

Education for

Education
2030 

Sustainable Development Goals

Teaching & Learning Objective Handbook





SUSTAINABLE DEVELOPMENT GOALS

Education for

Sustainable Development Goals

Teaching & Learning Objective Handbook

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: United Nations, 2015](#)

PREFACE/ FOREWORD

JSS College of pharmacy, Mysuru imparts quality education and training in the field of Pharmacy to a plethora of student community hailing from different diaspora of the country and the world. The imparted education and training not only cover the set programme objectives of pharmacy but also addresses the United Nations agenda of Sustainable Development Goals. In this regard, the hand book is designed to map the course contents of different programmes and specializations of pharmacy and its role in achieving the sustainable development goals. With this an overall impact of the course content on the cognitive, socio-emotional and behavioral aspects of the students can be gauged and further lacuna shall be addressed by additional activities. The main goal of the hand book is to impart knowledge and bring change in the ideology of the stakeholders to imbibe certain practices in their daily lives to have a positive impact on the achievement of SDG's.



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INTRODUCTION

The Sustainable Development Goals – an ambitious and universal agenda to transform our world On 25 September 2015, the UN General Assembly adopted the 2030 Agenda for Sustainable Development (UN, 2015). This new global framework to redirect humanity towards a sustainable path was developed following the United Nations Conference on Sustainable Development (Rio+20) in Rio de Janeiro, Brazil in June 2012, in a three-year process involving UN Member States, national surveys engaging millions of people and thousands of actors from all over the world.

At the core of the 2030 Agenda are 17 Sustainable Development Goals (SDGs). The universal, transformational and inclusive SDGs describe major development challenges for humanity. The aim of the 17 SDGs is to secure a sustainable, peaceful, prosperous, and equitable life on earth for everyone now and in the future. The goals cover global challenges that are crucial for the survival of humanity. They set environmental limits and set critical thresholds for the use of natural resources. The goals recognize that ending poverty must go together with strategies that build economic development. They address a range of social needs including education, health, social protection, and job opportunities while tackling climate change and environmental protection. The SDGs address key systemic barriers to sustainable development such as inequality, unsustainable consumption patterns, weak institutional capacity, and environmental degradation.

For the goals to be reached, everyone needs to do their part: governments, the private sector, civil society and every human being across the world. Governments are expected to take ownership and establish national frameworks, policies, and measures for the implementation of the 2030 Agenda.

A key feature of the 2030 Agenda for Sustainable Development is its universality and indivisibility. It addresses all countries – from the Global South and the Global North – as target countries. All countries subscribing to the 2030 Agenda are to align their own development efforts with the aim of promoting prosperity while protecting the planet to achieve sustainable development. Thus, with respect to the SDGs, all countries can be considered as developing and all countries need to take urgent action.

The 17 Sustainable Development Goals (SDGs)

No Poverty – End poverty in all its forms everywhere

Zero Hunger – End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Good Health and Well-Being – Ensure healthy lives and promote well-being for all at all ages

Quality Education – Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Gender Equality – Achieve gender equality and empower all women and girls

Clean Water and Sanitation – Ensure availability and sustainable management of water and sanitation for all

Affordable and Clean Energy – Ensure access to affordable, reliable, sustainable, and clean energy for all

Decent Work and Economic Growth – Promote sustained, inclusive, and sustainable economic growth, full and productive employment and decent work for all

Industry, Innovation and Infrastructure – Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Reduced Inequalities – Reduce inequality within and among countries

Sustainable Cities and Communities – Make cities and human settlements inclusive, safe, resilient and sustainable

Responsible Consumption and Production – Ensure sustainable consumption and production patterns

Climate Action – Take urgent action to combat climate change and its impacts

Life below Water – Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Life on Land – Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Peace, Justice and Strong Institutions – Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Partnerships for the Goals – Strengthen the means of implementation and revitalize the global partnership for sustainable development

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



SDG 1 – NO POVERTY



End poverty in all its forms everywhere

Teaching & Learning objectives for SDG 1 “No Poverty”

Subject/ topic/ course in regular curriculum relating to SDG 1	Pharmaceutical Chemistry, Pharmacy Practice, Pharmacology, Pharmacognosy, Pharmaceutics.
Cognitive Teaching & learning objectives	At the end of course the learner should be able to, <ol style="list-style-type: none">1. Classify and describe the functions of biomolecules and micronutrients.2. Enlist the diseases caused due to deficiency of micronutrients3. Recommended dietary requirements4. Understand the importance of Food Safety and its standards as per FSSAI
Socio-emotional Teaching & learning objectives	At the end of final year, the student should be able to <ol style="list-style-type: none">1. Educate the general public regarding malnutrition and its malice on 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 Teaching & learning objectives	At the end of final year, the learner should be able to <ol style="list-style-type: none">1. Provide patient counseling and educate them on medicine 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

Suggested topics for SDG 1 “No Poverty” for students' workshop

- 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.

SDG 2 - Zero Hunger



End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Teaching & Learning objectives for SDG 2 “Zero Hunger”

Subject/ topic/ course in regular curriculum relating to SDG 2	Biochemistry, Human anatomy and Physiology, Therapeutics, Pharmacognosy
Cognitive Teaching & learning objectives	At the end of final year, the learner should be able to, <ul style="list-style-type: none"> 1. Types of food and its nutrient values 2. The causes and consequences of malnutrition and related diseases 3. Medicinal Plant cultivation and its applications
Socio-emotional Teaching & learning objectives	At the end of final year, the learner should be able to <ul style="list-style-type: none"> 1. Provide Counseling to the patients with malnutrition and also to provide necessary inputs in diet control for individuals with obesity, diabetes etc 2. Council pregnant and lactating woman about their special dietary requirements
Behavioural Teaching & learning objectives	At the end of final year, the learned should be able to <ul style="list-style-type: none"> 1. Conduct health education sessions at community pharmacies 2. To educate the patients about healthy diet and its benefits 3. Organize seminars to educate the public regarding the mitigation of food wastage 4. Educate budding entrepreneurs regarding value addition via food processing and bridging the gap between overproduction and shortage of fruits and vegetables

Suggested topics for SDG 2 “Zero Hunger”

1. Role of various biochemical pathways in maintaining good health
2. Effects of balanced diet in malnutrition
3. Environmental science for improving the agricultural outputs

Examples of learning approaches and methods for SDG 2 “Zero Hunger”

1. Displaying Zero hunger posters in boys & girls hostel mess and in canteen.
2. Donating one day food to “Akshaya pathra” Foundation to symbolize our commitment toward the SDG 2.
3. Creating a short video to bring awareness about SDG 2 and display it in the college. (Lobby area T.V).
4. Awareness programme in annual NSS camp depicting food wastage.
5. Educate the public regarding certain government scheme towards eradicating malnutrition.

