

Department of Microbiology
University of Dhaka, Dhaka 1000, Bangladesh
SDG linkage for the syllabus taught in Bachelor of Science (Honours)

1st Year BS (Hons.)

MBG-101: Fundamental Microbiology

Achievement towards SDG:

SDG 3: Good Health and Well-being

- The course students should have an appreciation of the practice of microbiology and disease producing agent.
- Strengthen the capacity of our countries, for early warning, risk reduction and management of national and global health risks.
- Students should be familiar with the ways in which bacterial pathogens can be transmitted to humans, and the factors that influence transmission of pathogens and the occurrence of infectious diseases.

SDG 4: Quality Education

- Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.
- Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

MBG 102: Microbial Ecology

Achievement towards SDG:

SDG 3: Good Health and Well-being

- achieving an universal health coverage and access to quality essential health care
- substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution

SDG 4: Quality Education

- All learners should acquire the knowledge and skills needed for sustainable development

SDG 6: Clean water and Sanitation

- Improvement of water quality by reducing pollution and sustainable withdrawals

SDG 7: Affordable and Clean Energy

- Supply of freshwater to address water scarcity to reduce the number of people suffering from it.

SDG 13: Climate action

- Improvement of education, awareness raising and human and institutional capacity on climate change, mitigation, adaptation, impact reduction and early warning.

SDG 14: Life Below Water

- Prevention and significant reduction of marine pollution and sustainable management and protection of marine and coastal ecosystem

SDG 15: Life on Land

- Conservation, restoration, sustainable use of terrestrial and inland freshwater ecosystems
- Combat desertification and restoration of degraded land and soil
- Integration of ecosystem and biodiversity values into national and local planning and development process.

SDG 17: Partnership for the Goals

- Technology: Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms

MBG 103: Human Physiology

Achievement towards SDG:

SDG 3: Good Health and Well-being

- Understanding the reproductive system and good reproductive health will contribute in reducing maternal and neonatal mortality
- Aid to end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases
- Proper understanding of the human body can strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol
- Reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

SDG 4: Quality Education

- By providing knowledge to both male and female students, this course can ensure equal access for all women and men to affordable and quality (technical, vocational and) tertiary education, including university level education

SDG 11: Sustainable cities and communities

- Proper understanding of the human body can aid in reducing the number of deaths and the number of people affected by disease

MBG 104: Basic Techniques in Microbiology

Achievement towards SDG:

SDG 3: Good Health and Well-being

- End of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable disease
- substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution
- A stronger capacity of all countries, particularly developing countries, for early warning, risk reduction and management of national and global health risks

SDG 4: Quality Education

- Substantial increase the number of technically skilled youth and adults for sustainable development

SDG 9: Industry, Innovation and Infrastructure

- Enhanced scientific research, upgrade of the technological capabilities of industrial sector
- enhanced financial, technological and technical support to least developed countries for development

SDG 17: Partnership for the Goals

- Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing
- Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms.

MBG 105: Basic Biochemistry

Achievement towards SDG:

SDG 2: Zero Hunger

- A must access by all people to safe nutritious and sufficient food all year round
- Ending all forms of malnutrition

SDG 3: Good Health and Well Being

- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution
- A stronger capacity of all countries, particularly developing countries, for early warning, risk reduction and management of national and global health risks

SDG 4: Quality Education

- An equal access for all to affordable and quality technical, vocational and tertiary education
- Substantial increase the number of technically skilled youth and adults

SDG 9: Industry, Innovation and Infrastructure

- Enhanced scientific research, upgrade of the technological capabilities of industrial sector
- Enhanced financial, technological and technical support to least developed countries for development

SDG 17: Partnership for the Goals

- Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms.

2nd Year BS (Hons.)

MBG 201: General Microbiology

Achievement towards SDG:

SDG 3: Good Health and Well-being

- Maintaining healthy life by controlling microbial growth
- Strengthen the capacity of our countries, for early warning, risk reduction and management of national and global health risks.
- End of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable diseases

SDG 4: Quality Education

- Substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

SDG 9:

- Enhanced scientific research, upgrade of the technological capabilities of industrial sector

MBG 202: Environmental Microbiology

Achievement towards SDG:

SDG 3: Good Health and Well-being

- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution

SDG 6: Clean water and Sanitation

- Universal and equitable access to safe affordable access to safe drinking water.
- Participation of local communities in improving water and sanitation management

SDG 13: Climate Action

- Improvement of education, awareness raising and human and institutional capacity on climate change, mitigation, adaptation, impact reduction and early warning.

