

Education for



Sustainable Development Goals



JSS ACADEMY OF HIGHER EDUCATION & RESEARCH

Teaching & Learning of Activities in Achieving UN Sustainable Development Goals

Teaching & Learning Objective Handbook SDG-1-NO POVERTY

2022

TABLE OF CONTENTS

S NO	CONTENTS	Page No
1	PREFACE	2
2	PREAMBLE	3-4
3	TEACHING & LEARNING OBJECTIVES FOR SDG 1 JSS MEDICAL COLLEGE & HOSPITAL	5-7
4	TEACHING & LEARNING OBJECTIVES FOR SDG 1 JSS DENTAL COLLEGE & HOSPITAL	8
5	TEACHING & LEARNING OBJECTIVES FOR SDG 1 JSS COLLEGE OF PHARMACY-MYSORE	9-10
6	TEACHING & LEARNING OBJECTIVES FOR SDG 1 JSS COLLEGE OF PHARMACY, OOTY	11-13
7	TEACHING & LEARNING OBJECTIVES FOR SDG 1 FACULTY OF HEALTH SYSTEM MANAGEMENT STUDIES	14-15
8	TEACHING & LEARNING OBJECTIVES FOR SDG 1 FACULTY OF LIFE SCIENCES SCHOOL OF LIFE SCIENCES, OOTY	16
9	TEACHING & LEARNING OBJECTIVES FOR SDG 1 SCHOOL OF LIFE SCIENCE, MYSORE DEPARTMENT OF MICROBIOLOGY	17-18
10	TEACHING & LEARNING OBJECTIVES FOR SDG 1 DEPT. OF ENVIRONMENTAL SCIENCES	19-20
11	TEACHING & LEARNING OBJECTIVES FOR SDG 1 DEPT. OF NUTRITION & DIETETICS	21-27
12	TEACHING & LEARNING OBJECTIVES FOR SDG 1 DIVISION OF COGNITIVE NEUROSCIENCE AND PSYCHOLOGY	28-29
13	TEACHING & LEARNING OBJECTIVES FOR SDG 1 DIVISION OF MEDICAL PHYSICS	30-31
15	TEACHING & LEARNING OBJECTIVES FOR SDG 1 DIVISION OF MEDICAL STATISTICS	32-33
16	TEACHING & LEARNING OBJECTIVES FOR SDG 1 DIVISION OF GEOINFORMATICS	34-35
17	TEACHING & LEARNING OBJECTIVES FOR SDG 1 DEPARTMENT OF YOGA	36-37

PREFACE

The United Nations' 2030 Agenda for Sustainable Development was adopted Globally in September 2015. It is underpinned by 17 Sustainable Development Goals (SDGs) and 169 targets and applies to every country. It helps people from various counties to work together to promote sustained and inclusive economic growth, social development and environmental protection and to benefit all, including future generations. The 2030 Agenda for Sustainable Development sets forth "a plan of action for people, planet and prosperity" and "seeks to strengthen universal peace in larger freedom".

This universal agenda requires an integrated approach to sustainable development and collective action, at all levels, to address the challenges of our time, with an overarching imperative of 'leaving no one behind' and addressing inequalities and discrimination as the central defining feature. Many countries, institutions and organisations have already started to translate the new agenda into their development plans, strategies and visions.

JSSAHER'S Social Responsibility is an approach of ethical and intelligent management, which involves both its impact on its human, social and natural context and its active role on the promotion of Sustainable Human Development of the country. Within this approach, "Sustainable Campus" is a strategy that strives to reduce the ecological footprint of the Institution via a rational use of resources and to educate the JSSAHER community on the ethics of sustainability.

Supporting the JSSAHER'S Social Responsibility, the SDG Hand Book explains the SDGs and their connection between the various goals and targets of JSSAHER. It provides a blueprint to help, identify, implement and achieve the Sustainable Development Goals (SDGs) at JSS AHER.

As the process moves towards implementation, there is a need to address the scope and systemic nature of the 2030 Agenda and the urgency of the challenges. This requires a wide range of tools and science-based analysis to navigate that complexity and to realise the ambition. JSSAHER having in place effective governance systems, institutions, partnerships, and intellectual and financial resources favouring effective, efficient and coherent approach for implementation of SDGs.

Dr.B.Suresh
Pro Chancellor
JSS Academy of Higher Education & Research, Mysuru & President, Pharmacy Council of India
New Delhi

https://www.jssuni.edu.in/JSSWeb/WebShowFromDB.aspx?MID=11011&CID=0&PID=10001

PREAMBLE



Education for

Sustainable Development Goals

By 2030, ensure that all learners acquire knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non- violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

Source: The Sustainable Development Goals Report 2022

http://www.un.org/sustainabledevelopment/sustainable- development-goals

Access to Learning objectives for SDG-1
United Nations, n.d.

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY"



End poverty in all its forms everywhere

"Poverty is more than the lack of income and resources to ensure a sustainable livelihood. Its manifestations include hunger and malnutrition, limited access to education and other basic services, social discrimination and exclusion as well as the lack of participation in decision-making. Economic growth must be inclusive to provide sustainable jobs and promote equality." Poverty can be defined as a lack of money and/or vital resources which renders it impossible or challenging for human beings to live with dignity and provide for themselves.

Worldwide, 836 million people still live in extreme poverty. The 2 most affected regions are Sub Saharan Africa and South Asia. In these regions, 70% of the global population lives under the poverty line. Access to education contributes to poverty reduction because an educated population is able to take informed decisions contributing to equal rights, economic and natural resources and to granting basic services for all men and women, including ownership and control over land and property, inheritance, appropriate new technologies and financial services.

OBJECTIVE OF JSS ACADEMY OF HIGHER EDUCATION & RESEARCH TO PROMOTE EDUCATION FOR SUSTAINABLE DEVELOPMENT GOALS OF THE UNITED NATION IS TO MATCH THE TEACHING & LEARNING ACTIVITIES WITH SUSTAINABLE DEVELOPMENT GOALS THROUGH CURRICULUM DEVELOPMENT, ENHANCED RESEARCH AND EXTENDED OUTREACH ACTIVITIES.

