



Center for International Programs and Sustainability Studies

Course name: Costa Rican Health Care System and Tropical Medicine

Course code: HIS 3293

Total contact hours: 60 hours

Prerequisite: must be a health sciences student

DESCRIPTION

Costa Rica's healthcare system is unique because it's socialized and has achieved excellent health indicators. The course focuses on the history and development of the public health care system within the context of the Costa Rican socio political and economic situation. It also gives a strong emphasis on how the system works and points out not only the strongholds of the systems, but also its weak points.

During this course we will discuss different tropical diseases, some very common for countries not developed, and strange for people from North America.

Students will learn about the prevention and transmission of relevant tropical diseases.

AUDIENCE

This course is structured for international students attending the Study Abroad Program at an LCI Education university campus. However, courses are not exclusive to foreigners so local degree-seeking students may enroll in this course. Some of the courses are also taught in Spanish as part of our Bachelor's in Sustainability Management or Business Administration programs."

This is a theoretical-practical course and explores/responds to the following inquiry according to the professional/disciplinary profile:

1. **What are the components that make CR Healthcare System a special mode?**
2. **What is etiology, clinical signs, diagnosis, and treatment of some important Tropical Diseases?**

To respond this question, we will study the **following generative** topics:

- Generalities geographic, social, and economic aspects.
- Brief history about the development of healthcare in CR.
- Structure of Costa Rican healthcare system.
- Public healthcare and private.
- How is organized the healthcare system.
- Health aspects, important and basic knowledge.
- Presentation and discussion of different tropical diseases.
- Etiology, clinical signs, diagnosis, and treatment of some important diseases.

Along the course, the following **skills** will be fostered:

- Ability to recognize specific characteristics of Costa Rican population.
- Ability to understand how the Healthcare system works.
- Ability to know the principles or bases of this system.
- Ability to understand basic concepts of anatomy and physiology of human being.
- Ability to identify the etiologic agents, pathophysiology, clinical signs and treatment.
- Ability to discuss about conditions who trigger different diseases.

Among the **values** and **attitudes** that will be promoted among students are the following:

- Teamwork and leadership.
- Systemic thinking.
- Logical and communicative intelligence.
- Problem solving.
- Learning how to learn.

COMPETENCIES, CRITERIA AND EVIDENCE

The competencies for the Veritas University are reflexive and integral actions that respond to the professional profile and to the problems of the context, with suitability and ethical commitment, integrating the know-how, and the knowledge to know in a perspective of improvement.

Below are both the disciplinary and general competencies, linked to their criteria and evidence of performance for this course.

Competencies	Key competences	Learning Assessments
Discipline Analyzes the importance of Health System of Costa Rica, to promote humanism in medical practice, considering the principles of equality, solidarity, universality, and comprehensive care	Recognizes flaws and successes of the system, considering the principles of equality, solidarity, universality, and comprehensive attention	<ul style="list-style-type: none"> ○ Discussion of the topics presented ○ Oral and written presentation of essays
	Recognizes the benefits of the health system according to its structure	<ul style="list-style-type: none"> ○ Study of presented topics ○ Oral and written presentation of essays
	Applies the principles of the CR health system, in a specific context adapted from reality	<ul style="list-style-type: none"> ○ Case studies ○ Research report
Analyses the characteristics of some Tropical Diseases (Tropical Medicine) to promote good preventive practices, according to international health policies.	Evaluates tolerance to tropical diseases considering the clinical manifestations	<ul style="list-style-type: none"> ○ Locate the organs and tissues responsible for damage to the diseases discussed

	Explains the development of tropical diseases according to socio-economic factors	○ Discussion of the topics presented
	Identifies the adequate therapies for control and prevention, considering health policies	○ Discussion of the topics presented
Core/Generic		
Integrates knowledge, skills, and attitudes to learn continuously and through one's life pursuing an efficient development in the knowledge-based society	Learning to learn	○ Research report
Builds the necessary knowledge, skills, and attitudes to learn how to communicate orally and in written form in the different disciplines that make up the curriculum	Communicate thoughts of the discipline orally, iconically, and in written form	○ Thematic discussion
Integrates the necessary knowledge, skills, and attitudes to learn teamwork and leadership techniques.	Execute teamwork and leadership.	○ Collaborative work
Integrates the necessary knowledge, skills, and attitudes to learn interpersonal communication techniques.	Relate well to others Manage and solve conflicts Negotiate reliably and empathetically Speak responsibly Listen attentively	○ Research presentation