SDG 15: Life on Land

- Integration of ecosystem and biodiversity values into national and local planning and development process.

MBG 203: Microbial Physiology and metabolism–I

Achievement towards SDG:

SDG 3: Good health and well-being

- Achieving an universal health coverage and access to quality essential health care

SDG 4: Quality Education

- An equal access for all to affordable and quality tertiary education
- Substantial increase in the number of technically skilled youth and adults
- All learners should acquire the knowledge and skills needed for sustainable development
- Upgraded education facilities for inclusive and effective learning environments for all
- Increased supply of qualified teachers

SDG 17: Partnership for the Goals

- Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing
- Enhanced international support for capacity building in developing countries to support national plans to implement all the Sustainable Development Goals

MBG 204: Basic Microbial Genetics

Achievement towards SDG:

SDG 3: Good Health and Well-being

- students will be able to understand the basic of genetic analysis, the basic organization of microbial genomes, and the gene expression and regulation mechanisms and will be able to solve genetic problems

SDG 4: Quality Education

- Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university.
- All learners should acquire the knowledge and skills needed for sustainable development
- Ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university

SDG 8: Decent Work and Economic Growth

- Higher levels of economic productivity through technological upgrading and innovation.

MBG 205: Medical Microbiology-I

Achievement towards SDG:

SDG 3: Good Health and Well-being

- End of preventable deaths of newborns and children under five years of age as well as reduction of neonatal mortality and under 5 mortality resulting from infectious diseases.
- End of epidemics of AIDS, tuberculosis, malaria and combat hepatitis, waterborne and other communicable diseases.
- Prevention and treatment of abuse of drugs.
- Early warning, risk reduction and management of national and global health risks

SDG 4: Quality Education

- Increase the quality tertiary education and increase the number of technically skilled youth and adults
- Increased supply of qualified teachers.

SDG 11: Sustainable Cities and Communities

- Reduction of the number of deaths and the number of people affected by disease

MBG 206: Fundamental Cell Biology

SDG 4: Quality Education

- Substantial increase in the number of technically skilled youth and adults
- All learners should acquire the knowledge and skills needed for sustainable development
- Upgraded education facilities for inclusive and effective learning environments for all
- Increased supply of qualified teachers

SDG 17: Partnerships for the Goals

- Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing

MBG 207: Microbiology of Food and Frozen Food

Achievement towards SDG:

SDG 2: Zero Hunger

- Ensuring access by all people to safe nutritious and sufficient food all year round and ending all forms of malnutrition
- Developing a sustainable food production systems for increased productivity

SDG 3: Good Health and Well-being

- Maintaining good health by eating safe and nutritious food.

SDG 8: Decent Work and Economic Growth

- Higher levels of economic productivity through diversification, technological upgrading and innovation

SDG 12: Responsible Consumption and Production

- Ensure sustainable consumption and production

MBG 208: Applied Mycology

Achievement towards SDG:

SDG 2:

- End of all forms of malnutrition by ensuring access by all people to safe nutritious and sufficient food all year round
- Development of a sustainable food production systems for increased productivity

SDG 4: Quality Education

- Substantial increase the number of technically skilled youth and adults
- All learners should acquire the knowledge and skills needed for sustainable development
- Upgraded education facilities for inclusive and effective learning environments for all

SDG 7: Affordable and Clean Energy

- Substantial increase in the share of renewable energy in the global energy mix

SDG 8: Decent Work and Economic Growth

- Higher levels of economic productivity through diversification, technological upgrading and innovation

SDG 11: Sustainable Cities and Communities

- Reduction of the number of deaths and the number of people affected by disease
- Universal access to safe, inclusive and accessible, green and public spaces

SDG 12: Responsible Consumption and Production

- Sustainable management and efficient use of natural resources

SDG 15: Life on Land

- Conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems
- Urgent and significant action to reduce the degradation of natural habitats

SDG 17: Partnerships for the Goals

- Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries
- Adaptation and implementation of investment promotion regimes for least developed countries

3rd Year BS (Hons.)

MBG 301: Virology-I

Achievement towards SDG:

SDG 3: Good Health and Well-being

- End of preventable deaths of newborns and children under five years of age and reduction of neonatal mortality and under 5 mortality resulting from infectious diseases
- End of epidemics of AIDS, combat hepatitis, waterborne viral infections and other communicable diseases.
- Prevention and treatment of abuse of drugs.
- Contributing to the early warning, risk reduction and management of national and global health risks

SDG 4: Quality Education

- Increase the quality tertiary education and the number of technically skilled youth and adults
- Increased supply of qualified researchers and teachers in Virology.