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" JSS MEDICAL COLLEGE & HOSPITAL

Subject/ topic/ course in	Pharmacology, Community Medicine, Forensic Medicine,
regular curriculum relating	General Medicine, Obstetrics and Gynaecology, Paediatrics,
to SDG -1	Psychiatry
Cognitive Teaching &	At the end of 2 nd Professional year the learner should be
learningobjectives	able to,
	1. Describe poverty and its impact on health and disease
	2. Describe the indicators of poverty and socioeconomic status assessment scales
	3. Identify, discuss and defend medico-legal, sociocultural,
	economic and ethical issues as it pertains to rights, equity
	and justice in access to health care
	4. Describe the concept of pharmaco-economics
	At the end of 3 rd Professional year part -1, the learner should
	be able to,
	1. Describe social security and social assurance measures
	taken by government to alleviate poverty in India
	2. Understand the economic impact of various communicable
	and non-communicable diseases in various age groups
	3. Describe the role of health insurance in preventing
	catastrophic health expenditure and preventing poverty
	4. Describe various health programs and the facilities
	available under them for people below poverty line
	At the end of final year the learner should be able to,
	 Discuss impact of various ailments on economic status of the family
	2. Describe role of substance use, dependence and abuse in economic downturn of family
	3. Describe the mode of proving health care advise based on the socioeconomic status of a patient with specific illness.

Socio-emotional Teaching &	At the end of final year the student should be able to	
learningobjectives	 Counsel the vulnerable individuals, families and communities on social security and social assistance measures Reflect on how poverty contributes to onset, progression and consequences of various illnesses Support families in poverty alleviation through various government health schemes and programs related to disease Can feel empathy, responsibility and solidarity for people with poverty and its consequences 	
Behavioural Teaching &	At the end of final year the learner should be able to	
learningobjectives		

Topics for SDG-1 No poverty

- 1. Concept, causative factors, and impact of poverty on health and disease
- 2. Classification of socioeconomic status of the families through various scales and identification of families with poverty
- 3. Economic impact of various health problems (Communicable, non-communicable diseases, mother and child health problems and malnutrition)
- 4. Social security and social assistance measures in alleviating poverty and its effects.
- 5. Concept and application of pharmaco-economics in health care
- 6. Various national health programs and schemes for people below poverty line
- 7. Substance use, abuse and dependence and their economic impact
- 8. Health insurance and its importance in reducing catastrophic health expenditure and poverty

Learning approaches and Methods for SDG-1 No Poverty

- 1. Lectures, videos. small group discussions on the concept, causative factors and consequences of poverty
- 2. Calculation of indices of socioeconomic development like human development index, human poverty index etc
- 3. Assessment of socioeconomic status of families using various scales like (modified Kuppuswamy scale, modified BG Prasad scale, standard of living index, poverty line scales etc at hospital and community settings)
 - 4. Case studies on role of poverty in health and disease
- 5. Case based discussions on advising individuals, families and communities on their diet, environmental sanitation and prevention tailored to their economic status.
 - 6. Role plays on impact of poverty on health and diseases
- 7. Lectures, seminars and symposium on various social security, social assistance schemes and provisions under various national health programs for poor and marginalized people
- 8. Videos, role plays on the impact of substance use, abuse and dependence on poverty
- 9. Special lectures/seminar/Symposium on health insurance and its role in preventing poverty
 - 10. Introductory lecture sessions on health economics by experts in the field

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" JSS DENTAL COLLEGE & HOSPITAL

Subject/ topic/ course in regular curriculum relating to SDG 1	 Definition of poverty and poverty line Social sciences and Health. (Poverty, health, and oral Health) Strategies to reduce poverty at local and regional level 	 Dept Of Public health Dentistry III BDS IV BDS INTERNS & PG's 	
Cognitive Teaching & learning objectives	 and can critically reflect on the assumptions and practices. The learner knows about the loc extreme poverty and extreme we The learner knows about causes a distribution of resources and pocaused by natural hazards and cenvironmental degradation and the social protection systems and me 	and impacts of poverty such as unequal ower, colonization, conflicts, disasters other climate change-induced impacts, technological disasters, and the lack of asures.	
Socio-emotional Teaching & learning objectives	 The learner can collaborate wit communities to affect change resources in the community and I The learner can raise awareness and encourage dialogue about so The learner can show sensitivity 	The learner can collaborate with others to empower individuals and communities to affect change in the distribution of power and resources in the community and beyond. The learner can raise awareness about extremes of poverty and wealth and encourage dialogue about solutions. The learner can show sensitivity to the issues of poverty as well as empathy and solidarity with poor people and those in vulnerable	
Behavioural Teaching & learning objectives	 contribute to poverty reduction. The learner can evaluate, partici concerning poverty generation ar The learner can include poverty corruption considerations in their 	ty reduction, social justice and anti-	

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" JSS COLLEGE OF PHARMACY-MYSORE

Subject/ topic/ course in regular curriculum relating to SDG 1	Pharmaceutical Chemistry, Pharmacy Practice, Pharmacology, Pharmacognosy, Pharmaceutics.
Cognitive	At the end of course the learner should be able to,
Teaching & learning	1. Classify and describe the functions of biomolecules and
objectives	micronutrients.
	2. Enlist the diseases caused due to deficiency of micronutrients
	3. Recommended dietary requirements
	4. Understand the importance of Food Safety and its standards as per
	FSSAI
Socio-emotional	At the end of final year, the student should be able to
Teaching & learning	1. Educate the general public regarding malnutrition and its malice on
objectives	the society.
	2. Spread awareness about the government assistances available to the
	vulnerable section of the society.
	3. Can feel empathy, responsibility and solidarity for people with
	poverty and its consequences
Behavioural	At the end of final year, the learner should be able to
Teaching & learning	1. Provide patient counseling and educate them on medicine
objectives	adherence.
	2. Conduct camps in backward areas to educate public regarding the
	correlation of health and wealth.
	3. Conduct outreach activities to address the social stigma of poverty
	and their inclusion in society.
	4. Educate the families below poverty line to obtain benefits of free
	immunization.
	5. Provide health and dietary advise for pregnant, lactating women
	and undernourished children keeping in mind their socioeconomic
	status.