COURSE CONTENT

UNIT 1. INTRODUCTION TO COSTA RICA

- a. Course introduction
- b. Costa Rica Generalities
- c. Geography, demography, anthropology
- d. Economy

UNIT 2. COSTA RICA HEALTHCARE SYSTEM HISTORY

- a. Healers in the 19th Century
- b. Medicine and the Liberal State
- c. The foundation of the CCSS

UNIT 3. PUBLIC HEALTH CARE SYSTEM

- a. Structure and functionality of the CCSS
- b. The primary level: EBAIS
- c. Challenges and limitations

UNIT 4. PRIVATE HEALTH CARE SYSTEM

- a. Description of the Private Health Care System
- b. The mix between public and private

UNIT 5. SPECIFIC TOPICS

- a. Risk communities
- b. The Blue Zone

UNIT 6. TROPICAL MEDICINE

- a. Parasites:
 - Ectoparasites and diseases
 - Protozoans and diseases

- Helminthes and diseases
- Larva migrants
- b. Diseases transmitted by vectors:
 - Chagas Disease
 - Malaria
 - Leishmaniasis
 - Dengue
 - Chikungunya
 - Filariasis
- c. Bacterial disease Tuberculosis
- d. Accidental: venomous snakes bites

METHODOLOGY

The methodology is planned as experiential learning from a constructivist perspective and, the competency-based model. Classes try to produce an interactive effect, stimulating the comprehension from the students about themes related with our healthcare system and different tropical diseases.

The participation and direct intervention of the students in discussions allow simple analysis of concepts exposed on class.

Research is important part, the subjects discussed and exhibited in class, should be firstly investigated by the students as a prerequisite to present group work products.

The role of the professor is to mediate, facilitate and guide the teaching and learning process, allowing students to build and self-regulate learning, based on their previous and significant knowledge; the student is active, the teaching-learning process is collective and socialized.

Outdoor activities and field trips, besides to follow a particular objective depends of the topic, are proposed to socialize and understand the Costa Rican citizens, know about our culture and experiences nature.

EDUCATIONAL RESOURCES

To guarantee good development of the course, therefore, to guarantee learning, the following resources are available: an updated bibliographic database, multimedia equipment that students can use for their individual presentations; whiteboards and other school equipment for weekly sessions, and readings provided by the educator. All of these complement the suggested projects and provide the students with higher possibilities of knowledge own ship. Most of the lessons will take place in the classroom. During independent work periods students will be able to attend the institution.

A campus library, study rooms, and computer labs are available for the students' independent work time. Free Wi-Fi connection for students, educators, and staff is provided on campus, which gives students the possibility to work not only in the library or computer labs, but also around campus.

LEARNING ASSESSMENT

Evaluation compiles and evaluates evidence by considering feedback providing pre-established criteria. The course evaluation must be aligned with the competencies and the teaching methodology. There is a rubric for each evaluation resource and the details will be provided in **CANVAS LMS**. Even though the rubric grants a grade, it is also a quantitative and qualitative description of the students' performance. The rubrics include the core and discipline key competences.

ASSIGNMENTS	PERCENTAGE VALUE
Case studies: (15% each) group work <ul style="list-style-type: none"> ○ Comparison between health systems between CR and US ○ Advantages and disadvantages between public health versus private health 	30%
Round table 2 (10% each) group work <ul style="list-style-type: none"> ○ Parasitic diseases ○ viral diseases ○ co assessment 5% ○ self-assessment 5% 	30 %
Field trips reports (4 reports 5% each) <ul style="list-style-type: none"> ○ written report of the analysis of the visits 	20%
Reading Comprehension Reports (2 reports, 10% each)	20%
TOTAL	100%

LEARNING STRATEGIES AND RUBRICS

The following learning strategies will be developed:

1. Case studies

Learning through case studies educates students in three essential aspects: knowledge management, reflective practices, and the ability to adapt to change. Knowledge management seeks that the student acquires strategies and techniques that allow him/her to learn by him/herself; this implies the awareness of assimilation, reflection, and interiorization of knowledge so the student can finally value and deepen from a personal choice. In pairs, students will develop two case studies related to the implementation of health care practices in Costa Rica. Students will develop two Case Studies in groups. The topics they choose should be related to **these general topics**:

- **Case Study 1:** Comparison between health care systems between CR and USA

- **Case Study 2:** Advantages and disadvantages between public health versus private health in Costa Rica

Description:

The cases will be summarized according to the main actors, events, issues, dates and outcomes (and according to answering the following pattern for case study analysis: who was involved, where, when, what happened, how and why?).

