECIFIC OBJECTIVES	• Identify the different types of social security benefits. • Learn how to develop the benefit cost curve of social security that helps define the optimal financing system. • Distinguish the practical purpose between the social security system and the private pension system. • Evaluate the function of the financing systems over the time, according to the outcome of operations and the theory of the actuarial balance

START AND COMPLETION DATE	September 12th – October 13th, 2023
DEADLINE FOR REGISTRATION	September 8th, 2023
TOTAL LENGTH OF THE ACTIVITY	40 hours
COST OF THE PROGRAMME	400 USD (340 USD enrolment / 60 USD technological resource)
QUOTA	Minimum 15 students
HOST COUNTRY	Mexico
VENUE	Inter-American Center of Social Security Studies (CIESS)
LANGUAGE	Spanish with English simultaneous interpretation
TECHNOLOGICAL REQUIREMENTS	• Computer • Internet connection: broadband • Browser: Chrome, Firefox, or Safari in their updated versions • Access to Zoom • Speakers and microphone • Web camera (optional)

TECHNOLOGY SKILLS (PREFERABLY)	• Use online communication tools such as email, discussion forums, chats, etc. • Use of video call programmes and virtual meetings. • Microsoft Word management. • Use of webcam and microphone. • Use of web browsers. • File and folder management. • Use of search engines and library data bases.
COURSE DYNAMICS	The course comprises four modules. In each module, theoretical classes will be developed in a synchronous virtual mode, and individual and/or group assessment activities with practical exercises will be provided.

Requirements for
enrolment and permanence

REQUIREMENTS FOR ENROLMENT	The student should have knowledge on electronic spreadsheets.
REQUIREMENTS FOR PERMANENCE	• Attendance 80% • Submit all activities of each module timely and in due form

Thematic modules

1	**Classification of social security benefits**	
	Date:	September 12th, 2023 (10:00 a.m. - 1:00 p.m., Mexico City Time)
	Lecturer:	Dr. Ann Sibelle Rodriguez Mininni (Uruguay)

OBJECTIVE:

Identify the different types of social security benefits.

CONTENT:

1. Social Security foundations related to economic benefits.
2. Finance taxonomy, variants and aspects.

2	**Benefit financing models for Social Security**	
	Dates:	September 14th and 20th, 2023 (10:00 a.m. - 01:00 p.m., Mexico City Time)
	Lecturers:	Dr. Gabriel Badillo (Mexico) Dr. Angel Edoardo Ruíz Buenrostro (Mexico)

OBJETIVO:

Learn how to develop the benefit cost curve of social security that helps to define the optimal financing system.

CONTENT:

1. Economic approach.
2. Legal approach.

3 Actuarial technical aspects

Fechas:	September 22nd, 27th and 29th, 2023 (10:00 a.m. - 01:00 p.m., Mexico City Time)
Docente:	Dr. Luis Arguello (Nicaragua)

OBJECTIVE:

Distinguish the practical actuarial purpose for the proper operation of the social security systems in the region.

CONTENIDO TEMÁTICO:

1. Social Security risk
2. Actuarial approach in Social Security systems.
3. Financing systems from an actuarial perspective
   3.1. In health insurance schemes
   3.2. In pension insurance schemes
   3.3. Occupational risk insurance
4. Actuarial valuation, a tool to determine appropriate benefit financing

4 International experiences and perspectives

Fechas:	October 11th and 13th, 2023 (10:00 a.m. - 01:00 p.m., Mexico City Time)
Docente:	Carlos Contreras (Mexico)

OBJECTIVE:

Evaluate the function of the financing systems over the time, according to the outcome of operations and the theory of the actuarial balance.

CONTENT:

1. Internacional experiences.
2. Perspectives and recommendations on the financing systems.

Assesment and
accreditation requirements

EXPECTED OUTCOME	At the end of the course, the students have acquired a comprehensive understanding of the basics and practical aspects related to the financing of social security systems and will be able to apply this knowledge in different scenarios.
REQUIREMENTS FOR ACCREDITATION	• Assistance 80% • Deliver all proposed activities.

Lecturers' resume

Ann Sibelle Rodriguez

She holds a PhD in research projects with honours in Social Security. Master's Degree in Pension and Pension Funds Management from the Alcalá de Henares University (Spain).

She has served as lecturer in postgraduate studies, thesis tutor and director at the Iberoamerican University Foundation and at the University of Piura in Peru, UCSUR, and Polytechnic University of Catalonia.

For 28 years, she has served as Benefit Manager at the *Caja de Jubilaciones y Pensiones Bancarias* in Uruguay.

Gabriel Badillo

Full-time Appointed "C" Technical Academic of the Economic Research Institute at the National Autonomous University of Mexico (UNAM).

His academic profile is focused on research on labour markets, the Social Security, informal employment, and pension systems.