Learning approaches and methods for SDG 1 "No Poverty"

- Develop partnerships between other institutions such as NGO's which are working on eradication of poverty.
- Plan and run an awareness campaign about poverty at the local level
- Plan for street plays depicting the utilization of Jan Aushadhi kendra and generic medicine for the benefit of the poor.
- Conduct a case study on poverty and wealth at the local level through excursions and field trips.
- Develop an enquiry-based project around: "Is poverty increasing or decreasing?"
- Role plays on alcohol abuse and dependence on poverty

topics for SDG 1 "No Poverty" for students' workshop

and gender-sensitive development strategies in entrepreneurship — Reading and under: Governmental measures for the Pro-Poor in health and disease

- Alcohol abuse and its role in economic hardships of family.
- Survey on socioeconomic status of the families through various governmental websites.
- Educating the economically downtrodden regarding the national health programs and schemes
- Concept and application of pharmaco-economics in health care
- Health insurance and its importance in reducing catastrophic health expenditure and poverty
- Work conditions related to poverty such as, child labor and modern slavery Case study
- Unemployment Consequences of poverty such as malnutrition, mortality, and violence Essay & assignments
- Policy frameworks at the local, national and international levels, based on pro-poor and gender-sensitive development strategies Reading and understanding
- Awareness programmes targeting government schemes for self employment.

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" JSS COLLEGE OF PHARMACY, OOTY

Subject/ topic/ course in regular curriculum relating to **Subject:** Pharmacy Ethics & Law SDG 1

II D Pharm

Topic: Disaster management Act

Cognitive Teaching & learning objective:

The learner knows about causes and impacts of poverty such as unequal distribution of resources and power, colonization, conflicts, disasters caused by natural hazards and other climate change-induced impacts, environmental degradation and technological disasters, and the lack of social protection systems and measures.

Socio-emotional Teaching & learning objectives:

The learner can raise awareness about extremes of poverty and wealth and encourage dialogue about solutions.

Behavioural Teaching & learning objectives:

The learner can propose solutions to address systemic problems related to poverty.

IV B Pharm Pharm - VIII Semester

Subject: Dietary supplements and Nutraceuticals

Topic: Public health nutrition

Cognitive Teaching & learning objective:

The learner understands maternal & child nutrition, nutritional education in community.

Socio-emotional Teaching & learning objectives:

• The learner can enhance awareness about the development of nutritional health in society.

Behavioural Teaching & learning objectives:

The learner can also at a stage to resolve the problems related to poverty due to malnutrition in child and maternal women.

I Pharm.D

Subject: Medicinal Biochemistry

Topic: Biomolecules: Introduction, classification, chemical nature and biological role of carbohydrate, lipids, amino acids and proteins.

Cognitive Teaching & learning objective:

 Poverty is one factor for malnutrition. Learners will understand the concept of nutrition and malnutrition.

Socio-emotional Teaching & learning objectives:

The learner can create awareness about the importance of nutritional health among society.

Behavioural Teaching & learning objectives:

Learners will apply and follow the concepts about nutrition and malnutrition. They will raise awareness and guide the public about nutrients.

I B.Pharm-II Semester

Subject: Biochemistry

Topic: Biomolecules: Introduction, classification, chemical nature and biological

role of carbohydrate, lipids, amino acids and proteins.

Cognitive Teaching & learning objective:

- Learners will understand the metabolism of nutrient molecules in physiological and pathological conditions.
- Learners will understand the concept of poverty induced malnutrition.

Socio-emotional Teaching & learning objectives:

• The learner can create awareness about the importance of nutritional health among society.

Behavioural Teaching & learning objectives:

• Learners will apply and follow the concepts about nutrition and malnutrition.

II D.Pharm

Subject: Biochemistry and Clinical Pathology

Topic: Brief chemistry and role of Biomolecules:

Cognitive Teaching & learning objective:

• Learners will understand the association between poverty & malnutrition.

Socio-emotional Teaching & learning objectives:

• The learner can create awareness about the importance of nutritional health among society.

Behavioural Teaching & learning objectives:

• Learners will apply and follow the concepts about nutrition and malnutrition. They will raise awareness among the public.

I D Pharm

Subject: Social Pharmacy

Topic: Role of pharmacist in disaster management

Cognitive Teaching & learning objective:

 The learner knows about causes and impacts of poverty such as unequal distribution of resources and power, colonization, conflicts, disasters caused by natural hazards and other climate change-induced impacts, environmental degradation and technological disasters, and the lack of social protection systems and measures.

II Pharm D

Subject: Community Pharmacy

Topic: Balanced diet, treatment and prevention of deficiency disorders

Cognitive Teaching & learning objective:

• The learner understands the concepts of extreme and relative poverty and can critically reflect on their underlying cultural and normative assumptions and practices.

Behavioural Teaching & learning objectives:

 The learner can propose solutions to address systemic problems related to poverty.

II Pharm D

Subject: Pathophysiology

Topic: Environmental and nutritional diseases - Air pollution and smoking (SO2, NO, NO2 and CO), Protein calorie malnutrition, vitamins, obesity, pathogenesis of starvation

Cognitive Teaching & learning objectives:

- The learner understands the concepts of extreme and relative poverty and can critically reflect on their underlying cultural and normative assumptions and practices.
- The learner knows about causes and impacts of poverty such as unequal
 distribution of resources and power, colonization, conflicts, disasters caused
 by natural hazards and other climate change-induced impacts,
 environmental degradation and technological disasters, and the lack of
 social protection systems and measures.

Behavioural Teaching & learning objectives:

• The learner can plan, implement, evaluate, and replicate activities that contribute to poverty reduction.

IV B Pharm - VIII Semester

Subject: Social and Preventive Pharmacy

Topic: Social and health education: Food in relation to nutrition and health, Balanced diet, Nutritional deficiencies, Vitamin deficiencies, Malnutrition and its prevention.

Topic: Sociology and health: Socio cultural factors related to health and disease, Impact of urbanization on health and disease, Poverty and health **Cognitive Teaching & learning objective:**

• The learner understands the concepts of extreme and relative poverty and can critically reflect on their underlying cultural and normative assumptions and practices.