SDG 3 - Good Health and Well-being



Ensure healthy lives and promote well-being for all at all ages

Teaching & Learning objectives for SDG 3 “Good Health & Well being”

Subject/ topic/ course in regular curriculum relating to SDG 3	All Pharmacy Practice Subjects, Human anatomy & physiology, Biochemistry, Microbiology, Pharmaceutical formulations, Biopharmaceutics & pharmacokinetics
Cognitive Teaching & learning objectives	<p>On completion of the course the learner should be able to,</p> <ul style="list-style-type: none"> 1. Define health and well-being, describe the concept of dimensions, determinants, and positive health 2. Understands the anatomical, physiological, and biochemical basis of health and well-being. 3. Understand the concept of disease and illness, natural history of disease, dynamics of disease transmission, concepts of prevention and control. 4. Discuss the etiology and pathogenesis and diagnosis of various diseases 5. Understand environmental problems and be motivated to participate in environment improvement and protection, as well as prevent environmental pollution. 6. Discuss the microbiological basis of causation of various communicable diseases and their diagnosis 7. Describe the role of drugs/medicines in the prevention & treatment of various diseases including their pharmaco-kinetics and pharmacodynamics. 8. Formulate different dosage forms and evaluate them for their quality. 9. Understand the therapeutic approach to management of diseases referencing available evidence, prepare & implement individualized therapeutic & pharmaceutical care plans and monitor therapy. 10. Identify herbal drugs & isolate the phytoconstituents, and understand the preparation & development of herbal formulations. 11. Understand the pharmaceutical legislations for development & marketing of pharmaceuticals & regulatory agencies governing sale of pharmaceuticals, and the code of ethics for practice of pharmacy

	<p>12. Understand the various drug distribution methods & manufacturing formulations in a hospital set-up, and professional management skills in a community pharmacy including stores management & inventory control</p> <p>13. Understand the drug development process and conduct clinical trials in accordance with regulatory and ethical requirements and promote quality clinical trials.</p> <p>14. Discuss objectives, scope, strategies and provisions under various national health programs and schemes against communicable, non-communicable diseases in India.</p> <p>15. Understand the different pharmacoepidemiologic and pharmacoeconomic research methods and conduct such research to evaluate risk-benefit & cost-benefit ratios</p>
Socio-emotional Teaching & learning objectives	<p>On completion of the course, the learner should be able to</p> <ol style="list-style-type: none"> 1. Communicate with individuals, families and communities on prevention of diseases, promotion of healthy lifestyles and enhance health seeking behavior at community setting 2. Effectively communicate with patients attending the health centers with various illnesses 3. Counsel the patients on treatment options, medication adherence, behavioral modifications and care during special circumstances 4. Provide pharmaceutical care with compassion by applying the principles of ethics, empathy, humanism, altruism and professionalism 5. Counsel the individuals and families on care during pregnancy, child care, infant feeding practices, family welfare services, care of elderly and other vulnerable individuals.
Behavioural Teaching & learning objectives	<p>On completion of the course, the learner should be able to</p> <ol style="list-style-type: none"> 1. Organize health education sessions at community settings on prevention and control of various predominant health problems in the community. 2. Demonstrate the skills of medication history taking, treatment chart review, and provision of pharmaceutical care for various communicable and non-communicable diseases at any health care settings. 3. Demonstrate the skills in care of women during pregnancy, child birth and post-natal period including breast feeding and family planning 4. Exhibit the skills in managing health issues in special circumstances like disaster, outbreak, epidemic, pandemic, road traffic accidents etc. 5. Prepare and dispense medications with highest quality standards to safeguard the health of the public.

Suggested topics for SDG 3 “Good Health and Well-being”

1. Health Education
2. Structure and functioning of human body, including biochemical basis of functions in human body.
3. Concepts of pathological and microbiological basis of disease causation
4. Concept of disease, natural history of diseases, dynamics of disease transmission, risk factors levels of prevention and modes of intervention for various communicable and non-communicable diseases
5. Concepts in pharmacotherapeutic management of various diseases and their role in preventive domain.
6. Epidemiological and control measures including the use of essential laboratory tests at the for communicable diseases and non-communicable diseases including relevant national health programs.
7. Health care during special circumstances like disaster, epidemic, pandemic etc.
8. Hospital, Hospital Pharmacy & its organization, community pharmacy management, clinical pharmacy
9. Medication History Interview, Treatment Chart Review, laboratory diagnosis, treatment and prevention of various health problems at health care settings
10. Pharmacokinetics, bioavailability & bioequivalence
11. Drug Dosing in special populations
12. Health problems in elderly (Osteoarthritis, IHD etc.,) and their management
13. Environmental & nutritional diseases
14. Psychiatric disorders
15. Plant products
16. Communication skills
17. Guidelines in Clinical Research, Concept of risk and measurement of outcomes in pharmacoepidemiology

Examples of learning approaches and methods for SDG 3 “Good Healthand Well-Being”

1. Videos, group discussion, role plays on various health problems and their prevention
2. Group discussions, simulation exercises to understand human anatomy and physiology
3. Problem based learning, Team Based Learning, Community based learning sessions to understand the causation, diagnosis and prevention of various health problems in different age groups
4. Laboratory based exercises in identification of biochemical, pathological, microbiological basis of diseases.
5. Model making, animal simulation, drug stations and prescription analysis in understanding pharmacological aspects of treatment and prevention
6. Problem based learning to develop individualized drug dosing regimens
7. Case-based learning sessions on history taking, clinical examination, diagnosis, treatment and prevention of various communicable, non-communicable diseases including mother and childcare
8. Visit to primary health centers, community health centers, district hospitals, NGOs, Anganwadi to understand health care delivery system in India
9. Observation of days of public health importance like World Health Day, World Environment, TB, Tobacco cessation day, Hypertension, Diabetes, Cancer, AIDS, Leprosy Days etc to create awareness about their importance
10. Reflective writing, portfolios, storytelling, case scenario-based discussion, role plays, clinical encounters to impart attitudinal and communication skills including medical humanities
11. Skills and simulation lab-based teaching of Basic life support and advanced cardiac life support.