The major issues will be highlighted and illustrated with clear examples from the case studies or similar cases. Major events and historic contents will be extracted and discussed for its relevance and meaning. Students will choose the case studies according to their interests.

Students will identify the problematic and major contentious issues, evaluate, discuss, and report on the solvability of the case. **Students should propose at least 3 solutions.** Solutions will be provided based on observations, similar cases, and discussion outcomes.

Instructions:

A written report will be presented including:

- Introduction, content, and conclusions.
- A bibliography (APA format) will be included with at least 5 scholarly resources. It is necessary **to properly intertext cite (using APA style) other authors ideas and complex data even if it is paraphrasing.** At least 12 citations should be included in the text.
- Use times new roman 12 font in 1.5 spacing.
- 6 pages long.

Oral presentation:

- Length of the presentation: 20 minutes

- Visual Aid: PowerPoint, videos, and music
- Every member of the group should present.
- **Include questions and activities for classmate participation.**

2. Debate / round table

A round table dedicates to promote oral expression and exchange ideas according to the themes discussed in class.

A round table dedicates to promote oral expression and investigation about different themes. The idea is that a group of students prepares the topic “Perspectivas regionales del mundo globalizado” to produce ideas y points of view that either agree or disagree to generate new learning. Groups can be formed by 3 to 4 people who will investigate as much information as possible about the assigned topic. Then, they will sit in front of the rest of the class in forming a round table panel. The members of the group must choose a moderator. The moderator begins the round table discussion, informs the class about the topic, introduces the members of the round table group to the class, indicates when each member of the round table will intervene; asks previously planned questions, and takes notes that might work as conclusions. The moderator must be emotionally strong, must be unbiased, and must keep the group united. The moderator usually sits in the middle of the group to keep members focused and keep watch of how people work their goals. Ideally, a round table should last no longer than 45 minutes – 35 minutes to discuss the topics and 5 minutes to draw conclusions.

To run a round table each group must be assigned a topic. The group will investigate on the topic and will choose a moderator. They should also prepare some written information and short lectures through which they will make sure the topic and subtopics are clear for the audience. The group will also generate conclusions and a closure to the discussion. The students must provide evidence of their research through the composition of a written

document that contains at least 3 dependable and reliable references. The document should also include the questions used to generate discussions that will be used in the round table. The students must also provide their classmates with a virtual handout that briefly explains the topic and subtopics of the round table.

3. Field trips

During field trips the students will pay attention to the lectures offered, after that they will prepare a written report according to the analysis of the visit and express opinions interpreting different topics.

The field visits aim to show the student aspects of reality on topics related to the course, offer tools that allow a better vision of specific situations in them, experience a different and direct experience with very specific situations.

During the field trips the student will analyse the information offered and prepared a short report, highlighting the relevant aspects according to the exposed topic. Some fieldtrips would be short half day visits, other would require a complete day, and others will be including more complex training.

Description of the Field Trips

Visit to Museo Calderón Guardia: This is a 1 to 2 hours activity. Students will visit the *Museo Calderón Guardia* at Barrio Escalante in San José. A guide will tour the students around the Museum and will explain the legacy of Dr. Rafael Angel Calderón Guardia, the president who founded *Caja Costarricense del Seguro Social* CCSS. The **objective of this visit** is to learn about the creation and importance of this institution, which is the main pillar of the public healthcare system success in Costa Rica. **Departure time** from Universidad LCI Veritas at 1:00 p.m. **Returning time** to Universidad LCI Veritas 3:00 p.m.

Field Trip to Volcán Irazú and Sanatorio Durán: This is a 6 to 7 hours activity develop in a weekend day. Students will visit first, *Volcán Irazú* in the province of Cartago. Then students will travel to the Sanatorio Durán, to learn about the first tuberculosis Hospital in Central América, created at the begging of the 20th Century. Students will receive a guided visit and explanation. The objective of this fieldtrip is to learn about the advances in medicine Costa Rica was able to implement in the early 1900s, thanks to the implementation of health policies in the government. **Departure time:** 7 a.m. form Universidad LCI Veritas. **Returning time** to Universidad LIC Veritas 3: 00 p.m.

Workshop at Cruz Roja Costarricense: Students will receive a workshop, or training at Cruz Roja Costarricense, metropolitan station in San José. For 3 hours, students will learn about this institution and its importance for the articulation of a good public healthcare system in the country. Also, they will receive a training of workshop. **Departure time:** 1:00 p.m. from Universidad LCI Veritas. **Returning time** to Universidad LCI Veritas 5:00 p.m.