Behavioural Teaching & learning objectives:

 The learner can propose solutions to address systemic problems related to poverty.

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" FACULTY OF HEALTH SYSTEM MANAGEMENT STUDIES

Subject/ topic/ course in	Business Economics/Managerial and Health Economics/Analysis of Demand
regular curriculum relating to SDG 1	 and Supply/Semester-2-BBAHHSMS/Semester-1-MBAHA and MBAPA Epidemiology/ National health schemes/ Semester3- MBA-Hospital
	Administration
	Medical Insurance/ Topic/ Semester4-MBA-Hospital Administration
	 Business Communication/Communication/Semester-1-MBAHA and MBAPA/Semester-2-BBAHHSM
	Business Law/Consumer Law/Semester-3-BBAHHSM/Semester-4-MBAPA
	 Strategic Management/The concept of environment/ Semester-3- BBAHHSMS/Semester-2-MBAHA and MBAPA.
	 Organizational Behavior/Semester-4-BBAHHSMS/Semester-1-MBAHA and MBAPA
	 Corporate social Responsibility and governance/Importance and role of CSR/Semester-5-BBAHHSMS.
	 HRM/Introduction to HRM/Semester-5-6-BBAHHSM/Semester-2-MBAHA and MBAPA.
	 Marketing Management/Consumer Decision Making/Semester-5-6- BBAHHSM/Semester-1-MBAHA and MBAPA
	 Medical Insurance/Introduction to Insurance/Semester-5- BBAHHSMS/Semester-4-MBAHA
	Entrepreneurship development in BBAHHSM / MBA
Cognitive Teaching & learning objectives	 Entrepreneurship development in BBAHHSM / MBA The learner understands the concepts of national demographics, various global organizations and funding institutions which assist for the flourishment of various business activities Learner knows about various laws pertaining to the governance of law and basic rights. The compensation Act, Consumer Protection Act, Right to Education Act and Right to Information Act. The learner identifies various factors that might lead to poverty conditions such as high health care costs, deprivation of basic needs, sanitation, and ill health Learner also understands on various healthcare schemes currently available from the government and consumer protection acts The learner inculcates entrepreneurial skills for starting own ventures or projects The learner will be able to identify sources of funding for ventures

Hospital Postings





Socio-emotional Teaching & learning objectives

- The learner can get sensitized with the concepts of poverty, unequal distribution of wealth, vulnerable situations with respect to health
- Learners can be aware on issues such as inaccessibility and unaffordability to healthcare among individuals with low Socio-Economic Conditions (SEC)
- Learners can help the eligible in understanding various existing healthcare programs, enrolment, and benefits.

Health Camps at local slum areas





Behavioural Teaching & learning objectives

- Upon identifying few of the underlying conditions for addressing the poverty, learner can plan to develop feasible strategies for addressing poverty issues
- Learner can identify the existing system deficits in terms of poor infrastructure, various laws for refining socio economic conditions of the people and make people aware of those
- Learner also will be confident in planning and recruitment of human resources for an organization, demonstrate good communication skills, identify, and understand various personalities and explore various learning possibilities

Soft Skills Training Program





TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" FACULTY OF LIFE SCIENCES SCHOOL OF LIFE SCIENCES, OOTY

Cognitive Teaching & learning objectives	 The learner understands the concepts of extreme and relative poverty and can critically reflect on their underlying cultural and normative assumptions and practices. The learner knows about the local, national and global distribution of extreme poverty and extreme wealth. The learner knows about causes and impacts of poverty such as unequal distribution of resources and power, colonization, conflicts, disasters caused by natural hazards and other climate change-induced impacts, environmental degradation and technological disasters, and the lack of social protection systems and measures. The learner understands how extremes of poverty and extremes of wealth affect basic human rights and needs.
Socio-emotional Teaching & learning objectives	 The learner can collaborate with others to empower individuals and communities to affect change in the distribution of power and resources in the community and beyond. The learner can raise awareness about extremes of poverty and wealth and encourage dialogue about solutions. The learner can show sensitivity to the issues of poverty as well as empathy and solidarity with poor people and those in vulnerable situations.
Behavioural Teaching & learning objectives	 The learner can plan, implement, evaluate, and replicate activities that contribute to poverty reduction. The learner can evaluate, participate in and influence decision-making concerning poverty generation and eradication. The learner can include poverty reduction, social justice and anti-corruption considerations in their consumption activities. The learner can propose solutions to address systemic problems related to poverty.

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" SCHOOL OF LIFE SCIENCE, MYSORE DEPARTMENT OF MICROBIOLOGY

Subject/ topic/ course in regular curriculum relating to SDG 1

- Environmental Microbiology (BSc V Sem)
- Medical Microbiology, Industrial Microbiology (BSc VI Sem)
- Soil Microbiology & Plant Health; Industrial Microbiology & Fermentation technology (MSc II Sem)

Cognitive Teaching & learning objectives

- The poverty and the demographic implications towards the normal cultural and habitual practices
- Eradication of extreme poverty that includes the study of sufficient nourishment to the society with proper nourishment of planned diet, potable water supply and proper hygienic practices

Socio-emotional
Teaching & learning
objectives

- The learner can create awareness about the economic status of the current scenario which meets the basic requirement of an individual to lead a normal convenient life.
- The learner can collaborate with industries to empower the individuals and communities that brings about a change in the distribution of power and resources in the society.

Behaviorial Teaching & Learning objectives

- The learner can analyze the issues and causes of poverty and find the solutions to overcome the core areas that needs to be addressed.
- The learner can contribute to various decision-making aspects of poverty eradication.
- The learner can propose the plans for the optimum execution that reaches every citizen intended to be in the country.