SDG 11: Sustainable Cities and Communities

- Reduction of the number of deaths and the number of people affected by disease

MBG 302: Microbial Physiology and Metabolism-II

Achievement towards SDG:

SDG 3: Good health and well-being

- Achieving an universal health coverage and access to quality essential health care

SDG 4: Quality Education

- An equal access for all to affordable and quality tertiary education
- Substantial increase in the number of technically skilled youth and adults
- All learners should acquire the knowledge and skills needed for sustainable development
- Upgraded education facilities for inclusive and effective learning environments for all
- Increased supply of qualified teachers

SDG 7: Partnership for the Goals

- Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing
- Enhanced international support for capacity building in developing countries to support national plans to implement all the Sustainable Development Goals

MBG 303: Microbial Molecular Genetics

Achievement towards SDG:

SDG 4: Quality Education

- All learners should acquire the knowledge and skills needed for sustainable development
- An equal access for all to affordable and quality technical, vocational and tertiary education

SDG 9: Industry, Innovation and Infrastructure

- Development of quality, reliable, sustainable and resilient infrastructure
- Enhanced scientific research, upgrade of the technological capabilities of industrial sector

SDG 17: Partnerships for the Goals:

- TECHNOLOGY: Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing

MBG 304: Medical Microbiology-II

Achievement towards SDG:

SDG 3: Good health and well-being

- Reduction of the global maternal mortality ratio and neonatal mortality and under 5 mortality resulting from infectious diseases.
- End of preventable deaths of newborns and children under 5 years of age.
- End of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable diseases.

SDG 11: Sustainable Cities and Communities

- Reduction of the number of deaths and the number of people affected by disease. Contributing to the early warning, risk reduction and management of national and global health risks

MBG 305: Immunology-I

Achievement towards SDG:

SDG 3: Good Health and Well-being

- Support the research and development of preventive measures for the communicable and non-communicable diseases that mainly affect developing countries
- Build up the capacity of all countries in particular developing countries for early warning, lowering of risk and management of global health risks
- End of preventable deaths of newborns and children under 5 years of age
- Aim to reduce neonatal mortality to 12 and under 5 mortality to 25 per 1,000 live births

SDG 9: Industry, Innovation and Infrastructure

- Strengthen scientific research, upgrade the technological abilities of industrial sectors in all countries in particular developing nations

SDG 17: Partnership for the Goals

- Assist domestic technology development, research and innovation in developing countries

MBG 306: Agriculture Microbiology

Achievement towards SDG:

SDG 11: Sustainable Cities and Communities

- Universal access to safe, inclusive and accessible, green and public spaces.

SDG 13: Climate Action

- Improvement of education, awareness raising and human and institutional capacity on climate change, mitigation, adaptation, impact reduction and early warning.

SDG 15: Life on Land

- Integration of ecosystem and biodiversity values into national and local planning and development process.

MBG 307: Molecular Cell Biology

Achievement towards SDG:

SDG 3: Good Health and Well-being

- End of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable diseases

SDG 4: Quality Education

- An equal access for all to affordable and quality technical, vocational and tertiary education
- Substantial increases the number of technically skilled youth and adults for sustainable development.

SDG 17: Partnership for the Goals

- Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing
- Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms.

MBG 308: Fermentation Technology

Achievement towards SDG:

SDG 2: Zero hunger

- A sustainable food production systems for increased productivity
- End of all forms of malnutrition by ensuring access by all people to safe nutritious and sufficient food all year round

SDG 3: Good health and well being

- Achieving an universal health coverage and access to quality essential health care; and-
- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution

SDG 4: Quality Education

- All learners should acquire the knowledge and skills needed for sustainable development

SDG 6: Clean water and sanitation

- Improvement of water quality by reducing pollution

SDG 8: Decent work and economic growth

- Higher levels of economic productivity through technological upgrading and innovation

SDG 9: Industry, Innovation and infrastructure

- Enhanced scientific research, upgrade of the technological capabilities of industrial sector

SDG 17: Partnerships for the Goals

- Technology: Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms

MBG 309: Enzymology

Achievement towards SDG:

SDG 3: Good Health And Well-being

- End of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable disease
- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution

SDG 9. Industry, Innovation And Infrastructure

- Enhanced scientific research, upgrade of the technological capabilities of industrial sector

SDG 11. Sustainable Cities And Communities

- Reduction of the number of deaths and the number of people affected by disease
- Reduction of the adverse environmental impact of cities

MBG 310: Pharmaceutical Microbiology

Achievement towards SDG:

SDG 3: Good health and well-being

- Achieving an universal health coverage and access to quality essential health care
- Prevention and treatment of abuse of drugs and alcohol
- Reduction of the communicable and non-communicable diseases
- Reduction of maternal and child mortality

SDG 4: Quality Education

- Equal access for all to affordable and quality (technical, vocational and) tertiary education, including university level education
- Substantial increase in the number of technically skilled youth and adults
- All learners should acquire the knowledge and skills needed for sustainable development
- Upgraded education facilities for inclusive and effective learning environments for all
- Increased supply of qualified teachers
- Education for sustainable development and global citizenship

SDG 5: Gender Equality

- Women's effective participation and equal opportunities for leadership at all levels of decision making

SDG 9: Industry, Innovation and Infrastructure

- Knowledge of methods for microbial control can help to build resilient infrastructure, promote sustainable industrialization and foster innovation

SDG 10: Reduced Inequalities

- Enhanced representation and voice for developing countries in decision making in global economy

SDG 17: Partnership for the Goals

- Technology: Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing
- Capacity building: Enhanced international support for capacity building in developing countries to support national plans to implement all the Sustainable Development Goals

MBG 311: Advanced Food Microbiology

Achievement towards SDG:

SDG 2: Zero Hunger

- A must access by all people to safe nutritious and sufficient food all year round
- A sustainable food production systems for increased productivity and ending all forms of malnutrition

SDG 3: Good Health and Well being

- End of the epidemics of water borne diseases and other communicable diseases
- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution

SDG 6: Clean water and Sanitation

- Universal and equitable access to safe and affordable drinking water

4th Year BS (Hons.)

MBG 401: Virology II

Achievement towards SDG:

SDG 3: Good Health and Well-being

- End of preventable deaths of newborns and children under five years of age
- End of epidemics of AIDS, combat hepatitis, waterborne viral infections, zoonotic viral diseases (e.g. SARS-1 and SARS-2, influenza) and other communicable diseases
- Prevention strategies and treatment with antiviral drugs

SDG 4: Quality Education

- Increase the quality tertiary education and increase the number of technically skilled youth and adults
- Contribute in increased supply of qualified researchers and teachers in Virology

MBG 402: Immunology II

Achievement towards SDG:

SDG 1: No Poverty

- Implementation of nationally appropriate social protection system

SDG 3: Good Health and Well-being

- End of preventable deaths of newborns and children under 5 years of age
- End of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable diseases
- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution
- Reduce neonatal mortality to 12 and under 5 mortality to 25 per 1,000 live births
- Reduction of the global maternal mortality ratio to less than 70 per 100,000 live births and neonatal mortality and under 5 mortality resulting from diseases
- Reduction of one third premature mortality and non- communicable diseases

SDG 11: Sustainable Cities and Communities

- Reduction of the number of deaths and the number of people affected by disease
- Contributing to the early warning, risk reduction and management of national and global health risks

MBG 403: Environmental Pollution and Bioremediation

Achievement towards SDG:

SDG 3: Good Health and Well-being

- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution
- End of the water borne diseases and other communicable diseases

SDG 6: Clean Water and Sanitation

- Improvement of water quality by reducing pollution and universal and equitable access to safe and affordable drinking water
- End of the water borne diseases and other communicable diseases

- Protection and restoration of water related ecosystems and of the world's cultural and natural heritage

SDG 11: Sustainable Cities and Communities

- Reduction of the adverse environmental impact of cities
- Protection and restoration of water related ecosystems and of the world's cultural and natural heritage

SDG 12: Responsible Consumption and Production

- Ensuring environmentally sound management of chemicals and all wastes resulting in reduction of waste generation, as well as adequate and equitable sanitation and hygiene for all

SDG 14: Life below Water

- Prevention and significant reduction of marine pollution

SDG 15: Life on Land

- Conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems

MBG 404: Genomics and Bioinformatics

Achievement towards SDG:

SDG 4: Quality Education

- All learners should acquire the knowledge and skills needed for sustainable development
- An equal access for all to affordable and quality tertiary education
- Substantial increase in the number of technically skilled youth and adults
- Upgraded education facilities for inclusive and effective learning environments for all
- Increased supply of qualified teachers

SDG 8: Decent Work and Economic Growth

- Higher levels of economic productivity through technological upgrading and innovation

SDG 9: Industry, Innovation and Infrastructure

- Enhanced scientific research, upgrade of the technological capabilities of industrial sector

SDG 17: Partnership for the Goals

- Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing
- Enhanced international support for capacity building in developing countries to support national plans to implement all the Sustainable Development Goals