SDG 4 - Quality Education



Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Teaching & Learning objectives for SDG 4 “Quality Education”

Subject/ topic/ course in regular curriculum relating to SDG 4	Pharmaceutics, Pharmacology, Pharmaceutical chemistry, Pharmaceutical Analysis, Pharmacy Practice, Pharmacognosy
Cognitive Teaching & learning objectives	<p>At the end of final year, the learner should be able to,</p> <ul style="list-style-type: none"> • Differentiate between the foundational and advanced courses • Describe the importance of primary education at the rural settings • Identify themselves whether they are the first-generation graduates • List out the barriers/lacunas in achieving 100% literacy • Gender inequalities in obtaining higher education in rural setup
Socio-emotional Teaching & learning objectives	<p>At the end of final year, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Understand the role of education in imparting emotional self-awareness, emotional self-regulation, social awareness and interpersonal relationships 2. Recognize the importance of psychosocial well-being of the individual at university education irrespective of gender. 3. Investigate the association of socio-economic status with students' social emotional competence, strengths and difficulties. 4. Learn to self-monitor their feelings and develop strategies to change their emotional state 5. Apply decision-making skills to deal with daily academic and social responsibilities 6. Understand the need for learning systems to match to rapidly changing world with technological shifts, global integration and climate pressures
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Correlate the importance of providing appropriate learning environment at educational institute (for those seeking special needs, gender sensitive, safer) on the learning outcomes. 2. Appraise the effects of rapid technological advancements on the opportunities and challenges in quality of education especially in rural population and vulnerable population. 3. Appreciate the need for ensuring safe, gender separated accessible sanitation facilities on percentage of women opting for higher education

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| | <ol style="list-style-type: none"> 4. Respond to technology revolution in educational and learning systems as today's skills will not match the jobs of tomorrow and newly acquired skills may quickly become obsolete 5. Ensure the importance of right to safe, quality education and learning throughout life, based on the principles of non-discrimination, gender equality and equal opportunity for all |
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Suggested topics for SDG 4 “Quality Education”

- 1. Eradication of illiteracy through formal and non-formal education
- 2. Technology integration in teaching-learning
- 3. Safer learning environment for all
- 4. Life-long learning and continuous skill upgradation
- 5. Gender equality at work place
- 6. Vocational education and training
- 7. Governments, private sector and philanthropic organizations support schemes related to quality education

Examples of learning approaches and methods for SDG 4 “Quality Education”

- 1. Awareness programs on the challenges in achieving 100% literacy
- 2. Workshops on the integration of technology to match the global standards
- 3. Encouragement in overall personality development of students
- 4. Ensuring safer and non-discriminative learning environments
- 5. Scholarship schemes for facilitating economic challenges
- 6. Participating in national and international conferences related to quality education and health
- 7. Integration of SDGs into curriculum
- 8. Direct and indirect correlation of research outcomes to achieve quality education

SDG - 5 Gender Equality



Achieve gender equality and empower all women and girls

Teaching & Learning objectives for SDG 5 “Gender Equality”

Subject/ topic/ course in regular curriculum relating to SDG 5	<ul style="list-style-type: none"> • Pharmaceutical Chemistry, Pharmacy Practice, Pharmacology, Pharmacognosy, Pharmaceutics
Cognitive Teaching & learning objectives	<p>At the end of the course, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Classify and describe the functions of biomolecules and micronutrients required for women's health 2. Enlist the common diseases affecting women 3. Recommended dietary requirements for women during pregnancy and lactation 4. Describe the myths, beliefs, local customs and practices during menstruation
Socio-emotional Teaching & learning objectives	<p>At the end of the final year, the student should be able to</p> <ol style="list-style-type: none"> 1. Educate women regarding proper menstrual hygiene. 2. Spread awareness about the government assistances available to the women of the society for their financial betterment and improvement of health and hygiene. 3. Can feel empathy for the community with gender inequality and discrimination 4. Counsel the community on gender issues and the stigma associated, which can reflect on gender identity and gender issues.
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ol style="list-style-type: none"> 1. Provide education and create awareness on prevention and redressal of sexual harassment 2. Promote female faculty to conduct camps in backward areas to educate public regarding the women empowerment. 3. Conduct outreach activities to address the social stigma of gender identity disorders and their inclusion in society. 4. Educate the families on family planning and the imbalance in sex ratio 5. Counsel women regarding the disease, drugs and lifestyle modifications in women. 6. Ensure equal representation of women in all committees of the institution.

Suggested topics for SDG 5 “Gender Equality”

1. Gender as a social and cultural construct
2. Gender equality and participation in decision-making
3. Women empowerment and its advantages
4. Declining sex ratio, gender preferences and gender discrimination in health, education, social participation and decision making
5. Exploitation and trafficking of women and girls
6. Gender identity disorders, their diagnosis and management
7. Prevention, prohibition and redressal of sexual/gender harassment at all places
8. Gender specific national health programs and policies (RNMCH+A, RBSK, RSSK, etc.)
9. Sexual offenses, various sections of Indian Penal Code

Examples of learning approaches and methods for SDG 5 “Gender Equality”

1. Observation of International women day
2. Case based discussion on gender identity disorders
3. Awareness programme on declining sex ratio and its impact on society
4. Interdisciplinary teaching sessions on legal aspects related to gender equality
5. Visit to health centers at various levels to understand the implementation of gender specific national health programs and policies
6. Role plays/extracurricular (Competitions) activities on sexual and gender harassment and ways to overcome them
7. Project works on women/girls’ health, domestic violence, gender discrimination and gender equality
8. Student driven debates, panel discussion and symposium on various aspects of gender equality.

SDG 6 - Clean Water and Sanitation



Ensure availability and sustainable management of water and sanitation for all

Teaching & Learning objectives for SDG 6 “Clean Water and Sanitation”

Subject/ topic/ course in regular curriculum relating to SDG 6	<ul style="list-style-type: none"> • Anatomy Physiology and health education, Pharmaceutical Inorganic Chemistry, Pathophysiology, Environmental Sciences, Pharmaceutical Microbiology Social and preventive Pharmacy
Cognitive Teaching & learning objectives	<p>At the end of 1st year, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Explain the concept of health education 2. Acquire knowledge on different types fluids and importance of major and minor electrolytes 3. Explain the etiology, signs and symptoms, and clinical interpretation of gastrointestinal disorders 4. Develop an attitude of concern for the environment. 5. Acquire skills to help the concerned individuals in identifying and solving environmental problems. <p>At the end of 2nd year, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Explain the classification of bacteria's, sterilization process and ways to prevent microbial contamination 2. Explaining the mode of action, factors influencing and efficiency evaluation of disinfectants, antiseptics, bacteriostatic and bactericidal agents 3. Explain about the microbial spoilage and preservation techniques. 4. Explain the cultivation, collection, processing and storage of natural drugs <p>At the end of final year, the learner should be able to</p> <ol style="list-style-type: none"> 1. Explain the importance of patient counselling and education and training programs for pharmacists 2. Explain the causes and evaluation of diseases and public health. 3. Describe the preventive measures of life-threatening diseases 4. Explain the importance and execution of the health promotion and education programs in schools