Learning approaches and methods for SDG 1 "No Poverty"

- Infectious diseases of poverty (IDP) such as diseases prevalent among poorer sections (tuberculosis, malaria, HIV/AIDS and the neglected tropical diseases)
- Research to stop antimicrobial resistance
- Develop malarial vaccines and other endemic diseases
- Discover sustainable antimicrobials to fight poverty

Suggested topics for SDG 1 "No Poverty" for students workshop

- Spirulina & Mushroom cultivation for weaker economic sections
- Epidemiology and control measures for Infectious diseases of poverty
- Prevention of malaria, dengue, and other endemic diseases

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" DEPT. OF ENVIRONMENTAL SCIENCES

Course Name in curriculum relating to SDG 1	 Environmental Awareness (ABC 01) Natural Resource and Management (DSC 02) Eco-Restoration and Development (DSC 11) Environmental Impact Assessment (DSC 12) Environmental Economics and Management (DSC 04)
Cognitive Teaching & learning objectives	 The learner understands the concepts of extreme and relative poverty and can critically reflect on their underlying cultural and normative assumptions and practices. The learner knows about the local, national, and global distribution of extreme poverty and extreme wealth. The learner knows about the causes and impacts of poverty such as unequal distribution of resources and power, colonization, conflicts, disasters caused by natural hazards and other climate change-induced impacts, environmental degradation and technological disasters, and the lack of social protection systems and measures. The learner understands how extremes of poverty and extremes of wealth affect basic human rights and needs.
Socio-emotional Teaching & learning objectives	 The learner can collaborate with others to empower individuals and communities to affect change in the distribution of power and resources in the community and beyond. The learner can raise awareness about extremes of poverty and wealth and encourage dialogue about solutions. The learner can show sensitivity to the issues of poverty as well as empathy and solidarity with poor people and those in vulnerable situations.
Behavioral Teaching & learning objectives	 The learner can plan, implement, evaluate, and replicate activities that contribute to poverty reduction. The learner can evaluate, participate in and influence decision-making concerning poverty generation and eradication. The learner can include poverty reduction, social justice, and anti-corruption considerations in their consumption activities. The learner can propose solutions to address systemic problems related to poverty.

Examples of learning approaches and methods for SDG 1 "No Poverty"

- Develop partnerships between schools and universities in different regions of the country.
- Plan and run an awareness campaign about poverty locally and globally
- Plan and run a student company selling fair trade products
- Plan and implement local service-learning and engagement opportunities for empowering poor people, reducing their vulnerability to different hazards and increasing their resilience – in collaboration with NGOs, the private sector and/or community groups, etc.
- Conduct a case study on poverty and environmental wealth
- Provide internships within organizations addressing socio-economic issues in connected to environmental quality
- Develop an enquiry-based project around: "Is poverty increasing or decreasing?"

SDG 1 "No Poverty" for students' workshop

- Reason for global, national, and local distribution of extreme poverty and extreme wealth and environment case study
- The interrelation of poverty, natural hazards, climate change and other economic, social, and environmental shocks and stresses group exercise, debate, skits, etc.
- Work conditions related to poverty such as, child labor and modern slavery in connection with natural resources – Case study
- Consequences of poverty such as malnutrition, water and environmental quality, mortality, and violence - Essay & assignments
- Policy frameworks at the local, national, and international levels, based on pro-poor and gender-sensitive, environmental development strategies

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" DEPT. OF NUTRITION & DIETETICS

Subject/ topic/ course in	The Course MSc in Nutrition & Dietetics
regular curriculum relating to	All the course units & topics
SDG 1	 Good nutrition promotes good health, which in turn increases
	productivity leading to increased earning capacity & decreased risk of
	poverty.
	 Making headway against undernutrition will have wide-reaching
	consequences for improving health and working to end poverty.
Cognitive	At the end of 1st Professional year the learner should be able to,
Teaching & learning objectives	 Understand the concepts of good health throughout the life cycle, how ill health has impact on work productivity eventually affecting
	economic status and quality of life. the extreme and relative poverty and can critically reflect on their underlying cultural and normative assumptions and practices.
	 know about the current prevalence of disease burden at local,
	national and global levels and its direct / indirect influence on
	individual psychology and work performance.
	At the end of 2 nd year and course the learner should be able to,
	 Know about the situation & strategies to be implemented during
	extreme situations like unequal distribution of resources, climate
	change disaster management caused by natural hazards and
	environmental degradation.
	Understand how extremes the extremes of wealth can influence food
	consumption / lifestyle pattern leading to dual burden of malnutrition.
Socio-emotional	At the end of 2 nd year and course the learner should be able to,
Teaching & learning objectives	·
	 Create nutrition and health awareness, and educate on importance of
	good nutrition for maintaining good health at individual as well as in community at large.
	 Counsel vulnerable population of all age groups / economic conditions
	encouraging them to follow good nutrition and health practices, hence
	promoting their cognitive ability, work capacity and performance.
Behavioural	At the end of 2 nd year and course the learner should be able to,
Teaching & learning objectives	
	Plan, implement, evaluate, and replicate nutritional related action
	plans that contribute to improved economic status.
	Know about the situation & strategies to be implemented during
	extreme conditions like natural calamities, pandemic/endemic
	situations, emergencies
	 Form solution based plans to improve QOL, hence contributing directly/indirectly reducing poverty.

Suggested topics for SDG 2"Zero Hunger"

- The interrelation of poverty, natural hazards, climate change and other economic, social
- and environmental shocks and stresses Group exercise, debate, skits
- Nutrition awareness program & Danning strategies for implementing during extreme
- conditions like natural calamities, pandemic/endemic situations, emergencies
- Consequences of poverty such as malnutrition, mortality, and violence -
- Competitions

Examples of learning approaches and methods for SDG 1 "No Poverty"

- Current prevalence of disease burden at local, national and global levels
- Conceptualization, etiology and consequences of poverty on health and NCDs.
 Classification of socioeconomic status of the families through various scales and identification of families with poverty
- Economic impact of various health problems (Communicable, non-communicable diseases, mother and child health problems and malnutrition)
- Nutrition & food security measures to alleviate poverty and its effects.
- Various national health programs and schemes for people in BPL.