4. Reading Comprehension Report (Oral Presentation)

Students will exercise the capacity of critical thinking, and oral and written expression through the presentation of reports and oral presentations about reading resources. Each student is responsible of presenting two reading comprehension reports. As part of the analysis, they should stimulate classmate's participation through questions and observations.

The analysis of two reading resources (chosen by the students) is going to be represent in class using the following criteria:

- Main purpose of the article and key question.
- A summary of the main ideas and arguments (most important information).
- Critical analysis of the thoughts and ideas offer by the author (point of views, inferences, assumptions and implications).
- If the document accomplishes it purpose. (main conclusion).

- A visual aid as PowerPoint is going to be used to present the analysis.
- 2-3 questions will be presented to the class at the end of the presentation to promote class discussion.

ATTENDANCE

Regarding classes:

1. Students are only allowed a two (2) **non-consecutive (back-to-back) class absences**. A student shall fail the course if more than two absences are registered by the professor. Administration does not control attendance.
2. **Three late arrivals** to class (arrival after the first 15 minutes) are treated as one absence. Attending class 30 minutes late without an official justification will also count as an absence.
3. In the case of an **absence from any assignment evaluated in class** (presentations, evaluations, field trips, etc.) a student will be given a grade of zero unless an official document is presented within **one week** of the absence.
4. If a student presents an official document to excuse the absence, the missed assignment is to be presented on that same day.

Regarding field trips:

5. An unjustified **absence on a field trip** will immediately result in the loss of all points assigned to that specific trip. However, if an official document justifying the absence is presented, 50% of the assignment points may be obtained upon presentation of a complementary research assignment, to be agreed upon with the professor, within one week of the field trip.
6. An absence on a field trip may be justified should two course field trips coincide. In such a case, and to avoid losing points, students shall be able to opt for carrying out a research assignment.

CODE OF CONDUCT

Professors have the right to expel a student from the classroom should he / she/ they:

1. Be disruptive in the classroom.
2. Behave in a disrespectful way.
3. Be under the influence of alcohol.
4. Be under the influence of any illegal drug.
5. Shows hygiene or odor problems that may disturb other students.

ELECTRONIC DEVICES

The use of cell phones, smartphones, or other mobile communication devices is disruptive and is therefore prohibited during class. **Please turn all devices OFF and put them away** when class begins. Devices may be used only when the professor assigns a specific activity and allows the use of devices for internet search or recording. Those who fail to comply with the rule must leave the classroom for the remainder of the class period. Using devices while the professor or other peers are lecturing, or presenting is perceived as a lack of interest and disrespectful.

STUDY ABROAD PROGRAM POLICIES

The student must comply with the provisions of the Study Abroad Program Policies available on the Canvas platform.

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CHRONOGRAM

Week	Key competence	Content	Teaching strategies
1-2	Recognizes flaws and successes of the system, considering the principles of equality, solidarity, universality, and comprehensive attention.	<ul style="list-style-type: none"> a. Course introduction b. Costa Rica Generalities c. some aspects geography, demography, anthropology d. economy e. health indicators 	Discussion of the topics presented.
3-7	Recognizes the benefits of the health system according to its structure	<ul style="list-style-type: none"> a. Costa Rica Health System History b. Public Health System c. Private Health System services d. Meaning of health indicators 	<p>Discussion of the topics presented.</p> <p>Reading Comprehensions</p> <p>Case Studies: Private Health System vrs. Public Health System.</p> <p>Field Trip Reports:</p>

			Museo Calderon Guardia Ebais Sanatorio Durán
8-9	Applies the principles of the CR health system, in a specific context adapted from reality	An Original inhabitant: history and nowadays conditions	Discussion of the topics presented. Case Studies: CR and US health systems.
10	Evaluates tolerance to tropical diseases considering the clinical manifestations.	a. Parasites generalities b. ectoparasites and diseases c. protozoans and diseases d. Helminths and diseases e. Larva migrans	Discussion of the topics presented. Round Tables
11	Explains the development of tropical diseases according to socio-economic factors	Diseases transmitted by vectors Chagas Disease Malaria Leishmaniasis Dengue Chikungunya Filariasis	Discussion of the topics presented Round Tables
12	Identifies the adequate therapies for control and prevention, considering health policies	Bacterial disease: Tuberculosis Accidental: venomous snakes bites Field trip Instituto Clodomiro Picado	Discussion of the topics presented Written presentation of field trip report