Socio-emotional Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ol style="list-style-type: none"> 1. Create the awareness about environmental problems among learners. 2. Impart basic knowledge about the environment and its allied problems. 3. Take part in community activities of improving water and sanitation management 4. Able to explain about water pollution, water access and water saving measures 5. Counsel the individuals and families on using clean water and environmental sanitation 6. Communicate with families on importance of waste disposal 7. Can feel empathy, responsibility and solidarity for and with people for sanitation and hygiene.
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ol style="list-style-type: none"> 1. Participate in environment protection and environment improvement. 2. Undertake health awareness activities on water and sanitation at community setting 3. Impart appropriate advice on prevention of water and sanitation related advices 4. The learner can plan, implement, evaluate and replicate activities that contribute to increasing water quality and safety. 5. The learner can evaluate, participate in and influence decision-making on management strategies of local, national and international enterprises related to water pollution.

Suggested topics for SDG 6 “Clean Water and Sanitation”

1. Basic concepts of personal hygiene and environmental sanitation
2. Effect of microorganisms in water contamination
3. Role of individuals in applying good sanitary practices towards achieving good health and its barriers
4. Hazards of air, water and soil pollution.
5. Concepts of safe water, sources of sanitary water with water purification process
6. Standards of water quality with methods of water conservation and rainwater harvesting
7. Epidemiology, clinical features, diagnosis and management of water borne and water related diseases
8. Concept of waste management including solid waste, human excreta and sewage disposal
9. Unscientific use of Insecticides and Pesticides
10. Solid and liquid waste management
11. Sanitation measures of schools, swimming pools, slaughter houses, market places and hostels.

Examples of learning approaches and methods for SDG 6 “Clean Water and Sanitation”

1. Case studies, poster competition, essay writing on the causes, consequences and impact of clean water and sanitation
2. Periodic monitoring of potability of the water supplied through all installed apparatus.
3. Conduct an awareness program on judicious use of water in laboratories and lavatories in JSS College of Pharmacy, Mysuru.
4. Observation of community associated work on clean water and sanitation.
5. Family health advisory survey
6. Case based discussions on water borne diseases.
7. Awareness programmes in villages in achieving open defecation free status.
8. Assessment of hygiene of individual, family and community, planning the health sessions of the same.
9. Academic visit to water treatment plant, sewage treatment plan, swimming pool market places to understand their sanitation conditions
10. Observation of world water day and world environment days

SDG 7 - Affordable and Clean Energy



Ensure access to affordable, reliable, sustainable and clean energy for all

Teaching & Learning objectives for SDG 7 “Affordable and Clean Energy”

Subject/ topic/ course in regular curriculum relating to SDG 7	Pharmaceutical Chemistry, Pharmacy Practice, Pharmacology, Pharmacognosy, Pharmaceutics.
Cognitive Teaching & learning objectives	<p>At the end of course the learner should be able to,</p> <ol style="list-style-type: none"> 1. Understand the importance of affordable and clean energy 2. Conservation of energy. 3. Describe the concept of energy conservation. 4. Understand the effect of Affordable and Clean Energy towards healthy living.
Socio-emotional Teaching & learning objectives	<ol style="list-style-type: none"> 1. At the end of final year, the student should be able to 2. Practice and implement energy conservation. 3. Educate the individuals, families and communities on health problems related to non-availability of clean energy. 4. Spread awareness regarding the advantages of renewable vs non-renewable source of energy. 5. Advocate for affordable and clean energy.
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ol style="list-style-type: none"> 1. Adopt the usage of various affordable energy sources at individual, family and community levels. 2. Evaluate the accessibility of clean energy (renewable energy) of individual, family and community. 3. Conduct awareness sessions at community level on causes, effect on health related to non-availability of clean energy. 4. Conduct Energy Audit at institutional level to understand the energy consumption.

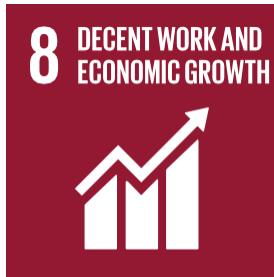
Suggested topics for SDG 7 “Affordable and Clean Energy”

1. Different energy types, especially renewable solar energy
2. Concept of greenhouse effect and their importance at state, national and international levels.
3. Bridging technologies and technology for a ‘cleaner and judicious’ use of fossil fuels.
4. Understand the effect of Affordable and Clean Energy towards healthy living.
5. Identify the health hazards related to Affordable and Clean Energy.
6. Socio-cultural factors influencing the availability of clean energy sources
7. Political and financial factors affecting the affordability of clean energy
8. Assessment methods for clean energy sources at individuals and Public.

Examples of learning approaches and methods for SDG 7 “Affordable and Clean Energy”

1. Advocate the use of renewable sources instead of non-renewable at individual, family and community level
2. Energy efficiency and sufficiency in its usage.
3. Visiting sewage treatment and water recycling centres.
4. Extempore and Essay writing on the causes, consequences and impact of environmental pollution
5. Run a group project on how much energy is required to produce our daily needs.

SDG 8 - Decent Work and Economic Growth



Promote sustained inclusive and sustainable economic growth, full and productive employment, and decent work for all

Teaching & Learning objectives for SDG 8 “Decent Work and Economic Growth”

Subject/ topic/ course in regular curriculum relating to SDG 8	Pharmaceutical Chemistry, Pharmacy Practice, Pharmacology, Pharmacognosy, Pharmaceutics.
Cognitive Teaching & learning objectives	<p>At the end of course the learner should be able to,</p> <ol style="list-style-type: none"> 1. Understand the concepts of innovator and generic drugs, drug development process. 2. Practice experiential learning 3. Understand how innovation and entrepreneurship can contribute to decent work. 4. Know scheduled activities in a pharmaceutical firm. 5. Understand the role of enterprise in national and global economy 6. Understand the regulatory Requirements for nutraceuticals 7. Develop soft skills for effective communication (Verbal and Non-Verbal) 8. Have a critical way of thinking based on current healthcare development.
Socio-emotional Teaching & learning objectives	<p>At the end of final year, the student should be able to</p> <ol style="list-style-type: none"> 1. Educate the general public regarding entrepreneurship development 2. Spread awareness about the gender equality at the work place. 3. Provide quality pharmaceutical care and comprehensive patient care services 4. Implement Good Regulatory Practices in the Healthcare and related Industries 5. Discuss the clinical controversies in drug therapy and evidence-based medicine
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ol style="list-style-type: none"> 1. The learner can plan and implement entrepreneurial projects 2. Provide integrated, critically analysed medicine and poison information to enable healthcare professionals in the efficient patient management 3. Appreciate and conduct the clinical trials activities 4. Promote entrepreneurship in students to create job opportunities 5. Improve training and placements at the college level.