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY"

MSC SPORTS NUTRITION & MANAGEMENT

Subject/ topic/ course in regular curriculum relating to SDG 1	Basics of Management; Finance Management; Principles of marketing; Entrepreneurship Development; Internship
Cognitive Teaching & learning objectives	 At the end of 1st Professional year the learner should be able to Understand the concepts of decision making, leadership, employee motivation and quality management and thus contribute towards increasing the profit of an establishment. Know about the successful business running, the concept of cost, financial accounting and working capital and thus helps in employment generation. At the end of 2nd Professional year the learner should be able to The learner knows necessary knowledge and skills to be an entrepreneur.
Socio-emotional Teaching & learning objectives	 At the end of the program, the student should be able to Collaborate with others to empower individuals and communities to affect change in the distribution of power and resources in the community and beyond. Raise awareness employment opportunities and improvement of one's financial status. The learner can show sensitivity to the issues of poverty as well as empathy and solidarity with poor people and those in vulnerable situations.
Behavioral Teaching & learning objectives	 At the end of the program, the student should be able to Strengthen entrepreneurial quality, plan and implement, activities that contribute to poverty reduction. Evaluate, participate in and influence decision-making concerning poverty generation and eradication. Include poverty reduction, social justice and anti-corruption considerations in their consumption activities. The learner can propose solutions to address systemic problems related to poverty.

Examples of learning approaches and methods for SDG 1 "No Poverty"

- Lectures, videos. small group discussions on the concept, causative factors, and consequences of poverty and overcoming it by knowledge of management and entrepreneurship.
- Case studies on the role of poverty on SHG and small-scale industries
- Plan and implement local service-learning and/or engagement opportunities for empowering poor people, reducing their vulnerability to different hazards and increasing their resilience – in collaboration with NGOs, the private sector and/or community groups, etc.
- Conduct a case study on poverty and wealth in selected countries (through desktop research) or at the local level (through excursions, doing interviews, etc.)
- Provide internships within organizations addressing poverty
- Develop an enquiry-based project around: "Is poverty increasing or decreasing?"

Suggested topics for SDG 1 "No Poverty" for students workshop Suggested

- Definitions of poverty Learning exercise
- The interrelation of poverty, natural hazards, climate change and other economic, social and environmental shocks and stresses on nutrition security – Group exercise, debate, skits
- Policy frameworks at the local, national and international levels, based on p

BSC FOOD, NUTRITION & DIETETICS

Subject/ topic/ course in regular curriculum relating to SDG 1	Introduction to Food Science/ Basics of Nutrition & Dietetics/ Health & Wellness/ Development of value enhanced products/ Food Biotechnology/ Food Processing & Technology/ Public Health & Community Nutrition/ Food & Nutrition Security
Cognitive Teaching &learning objectives	At the end of 1& 2 nd Professional year, the learner should be able to, Understand the need of Food on health and disease addressed at diversified geographic area by different poverty lines Demonstrate the indicators of poverty and socioeconomic status assessment scales Identify and discuss the sociocultural, economic issues pertained to poverty, rights, equity in accessing foods towards health Explain the impact of food / nutrition security and food safety in context to poverty and extremes of wealth affecting basic human rights and needs. Understand the Concept and application of food based approaches At the end of 3 rd Professional year, the learner should be able to, Describe local, national and global nutrition agencies for the extreme health and welfare of individual with different poverty lines Understand the economic impact of various communicable and non-communicable diseases in various age groups Describe the role of impact of traditional low cost foods in context to poverty such as unequal distribution of resources and power, colonization, conflicts, disasters caused by natural hazards and other climate change-induced impacts, environmental degradation and technological disasters, and the lack of social protection systems and measures. Describe various health programs and the facilities available for people under below poverty line At the end of final year the learner should be able to, Discuss the impact of various ailments on economic status of the individual, family and society Describe role of substance use, dependence and abuse in economic downturn of family Describe the mode of proving nutrition services based on the socioeconomic status of a individual with specific illness

Socio-emotional	
Teaching &learning objectives	 At the end of final year the student should be able to Analyze the vulnerable individuals, families and communities on social, food & nutrition security and health assistance measures Illustrates the contribution of poverty towards onset, progression and consequences of various nutrition related health illnesses Support families in poverty alleviation through various government food policies, schemes and nutrition programs related to disease Express empathy, responsibility and solidarity for people with poverty and its consequences Explore food business avenues in context to extremes of poverty and wealth and encourage dialogue about solutions. Establish quality food development to the issues of poverty as well as empathy and solidarity with individuals in vulnerable situations.
Behavioural Teaching & learning objectives	 At the end of final year the learner should be able to Demonstrate various health assessment to understand the socioeconomic status of the family and identification of families below poverty line. Demonstrate nutritional health related advise to the individuals and families with various illnesses suitable for their economic status Provide health and dietary advise for pregnant, lactating women and undernourished children by concerning the socioeconomic status. Plan, implement, evaluate, and replicate nutrition science knowledge towards self empowerment that contributes to poverty reduction.

Examples of learning approaches and methods for SDG1 "NoPoverty"

- 4. Concept, causative factors, and impact of poverty on health and disease
- Economic impact of various health problems (Communicable, noncommunicable diseases, mother and child health problems and malnutrition)
- 6. Concept and application of food based approaches in health care
- 7. Various national health programs and schemes for people below poverty line
- 8. Faulty health practices including Substance use, dependence and its impact on economic

Suggested topics for SDG1 "No Poverty" for students workshop

- Assessment of socioeconomic status of families using various scales like (standard of living index, etc at hospital and community settings)
- Case studies on role of poverty in health and disease
- Case based discussions on advising individuals, families and communities on their diet, environmental sanitation and prevention tailored to their economic status.
- Introductory lecture sessions on nutrition relationship with health economics by experts in the field

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" DIVISION OF COGNITIVE NEUROSCIENCE AND PSYCHOLOGY

Subject/ topic/ course in regular curriculum relating to SDG 1	 Health and Wellness The concept of health, food, nutrition and diet and their role in Malnutrition.
Cognitive Teaching & learning objectives	 The learner understands the concepts of extreme and relative poverty and can critically reflect on their underlying cultural and normative assumptions and practices. The learner knows about the local, national and global distribution of extreme poverty and extreme wealth. The learner knows about causes and impacts of poverty such as unequal distribution of resources and power, colonization, conflicts, disasters caused by natural hazards and other climate change-induced impacts, environmental degradation and technological disasters, and the lack of social protection systems and measures. The learner understands how extremes of poverty and extremes of wealth affect basic human rights and needs.
Socio-emotional Teaching & learning objectives	 The learner can collaborate with others to empower individuals and communities to affect change in the distribution of power and resources in the community and beyond. The learner can raise awareness about extremes of poverty and wealth and encourage dialogue about solutions. The learner can show sensitivity to the issues of poverty as well as empathy and solidarity with poor people and those in vulnerable situations.
Behavioural Teaching & learning objectives	 The learner can plan, implement, evaluate, and replicate activities that contribute to poverty reduction. The learner can evaluate, participate in and influence decision-making concerning poverty generation and eradication. The learner can include poverty reduction, social justice and anti-corruption considerations in their consumption activities. The learner can propose solutions to address systemic problems related to poverty.