Specialised in statistical work with microdata, in the development of indicators from household surveys and administrative records, population census, and specialised software used in the statistical analysis, such as SPSS y STATA.

Angel Edoardo Ruiz

Lawyer from the University of Guadalajara (UDG). He holds a Master's Degree in Collective Bargaining and Social Security, and a PhD in Law from the same university. He has completed different majors and diploma courses, such as the 2019 Labour Reform, Protection, Industrial Relations, and American Comparative Law, among others.

He was honoured as the best National Researcher Level 1 of the National System of Researchers of the National Council of Science and Technology (CONACyT) of Mexico during 2020-2025. He is an authorized Lecturer by the Federal STPS. Since 2009 he has been a guest lecturer at more than 15 public and private universities nationally and internationally.

Current General and Legal Manager of *"Grupo Consultor y Asesor Legal Ruiz Moreno, S. C."*

Luis Manuel Arguello

Holds a Bachelor's Degree in Actuarial and Financial Sciences from the National Autonomous University of Nicaragua (UNAN). He holds a Master's Degree in Management and Direction of Health Services from the University of Alcalá de Henares (UAH), and Master's Degree in Applied Economics from the Central American University (UCA).

PhD student in Public Management from the Central American Institute of Public Administration (ICAP).

Lecturer at the UNAN, the UCA and the Institute for Advanced Fiscal Studies.

Since 2008, he has collaborated at the Nicaraguan Social Security Institute, in demography and actuarial activities.

Carlos Contreras

Has a degree in Actuary science from the Faculty of Sciences of the National Autonomous University of Mexico (UNAM), where he haa more than twenty years of teaching experience, teaching subjects such as Insurance Theory, Social Security, Actuarial Applications Seminar, Private Pensions and Databases.

Since 2021 he has been teaching in the curriculum of the Bachelor's Degree in Actuarial Science at the Benemérita Universidad Autónoma de Puebla, Mexico. He has a Master's degree in Management and Direction of Social Security Systems from the Universidad de Alcalá, Spain and a Master's degree in Corporate and Stock Market Finance from the Universidad Anáhuac, Mexico - south campus.

Has directed 1 thesis for the Specialty in Pensions at UNAM and 19 undergraduate theses for the Bachelor's Degree in Actuarial Science, among them: "*Propuesta de un modelo de hipoteca inversa sobre el valor del terreno en la Ciudad de México*", awarded in the insurance category of the 17th Insurance and Bonding Research Award (2010); "*Simulación estocástica de cuentas individuales de ahorro para el retiro en México (comparación de tasas de reemplazo)*", selected for the Colloquium of the International Association of Actuaries held in Lyon, France, in June 2013; and "*Sobre el impacto del bono demográfico en los sistemas de pensiones de la seguridad social*", presented at the International Congress of Actuaries 2018, held in Berlin, Germany.

He has also been a speaker at international congresses such as the "First International Congress on Actuarial Science and Quantitative Finance", held at the Universidad Nacional de Colombia, Bogota in 2014; the Joint IAA Colloquium, held in St. John's, Canada in 2016; and the International Congress of Actuaries 2018, in Berlin, Germany.

Co-author of the Syllabus of the Master's Degree in Actuarial Management of Social Security, which was taught between the Faculty of Economic Sciences of the University of Buenos Aires and the Inter-American Conference on Social Security, where he has worked as a Consultant for the Conference's partner Institutions from 2006 to 2009, as Head of the Academic Division of Actuarial and Financing from 2014 to 2019 and where he currently holds the position of Actuary - Researcher. His main functions are actuarial technical assistance to affiliated social security institutions and research on priority issues.

He also has experience as a teacher and trainer of human capital in social security at international level, in institutions such as: The Panamanian Social Security Fund, the Costa Rican Social Security Fund, the Ministry of Labor and Social Security of Cuba, the International Labor Organization (ILO), among others.

He also provided consulting services in actuarial social security matters to the Instituto Dominicano de Seguros Sociales as Administradora de Riesgos Laborales "Salud Segura" (today Idoppril), to the Instituto de Previsión Social of Paraguay, to the Ministry of Foreign Affairs and the Chamber of Deputies of Mexico, and to the Sindicato de Telefonistas de la República Mexicana, among others.

From March 2011 to February 2013, he served as Secretary General of the Board of Directors of the Mexican Academy of Social Security Law, to which he belongs since 2009.

He has been a member of the Pensions and Social Security Benefits section of the International Association of Actuaries; and he has been a member of the National College of Actuaries, A.C.

Since 2009 he has published several articles in IDC Asesor jurídico y fiscal, and he has several chapters in books and articles in refereed journals.

His most recent publications:
- Desirable model for an egalitarian, fair and sustainable pension system; and.
- Characteristics of pension systems: Classic taxonomies and their conceptual problems, where a new taxonomy is proposed to classify pension systems.
- Edited and published by the Inter-American Conference on Social Security and the Latin American Council of Social Sciences, respectively.

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