Suggested topics for SDG 8 “Decent Work and Economic Growth”

- Develop institution and industry partnership to increase placement.
- Generic drugs, drug development process.
- Career opportunities for the students after under graduation and post-graduation in various fields
- Role plays on alcohol abuse and dependence on economy.
- Develop Leadership qualities and essentials

Examples of learning approaches and methods for SDG 8 “Decent Work and Economic Growth”

- Plan and implement entrepreneurial and social entrepreneurial projects
- Run student internships in conjunction with local businesses
- Explore needs and perspectives of employers and employees through interviews
- Engage with employers to nourish budding entrepreneurs at college level.
- Develop an enquiry-based project

SDG 9 - Industry, Innovation and Infrastructure



Build infrastructure, promote inclusive and sustainable industrialization and foster innovation

Teaching & Learning objectives for SDG 9 “Industry, Innovation and Infrastructure”

Subject/ topic/ course in regular curriculum relating to SDG 9	<ul style="list-style-type: none"> • Pharmaceutics, Human Anatomy & Physiology, Biochemistry, Pharmacology, Industrial pharmacy-I, Cosmeceuticals, Instrumental method of analysis, Microbiology and Biotechnology, Pharmaceutical Engineering
Cognitive Teaching & learning objectives	<p>At the end of 1st Professional year, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Describe and explain preparation of dosage forms 2. Discuss conduction of experiments on quantification of drug substances 3. Describe classification of dosage forms and route of administration. 4. Define and discuss the methods of storage various dosage forms 5. Describe the applications of computer in pharmacy <p>At the end of 2nd Professional year, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Enumerate recent advancement in drug delivery and their evaluation 2. Describe the techniques to Improve the solubility of drugs 3. Demonstrate the use of physicochemical properties of drugs in the formulation development 4. Describe the sterility testing methods of pharmaceutical products 5. Demonstrate unit operations in the pharma industries 6. Describe the preparation of organic compounds 7. Describe the Structural Activity relationship of various drugs 8. Describe the evaluation techniques for herbal drugs <p>At the end of 3rd Professional year, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Describe the quality control tests for various dosage forms 2. Describe and demonstrate the manufacturing techniques of dosage forms 3. Discuss the pharmaceutical legislation and their implications 4. Describe the chemistry of drugs and their biological activity 5. Describe the concepts of pharmacokinetics and pharmacodynamics of drugs 6. Describe the method of preparation vaccines and their storage 7. Describe the cGMP aspects of pharmaceutical Industries

	<p>At the end of 4th Professional year, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Describe the chromatographic techniques for separation and drug analysis 2. Describe the technology transfer and commercialization 3. Discuss the therapeutic drug monitoring of patients 4. Describe the pharmaceutical care services, patient counselling and interpret laboratory results 5. Describe the various approaches for development of novel drug delivery systems 6. Demonstrate the statistical techniques to solve the problems
Socio-emotional Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ol style="list-style-type: none"> 1. Effective communication and counselling the patients and their families on the safe use of drugs and care. 2. Can feel responsibility and solidarity for patients 3. Identify route for development of cost-effective dosage
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ul style="list-style-type: none"> • Perform basic pre-clinical examination in simulated environment/ mannequins • Perform and demonstrate the various analytical techniques • Formulate stable, economical and safe dosage forms • Demonstrate the use of learning management system • Demonstrate the application of computers in drug delivery systems • Observe, demonstrate and interpret animal experiments with computer assisted learning • Formulate a research question for a study and demonstrate ability to conduct research in pursuance to guidelines or research ethics

Suggested topics for SDG 9 “Industry, Innovation and Infrastructure”

1. Molecular biology and genetics
2. Synthesis of novel compounds
3. Evaluation techniques like GC, HPLC etc.
4. Novel drug delivery systems and drug development
5. Development of vaccines and the phases of vaccine trials
6. ICH-GCP, GLP, GMP
7. Research Methodology and bio-statistics
8. Local, national and global challenges and conflicts in achieving sustainability in infrastructure and industrialization
9. E learning
10. Setting up of small scale pharmaceutical industries .

Examples of learning approaches and methods for SDG 9 “Industry, Innovation and Infrastructure”

1. Demonstration on handling of analytical instruments and equipment
2. Conduction of seminars, conferences to share innovative research ideas
3. Poster competition and essay writing on the methods of using renewable resources and sustainable products in order to preserve natural resources, disaster risk reduction, fossil fuel free transport systems etc.
4. Visit to Centre of Excellence in nanotechnology to understand innovations in research and laboratory infrastructure to conduct drug development research activities in the field of nanotechnology
5. Visit to central animal house to understand drug discovery and pre-clinical testing
6. Guide and encourage students to apply research projects for funds at various government and non-government funding agencies
7. Visit to pharmaceutical industries to understand basic infrastructure, regulations/guidelines and recent advancements on drug development among experts working in pharmaceutical industries.

SDG 10 - Reduced Inequalities



Reduce inequality within and among countries

Teaching & Learning objectives for SDG 10 “Reduced Inequalities”

Subject/ topic/ course in regular curriculum relating to SDG 10	Pharmacy Practice, Pharmacology, Pharmaceutics, Pharmaceutical Chemistry, Pharmacognosy
Cognitive Teaching & learning objectives	<p>At the end of course, the learner should be able to</p> <ul style="list-style-type: none"> • Understand the concept of equity, equality, justice and inequality • Discuss on inequality that is contextual to gender, age, vulnerability, social and economic status, patient preferences, beliefs and values • Discuss national and regional health care policies including the National Health
Socio-emotional Teaching & learning objectives	<p>At the end of course, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Demonstrate ability to communicate to patients in a respectful, non-threatening, non-judgmental and empathetic manner 2. Counsel and raise awareness among the individuals and community about inequalities. 3. Counsel the vulnerable individuals, families and communities to reduce inequalities
Behavioral Teaching & learning objectives	<p>At the end of course, the learner should be able to,</p> <ul style="list-style-type: none"> • Demonstrate the steps to achieve health promotion and education program to reduce financial inequality • Identify and analyze different types of causes and reasons for inequalities. • Conduct health education sessions at community level on various social security, assistance measures and national health programs

Suggested topics for SDG 10 “Reduced Inequalities”

1. Equity, equality, justice and inequality in health and well-being
2. Different indicators to measure inequality
3. Health insurance and prevention of catastrophic health expenditures
4. Role of families and communities on health and wellness
5. National policies related to health, health planning, millennium development goals and sustainable development goals
6. Ethical and legal issues related to reducing inequalities.
7. Laws and legislations to prevent inequalities.