Examples of learning approaches and methods for SDG 1 "No Poverty"

Develop partnerships between schools and universities in different regions of the country/ world

Plan and run an awareness campaign about poverty locally and globallyPlan and run a

student company selling fair trade products

Plan and implement local service-learning and/or engagement opportunities for empowering poor people, reducing their vulnerability to different hazards and increasing their resilience – in collaboration with NGOs, the private sector and/or community groups, etc.

Conduct a case study on poverty and wealth in selected countries (through desktop research) or at the local level (through excursions, doing interviews, etc.)

Provide internships within organizations addressing poverty

Develop an enquiry-based project around: "Is poverty increasing or decreasing?"

Suggested topics for SDG 1 "No Poverty" for students workshop

- Definitions of poverty Learning exercise
- Reason for Global, national and local distribution of extreme poverty and extreme wealth Case study
- The interrelation of poverty, natural hazards, climate change and other economic, social and environmental shocks and stresses Group exercise, debate, skits
- Work conditions related to poverty such as , child labour and modern slavery Case study
- · Consequences of poverty such as malnutrition, mortality, and violence Essay & assignments
- Policy frameworks at the local, national and international levels, based on pro-poor and gender-sensitive development strategies – Reading and understanding

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" DIVISION OF MEDICAL PHYSICS

Subject/ topic/ course in regular curriculum relating to SDG 1	Radiation dosimetry and Instrumentation
Cognitive Teaching & learning objectives	 At the end of Professional year the learner should be able to Describe poverty and its impact on health and disease The learner knows about causes and impacts of poverty such as unequal distribution of resources and power, colonization, conflicts, disasters caused by natural hazards The learner understands how extremes of poverty and extremes of wealth affect basic human rights and needs.
Socio-emotional Teaching & learning objectives	Support families in poverty alleviation through various government health schemes and programs related to disease
Behavioural Teaching & learning objectives	 Conduct awareness sessions on various social security, assistance measures and government schemes for people below poverty line. Give health related advise to the individuals and families with various illnesses in a way that is suitable for their economic status

Examples of learning approaches and methods for SDG 1 "No Poverty"

- The learner knows about the local national and global distribution of radiation related instruments including radiation therapy machine(LINAC), cobalt teletherapy machines, brachytherapy units manufactured by several companies like Varian, Elekta, AECL, Pancea...
- The learner understands the extremity of poverty that affect basic human rights and needs that in turn very difficult to defeat the cancer disease because of its high expensive treatment
- The learner can collaborate with others to empower individuals and provide psycho social support to defeat cancer since, people have anxiety ,Socio-economic feelings.
- Case study of cancer patient is must on understanding his/her wealth background
- Educating people about cancer by conducting medical awareness camps conducted in local areas to provide support to end on poverty.

Suggested topics for SDG 1 "No Poverty" for students' workshop

- By encouraging blood donation camps to cancer patients as the patient requires blood transfusion during surgery, chemotherapy and radiation therapy for their treatment purpose in cancer treatment of the below poverty patients.
- Educating people about the government schemes and Health Insurances
- Consequences of poverty such as malnutrition, mortality.
- Policy frameworks at the local, national and international levels, based on pro-poor and gendersensitive development strategies

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" DIVISION OF MEDICAL STATISTICS

Subject/ topic/ course in	Statistical Epidemiology
regular curriculum relating to SDG 1	
Cognitive Teaching & learning objectives	 The learner understands the disease burden patterns that are related to economic development. The learner knows about the local, national, and global distribution of extreme poverty and extreme wealth. The learner understands meaningful metrics to measure how different diseases are related to poverty which are neglected in the current Research & Development system. The Learner understands incidence of poverty is which is measured by measured by the poverty ratio also known as head-count ratio
Socio-emotional Teaching & learning objectives	 The learner can collaborate with others to empower individuals and communities to affect change in the distribution of power and resources in the community and beyond. The learner can raise awareness about extremes of poverty and wealth and encourage dialogue about solutions. The learner can show sensitivity to the issues of poverty as well as empathy and solidarity with poor people and those in vulnerable situations.
Behavioural Teaching & learning objectives	 The Learners can use Mixed effects linear model simple slopes, standard errors, t, and p-values, for the relationship between poverty index and the number of cases. The learner can plan, implement, evaluate, and replicate activities that contribute to poverty reduction. The Learners can know disease burden attributable to risk factors associated with unimproved water and sanitation, as well as child and maternal undernutrition by using different Statistical Methods. The learner can evaluate, participate in and influence decision-making concerning poverty generation and eradication. The learner can include poverty reduction, social justice, and anti-corruption considerations in their consumption activities. The learner can propose solutions to address systemic problems related to poverty.

Examples of learning approaches and methods for SDG 1 "No Poverty"

- ✓ Develop partnerships between schools and universities in different regions of the country/ world.
- ✓ Diseases are related to economic development with the income relation factor (IRF), defined by the ratio of disability-adjusted life-years (DALYs) per 100,000 inhabitants in LMIC versus that in high-income countries.
- ✓ The disease burden varies considerably with the level of economic development, which can be shown by the IRF by calculating median and interquartile range (IQR).
- ✓ Conduct a case study on poverty and wealth in selected countries (through desktop research) or at the local level (through excursions, doing interviews, etc.
- ✓ Develop an enquiry-based project around: "Is poverty increasing or decreasing?"