Examples of learning approaches and methods for SDG 10 “Reduced Inequalities”

1. Problem based and case-based discussions on innovations in health care and diagnostics
2. Visit to health centers at rural and urban areas
3. Special annual NSS Camps in rural areas to educate regarding the menace of inequality and measures to overcome the same.
4. Support to below poverty line families and weaker sections of the society in hospital and community settings
5. Conduct health education session in various social security, assistance schemes and national health programs

SDG 11 - Sustainable Cities and Communities



Make cities and human settlements inclusive, safe, resilient and sustainable

Teaching & Learning objectives for SDG 11 “Sustainable Cities and Communities”

Subject/ topic/ course in regular curriculum relating to SDG 11	Pharmaceutical Chemistry, Pharmacotherapeutics, Pharmacology, Pharmacognosy, Pharmaceutics.
Cognitive Teaching & learning objectives	At the end of course the learner should be able to, <ol style="list-style-type: none">1. Classify and identify the resources for drug manufacturing.2. Enlist the diseases caused due to environmental hazards, both physical and social3. Identify natural resources and its indication in treatment of various diseases4. Understand the importance of research for developing innovative manufacturing methods.
Socio-emotional Teaching & learning objectives	At the end of final year, the student should be able to <ol style="list-style-type: none">1. Educate the general public regarding life style modifications necessary for the prevention of disease.2. Perform better biochemical waste management3. Understand and support people suffering from emotional disabilities
Behavioural Teaching & learning objectives	At the end of final year, the learner should be able to <ol style="list-style-type: none">1. Conduct awareness programs for environmental safety2. Health screening camp to provide services3. Awareness camps on mental well-being to promote better quality of life

. Suggested topics for SDG 11 “Sustainable Cities and Communities”

- Mock exercise on chemical and bio-medical waste disposal
- Co-curricular activities depicting safe environment (safe city and communities)
- Team based exercise to frame strategies to overcome inhibitions among students

Examples of learning approaches and methods for SDG 11 “Sustainable Cities and Communities”

- Workshop on importance of green chemistry
- Awareness program for plastic free environment
- Awareness program on health policies that can help public to reduce health cost

SDG 12 - Responsible Consumption and Production



Ensure sustainable consumption and production patterns

Teaching & Learning objectives for SDG 12 “Responsible Consumption and Production”

Subject/ topic/ course in regular curriculum relating to SDG 12	Pharmacognosy, Pharmacology, Jurisprudence, Community Pharmacy, Pharmacotherapeutics
Cognitive Teaching & learning objectives	<p>At the end of final year, the learner should be able to,</p> <ol style="list-style-type: none"> 1. Describe and discuss the digestion and assimilation of nutrients from food 2. Explains the Calorific value of common Indian foods. 3. Describe the health hazards of water pollution 4. Describe food hygiene 5. Describe occupational and environmental pesticides, food adulterants, pollutants and insect repellents. 6. Enumerate the causative agents of food poisoning 7. Understand the basic concepts regarding the utilization of medicinal plants
Socio-emotional Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ol style="list-style-type: none"> 1. Counsel an individual and family on using renewable energy sources 2. Counsel pregnant women, Lactating mothers about balanced diet and sources of nutrients in common Indian food 3. Counsel individual and family on environmental sanitation and hazards of environmental pollution 4. Educate the public regarding the common medicinal plants and their benefits in the treatment of common ailments.
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ol style="list-style-type: none"> 1. Calculate energy content of different food Items, identify food items with high and low glycemic index and explain the importance of these in the diet. 2. Celebration of National Nutrition Week (NNW) is observed from September 1-7 every year. 3. Facilitate creation of kitchen garden at the hostel and home 4. Conduct health education sessions on responsible consumption and production for school and college students 5. Increase utilization of renewable energy at home, workplace and hostels.

Suggested topics for SDG 12 “Responsible Consumption and Production”

1. Production and consumption history, patterns and value chains, and management and use of natural resources (renewable and non-renewable)
2. Environmental and social impacts of production and consumption
3. Energy production and consumption (transport, commercial and residential energy use, renewable energies)
4. Food production and consumption (agriculture, food processing, dietary choices and habits, waste generation, deforestation, over-consumption of food and hunger)
5. Medicinal Plant Garden to cater the needs of college.

Examples of learning approaches and methods for SDG 12 “Responsible Consumption and Production”

1. Micro and Macro nutrients identification.
2. Perform role plays dealing with different roles in a trading system (producer, advertiser, consumer, waste manager, etc.)
3. Screening of short films/documentaries to help the learners understand production and consumption patterns
4. Organization of events such as conference on Society for Ethnopharmacology where in traditional healers from across the country shall participate and educate the public.

SDG 13 - Climate Action



Take urgent action to combat climate change and its impacts

Teaching & Learning objectives for SDG 13 “Climate Action”

Subject/ topic/ course in regular curriculum relating to SDG 13	Pharmacognosy, Pharmacology, Jurisprudence, Community Pharmacy, Pharmacotherapeutics
Cognitive Teaching & learning objectives	<p>At the end of final year, the learner should be able to,</p> <ul style="list-style-type: none"> • List out the various causes and effects of climate change • Explain the health effects of climate change and their prevention • Able to explain the importance of disaster management • List out the effects of air, water, noise pollution and its impact on climate change. • Explain the importance of water conservation. • Explain the advantages of using non carbon polluting vehicles • Explain the importance of sanitary cleaning and safety • Explain the importance of vehicle pooling while transit to working places • Explain the importance of using solar energy • Describe the minimum use of electricity and make use of renewable energy
Socio-emotional Teaching & learning objectives	<p>At the end of final year, the learner should be able to,</p> <ul style="list-style-type: none"> • Involve in educating the common people about climate changes • Counsel the families on utilizing renewable sources of energy to prevent the impact of climate change • Appreciate the consequence of climate change on health and social status of people • Voluntarily involve in any activity which contribute to save the earth • Actively organize the mass plantation, save earth, making plastic free environment
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to,</p> <ul style="list-style-type: none"> • Demonstrate the ability to actively involved in any program which contributes to prevent climate changes. • Conduct some seminars or any programs which educate the society about climate change • Create awareness in the society about the impact of climate changes

Suggested topics for SDG 13 “Climate Action”

1. Mass plantation.
2. Awareness rally about climate change.
3. Awareness jatha to educate the people about use of renewable energy.
4. Actively involve in disaster management.
5. Guest lecture to create awareness about vehicle pooling, use of public transport to minimize energy consumption

Examples of learning approaches and methods for SDG 13 “Climate Action”

1. Case based studies about impact of climate change
2. Attending workshops, seminars or conferences held on theme of climate changes
3. Group discussion on hazardous effect of climate changes
4. Project on actions towards climate protection
5. Poster competition, essay writing competition on climate change and risk of disasters in community.
6. Participation in various activities on world environment day
7. Seed ball sowing and plantation camping activities

SDG 15 - Life on Land



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Teaching & Learning objectives for SDG 15 “Life on Land”

Subject/ topic/ course in regular curriculum relating to SDG 15	<ul style="list-style-type: none"> • Pharmacognosy, Microbiology, Pharmacology, Pharmacy practice
Cognitive Teaching & learning objectives	<p>At the end of final year, the learner should be able to,</p> <ul style="list-style-type: none"> • Understand the ethical guidelines in conducting the animal research • Enlist the alternatives to animal methods in preclinical research • Describe the etiology of air and water borne diseases/jaundice diarrheal diseases • Explain the role of environmental hazards in causing infectious diseases. • Understand the guidelines for proper disposal of biomedical and other wastes • To describe the vernacular and biological names and uses of all the lower phylogenetic models
Socio-emotional Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ul style="list-style-type: none"> • Appreciate the medicinal value of the various flora and fauna • Conduct the research activities involving animals and humans with ethical and humane way • Correlate the harmful effects of deforestation, pollution in the causing ecological imbalance and its impact of health • Understand the importance of green initiatives implemented in the institution
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ul style="list-style-type: none"> • Choose appropriate methods of research (invitro and bioinformatics) wherever applicable to reduce the small animal use in research • Follow the 3R's principles in research i.e reduce, replace and reuse animal in research • Provide proper housing facilities during the research and follow all the humane methods as per the CPCSEA guidelines • Implement green initiatives as applicable

Suggested topics for SDG 15 “Life on Land”

1. Alternatives to animal testing
3R's Principles in research (reduce, replace and reuse animal in research)
2. CPCSEA and ICH guidelines for conducting research.
3. Green initiatives to save environment

Examples of learning approaches and methods for SDG 15 “Life on Land”

1. Seminar on alternatives to animal experimentation
2. Reduce and replace usage of biohazard materials
3. Training students in biomedical waste disposal practices
4. Encourage students for planting trees and animal adoption.
5. Poster competition, essay writing competition, role play on World Environment Day celebration

SDG 16 - Peace, Justice and Strong Institutions



Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

Teaching & Learning objectives for SDG 16 “Peace, Justice and Strong Institutions”

Subject/ topic/ course in regular curriculum relating to SDG 16	Pharmaceutical Chemistry, Pharmacy Practice, Pharmacology, Pharmacognosy, Pharmaceutics, Pharmaceutical Jurisprudence, Pharmaceutical Regulatory Affairs, Pharmaceutical Quality Assurance
Cognitive Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ul style="list-style-type: none"> • Understand the behavioural needs for a pharmacist to function effectively in the areas of pharmaceutical operation • Develop leadership qualities and essentials to provide justice and peace • Demonstrate Pharmaceutical legislations and their implications in the development and marketing of pharmaceuticals. • Describe the various Indian pharmaceutical Acts and Laws • Describe the regulatory authorities and agencies governing the manufacture and sale of pharmaceuticals • Describe code of ethics during the pharmaceutical practice • Understand the cGMP aspects in a pharmaceutical industry
Socio-emotional Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ul style="list-style-type: none"> • Spread awareness about the ethics during the pharmaceutical practice. • Educate the general public regarding leadership qualities and essentials to provide justice and peace
Behavioural Teaching & learning objectives	<p>At the end of final year, the learner should be able to</p> <ul style="list-style-type: none"> • Demonstrate responsibility and work ethics while working in a pharmacy. • Communicate with the patient with empathy and ethics on all aspects of drug use. • Provide patient counseling and educate them about medicine interaction. • The learner can contribute to conflict resolution at the local and national level.

Suggested topics for SDG 16 “Peace, Justice and Strong Institutions”

1. Perform a role-play about different people from around the world who are victims of injustice
2. Have interfaith dialogues in schools and college campuses about justice and equality
3. Organize an excursion to a local court or police station
4. Design a poster “What is fair/just”?
5. Debate issues of justice of historical and cultural context
6. Celebrate the International Day of Peace (September 21)
7. Develop an enquiry-based project: “What would a peaceful world look like?”
8. Retreat camps for the students to understand the spiritual context of health and well-being and peace and justice

Examples of learning approaches and methods for SDG 16 “Peace, Justice and Strong Institutions”

1. Definitions of justice: retributive and rehabilitative
2. Crime and punishment, comparing laws and punishments
3. Child labor and exploitation of children
4. Global treaties and agreements related to war, peace, and refugees
5. The illegal weapons trade
6. Drug abuse and its trade
7. The international criminal court and its role
8. Corruption and how to mitigate it.
9. Meaning and importance of mission, vision statements and strategic plans of the institution.

SDG 17 - Partnerships for the Goals



Strengthen the implementation and revitalize the global partnership for sustainable development

Teaching & Learning objectives for SDG 17 “Partnerships for the Goals”

Subject/ topic/ course in regular curriculum relating to SDG 17	Pharmacy Practice, Community Pharmacy, Regulatory Affairs
Cognitive Teaching & learning objectives	<p>At the end of course the learner should be able to,</p> <ul style="list-style-type: none"> • Define and describe the concept of Drugs and Pharmaceutical products in the field of international health • Describe roles of various international health agencies (World Health Organization, Food and Agriculture Organization) • Discover, develop, produce and market Pharmaceuticals to be administered to patients across the globe • Protect public health by monitoring and controlling the safety and efficacy of drug • Study the disease, research and invent new drugs / medicines for the prevailing diseases.
Socio-emotional Teaching & learning objectives	<p>At the end of final year, the student should be able to</p> <ul style="list-style-type: none"> • Appreciate the role of pharmaceutical agencies in providing drugs and medical aids in health care • Reflect on the importance of partnerships and collaboration in the field of pharmacy for providing health care
Behavioural Teaching & learning objectives	<p>At the end of final year, the student should be able to</p> <ul style="list-style-type: none"> • Collaborative research work through electives • Communicate accurate information to the healthcare providers • Provide medicinal and clinical expertise to internal and external groups • Provide information on the use of pharmaceuticals, on over-the-counter medications, and prescription.