Suggested topics for SDG 1 "No Poverty" for students workshop

- ✓ The poverty index which can be calculated by using principal components analysis (PCA)
- ✓ The percent of individuals living below poverty, the percent of residents in deep poverty, social
 mobility, the percent of residents with less than a high school diploma, whether a county was classified
 as urban, life expectancy, and the percent of low birth weights-Case Study
- Reason for Global, national, and local distribution of extreme poverty and extreme wealth Case study
- ✓ The interrelation of poverty, natural hazards, climate change and other economic, social, and environmental shocks and stresses Group exercise, debate.

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" DIVISION OF GEOINFORMATICS

Land Use and Land Cover mapping-landutilization
Agricultural land suitability
Climate Change and Food Security
Spatial-Temporal analysis of the poverty using GIS.
At the end of 2nd year the learner should be able to
• Understand the concept of povery and its corelationship with the
existing LULC utilization.
• Discuss the impact of various factory influencing variation in the
spatial-temporal distribution of the poverty.
• explain and identify the optimum utilisation of the land to increase
the productiovity using GIS
Perform and analyse the application of GIS and Remote Sensing
Technology in the analysis of the poverty.
• understand the importance and use of Geospatial Technology to study
and tackle the problems like proerty to achieve SDG.
At the end of final year the student should be able to
Learn ablout the vulnerable society, families and communities using GIS technology.
• Reflect on how poverty contributes to the spatial-temporal variation of the geographical factors and LULC.
Can feel empathy, responsibility and solidarity forpeople
with poverty and its consequences
At the end of the program the learner should be ableto
 Demonstrate various GIS technoques abnd methods to assess the socioeconomic status of the region and identify hotspot areas. Assess the economic impact of various geographical factors Analyse different variables that affect on the economic condition of the sociery or region. propose and create spatial descision support system to solve the inequality in the region using spatial technology.

Examples of learning approaches and methods for SDG 1 "No Poverty."

- 1. Concept, causative factors, and impact of poverty on a spatial variation on LULC
- 2. Climate Change and Food Security for economic development
- 3. Spatial-temporal analysis of the indicators using GIS and Remote Sensing technology
- 4. Assessment of socio-economic indices to study economic development
- 5. Case studies on GIS application on poverty study and its use of GIS in decision support system.

Suggested topics for SDG 1 "No Poverty" for students' workshop

- 1. Concept, causative factors, and impact of poverty on a spatial variation on LULC
- 2. Climate Change and Food Security for economic development
- 3. Spatial-temporal analysis of the indicators using GIS and Remote Sensing technology
- 4. Assessment of socio-economic indices to study economic development
- 5. Case studies on GIS application on poverty study and its use of GIS in decision support system.

TEACHING & LEARNING OBJECTIVES FOR SDG 1 "NO POVERTY" DEPARTMENT OF YOGA

Subject/ topic/ course in	The Course MSc in Yoga
regular curriculum relating to	All the course units
SDG 1	 Yoga promotes good health, which in turn increases productivity leading to increased earning capacity & decreased risk of poverty. Making headway against undernutrition will have wide-reaching consequences for improving health and working to end poverty.
Cognitive	At the end of 1st Professional year the learner should be able to,
Teaching & learning objectives	 Understand the concepts of good health throughout the life cycle, how ill health has impact on work productivity eventually affecting economic status and quality of life. The extreme and relative poverty and can critically reflect on their underlying cultural and normative assumptions and practices. Know about the role of Immune response in disease condition and its direct / indirect influence on individual psychology and work performance. At the end of 2nd year and course the learner should be able to, Know about the situation & implement different financial, marketing strategies during extreme situations like unequal distribution of resources, climate change disaster management caused by natural hazards and environmental degradation. Understand how different lifestyle disorder can be managed by Yoga and its influence health. Understand impact of various health ailments on economic status of the family & society.
Socio-emotional	At the end of 2 nd year and course the learner should be able to,
Teaching & learning objectives	 Create Yoga and health awareness and educate on importance of Yoga practice for maintaining good health at individual as well as in community at large. Counsel vulnerable population of all age groups / economic conditions encouraging them to follow Yoga as a lifestyle module and health practices, by which able to modulate stress and hence promoting their cognitive ability, work capacity and performance of the individual.
Behavioural	At the end of 2 nd year and course the learner should be able to,
Teaching & learning objectives	 Plan, implement, evaluate, and replicate Yoga related action plans that contribute to improved economic status. Know about the situation & strategies to be implemented during extreme conditions like natural calamities, pandemic/endemic situations, emergencies Form solution based plans to improve individual ailments and maintain health and hence contributing directly / indirectly reducing poverty by improving Quality of Life (QOL) of an indivdual in society.

Examples of learning approaches and methods for SDG 1 "No Poverty"

- Concept, causative factors, and impact of poverty on health and disease.
- Current prevalence of disease burden at local, national and global levels
- Conceptualization, etiology and consequences of poverty on health and NCDs.
- Economic impact of various health problems (Communicable, Non-Communicable diseases)
- Yoga education & Yoga implementation by society will help to maintain healthy body & mind and thereby Productivity of an induvial at work will improve and hence Yoga measures will reduce poverty and its effects.
- Various Yoga awareness programme, national health programs and schemes for people

BSC Yoga

Subject/ topic/ course in regular curriculum relating to SDG 1	 The Course BSc in Yoga All the course units Yoga promotes good health, which in turn increases productivity leading to increased earning capacity & decreased risk of poverty.
Cognitive Teaching &learning objectives	 he end of final year the learner should be able to, Implement Yoga for Society and its influence health. Understand impact of various health ailments on the economic status of the family & society.
Socio-emotional Teaching &learning objectives	 the end of final year the student should be able to Create Yoga and health awareness and educate on importance of Yoga practice for maintaining good health at individual as well as in community at large.
Behavioural Teaching & learning objectives	 the end of final year the learner should be able to Form solution based plans to improve individual ailments and maintain health and hence contributing directly / indirectly reducing poverty by improving Quality of Life (QOL) of an indivdual in society.

Llearning approaches and methods for SDG1 "NoPoverty"

- 1. Economic impact of various health problems (Communicable, Non-Communicable diseases)
- 2. Yoga education & Yoga implementation by society will help to maintain healthy body & mind and thereby Productivity of an induvial at work will improve and hence Yoga measures will reduce poverty and its effects.
- 3. Various Yoga awareness programme, national health programs and schemes for people