Suggested topics for SDG 17 “Partnerships for the Goals”

1. International Regulatory authority for drugs and its roles in disease control and prevention
2. Role of globalization in Pharmaceutical Field.
3. Public private partnerships in pharmaceutical agencies.
4. International Pharmaceutical agencies and their role in health and social welfare
5. Develop partnerships between other institutions such as NGO's which are working on health sector.

Examples of learning approaches and methods for SDG 17 “Partnerships for the Goals”

1. Field visits to Pharma companies to learn about various novel drugs and formulations.
2. Participation in National Pharmacy Day and other health days.
3. Volunteering to be members of Pharmacy council of India and other voluntary health agencies.
4. Visit to voluntary pharmaceutical agencies and NGOs.
5. Participate in WHO, UNICEF or other international agencies driven activities like pulse polio programme, pharmacy week etc.

CONCLUSIONS

Higher educational institutions are in the frontline of many of the challenges that the SDG's seek to resolve. The achievement of Sustainable development goals of the UN shall be possible through infusion of knowledge and skill in the minds of our young generation. The SDGs are universal goals for all people and are inherently global in nature. Learning about these initiatives helps teachers and students develop insights into critical issues around the world. This is made possible by implementing teaching and learning objectives at the college level.

Consideration is given to the broader aspects of SDG such as economic growth, environmental sustainability and social inclusion including the use of resources judiciously without degradation of environment to aid future generations. It is imperative to educate the young generation and impart suitable training. In the process the college shall strive to design research, frame policy decisions and increase engagement with societies for creating awareness and effective implementation of sustainable development strategies.

This handbook has been designed keeping the pharmacy curriculum of various courses as the background to help the teachers to understand and develop relevant teaching and learning methods in consonance with the SDG's. This shall in turn facilitate the students to learn and imbibe qualities which shall help in transforming one's personality to facilitate the achievement of the goals.

Learning objectives for teachers to promote SDG

1. The teacher needs to know about the sustainable development goals and the challenges in achieving them.
2. Link their specific learning objectives, teaching learning strategies and assessment techniques with the sustainable development goals wherever they are relevant.
3. Take disciplinary, interdisciplinary and transdisciplinary perspectives on issues of global change and their local manifestations
4. Act as a change agent in a process of organizational learning that advances their institution towards sustainable development
5. Practice an action-oriented transformative pedagogy that help learners in participative, systemic, creative and innovative thinking and acting processes in the context of local communities and learners' daily lives.
6. Reflect on the concept of sustainable development, the challenges in achieving the SDGs, the importance of their own field of expertise for achieving the SDGs and their own role in this process
7. Evaluate and assess the learners' development of cross-cutting sustainability competencies and specific sustainability-related learning outcomes

Key elements for whole-institution approaches

1. Align the vision, mission, strategic directions with the sustainable development goals
2. Empower the faculty members, administrators, students, communities on the importance and strategies for sustainable development goals.
3. Encourage staff to attend international seminars and webinars on SDG's
4. Observe special days at college such as World Environment Day and Woman's Day etc
5. Inter-institutional networks that facilitate mutual support such as peer-to-peer learning on a whole-institution approach

Key methods for learning for the SDGs

1. SDGs as a topic of the National Pharmacy Week celebrations
2. SDGs as a topic for the competitions such as debate, extempore etc., in the Pharma fest celebrations
3. Inclusion of SDGs in the student magazine section with call for articles related to the SDG's
4. Arranging guest lectures, seminar, symposia, conferences by involving experts in the respective fields on various aspects of SDGs
5. Conducting community based and hospital-based health awareness sessions
6. Role plays, rallies on different components of SDGs as part of NSS
7. Undertaking research projects addressing the SDGs
8. Publishing relevant articles in reputed journals with collaboration.

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 26. The Youth resource pack from MYCI: Methodologies for introducing the SDGs to young people in an engaging and informative manner http://www.youth.ie/sites/youth.ie/files/SDGs_Youth_Resource%20_Pack.pdf
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 28. World's Largest Lesson: Find everything you need to introduce the SDGs to young people, take part and take action <http://worldslargestlesson.globalgoals.org>
 29. Young Masters Programme on Sustainable Development: Online courses and international exchange between students on sustainable development <http://www.goymp.org/en/frontpage>
 30. YUNGA Challenge Badges: Developed in collaboration with UN agencies, civil society and other organizations, YUNGA Challenge Badges aim to raise learners' awareness, educate and motivate them to change their behaviour and become active agents
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'Touching the lives of Millions'

Focusing on a purpose as expansive and yet as specific as improving quality of life through Human Development, the JSS Mahavidyapeetha has grown from strength to strength. A long and healthy life, Education for all and a decent standard of living, the indicators of Human development, have been the underlying philosophy of Jagadguru Sri Veerasimhasana Mahasamsthana Math, Suttur Srikshethra, for centuries. This is also the philosophy for which the Mahavidyapeetha today stands for.

Under the untiring efforts of Jagadguru Dr. Sri Shivarathri Rajendra Mahaswamiji, the Mahavidyapeetha has witnessed enormous growth in the field of education and today has over 300 institutions under its fold, from kindergartens to postgraduate centres and postdoctoral research catering to the educational needs of more than 1,00,000 students.

The Mahavidyapeetha continues to play an important role in expanding the scope of its activities to several branches of knowledge, welfare, and culture. Its educational efforts span crèches for toddlers of working rural women, schools to impart primary and secondary education in both Kannada and English medium, Colleges, Polytechnics, Technical, Medicine, etc. For realizing its mission, it has equipped itself with an extensive infrastructure and an army of dedicated and highly qualified human resource. These institutions, located in strategic areas, serve a broad spectrum of society, from virtually remote tribal villages to metropolitan cities such as Bengaluru, Noida, New Delhi, Ooty, and Coimbatore, besides their presence in United States, Mauritius, and Dubai.

Apart from formal education, the initiatives stretch to integrated rural development through training and empowering of rural folk, reaching out healthcare to people through modern and traditional Indian systems of medicine, patronizing literary activities, visual arts, performing arts, restoration of temples and historical monuments.

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