MBG 405: Genetic Engineering

Achievement towards SDG

SDG 2: Zero Hunger

- Doubling the agricultural productivity and incomes of small scale food producers through secure and equal access to land other productive resources
- A sustainable food production systems for increased productivity
- Increasing the investment in rural infrastructure, agricultural research to enhance agricultural productive capacity in developing and least developed countries

SDG 3: Good Health and Well-being

- End of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable disease

- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution

SDG 4: Quality Education

- Substantial increase the number of technically skilled youth and adults
- All learners should acquire the knowledge and skills needed for sustainable development

SDG 9: Industry, Innovation and Infrastructure

- Enhanced scientific research, upgrade of the technological capabilities of industrial sector
- Enhanced financial, technological and technical support to least developed countries for development

SDG 11: Sustainable Cities and Communities

- Reduction of the adverse environmental impact of cities

SDG 12: Responsible Consumption and Production

- Sustainable management and efficient use of natural resources
- Environmentally sound management of chemicals and all wastes

SDG 17: Partnerships for the Goals

- Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing
- Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms.

MBG 406: Industrial Microbiology

Achievement towards SDG

SDG 2: Zero Hunger

- A sustainable food production systems for increased productivity
- End of all forms of malnutrition by ensuring access by all people to safe nutritious and sufficient food all year round

SDG 3: Good Health and Well-being

- Achieving an universal health coverage and access to quality essential health care
- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution

SDG 4: Quality Education

- All learners should acquire the knowledge and skills needed for sustainable development

SDG 6: Clean Water and Sanitation

- Improvement of water quality by reducing pollution

SDG 7: Affordable and Clean Energy

- Substantial increase in the share of renewable energy in the global energy mix; and
- Sustainable withdrawals and supply of freshwater to address water scarcity to reduce the number of people suffering from it

SDG 8: Decent Work and Economic Growth

- Higher levels of economic productivity through technological upgrading and innovation

SDG 9: Industry, Innovation and Infrastructure

- Promotion of inclusive and sustainable industrialization; and
- Enhanced scientific research, upgrade of the technological capabilities of industrial sector

SDG 14: Life below Water

- Prevention and significant reduction of marine pollution

SDG 17: Partnerships for the Goals

- Technology: Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms

MBG 407: Microbial Biotechnology

Achievement towards SDG:

SDG 2: Zero Hunger

- A sustainable food production systems for increased productivity

SDG 3: Good Health and Well-being

- Achieving an universal health coverage and access to quality essential health care

SDG 4: Quality Education

- An equal access for all to affordable and quality tertiary education
- Substantial increase in the number of technically skilled youth and adults
- All learners should acquire the knowledge and skills needed for sustainable development
- Upgraded education facilities for inclusive and effective learning environments for all
- Increased supply of qualified teachers

SDG 5: Gender Equality

- Women's effective participation and equal opportunities for leadership at all levels of decision making

SDG 7: Affordable and Clean Energy

- Universal access to affordable, reliable and modern energy services substantial increase in the share of renewable energy in the global energy mix
- Enhancement in international cooperation to facilitate access to clean energy research and technology.

SDG 9: Industry, Innovation and Infrastructure

- Development of quality, reliable, sustainable and resilient infrastructure
- Promotion of inclusive and sustainable industrialization

SDG 17: Partnership for the Goals:

- Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing
- Enhanced international support for capacity building in developing countries to support national plans to implement all the Sustainable Development Goals

MBG 408: Diagnostic Microbiology

Achievement towards SDG

SDG 3: Good Health and Well-being

- Reduction of the global maternal mortality ratio and neonatal mortality and under 5 mortality resulting from infectious diseases
- End of preventable deaths of newborns and children under 5 years of age
- End of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable diseases.
- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution
- A stronger capacity of all countries, particularly developing countries, for early warning, risk reduction and management of national and global health risks

SDG 8: Decent Work and Economic Growth

- Higher levels of economic productivity through diversification, technological upgrading and innovation

SDG 9: Industry, Innovation and Infrastructure

- Enhanced scientific research, upgrade of the technological capabilities of industrial sector
- Reduction of the number of deaths and the number of people affected by disease

SDG 11: Sustainable Cities and Communities

- Reduction of the number of deaths and the number of people affected by disease.
- Contributing to the early warning, risk reduction and management of national and global health risks.
- Reduction of the adverse environmental impact of cities

SDG 17: Partnerships for the Goals:

- TECHNOLOGY: Enhancement of international cooperation on and access to science, technology and innovation and knowledge sharing

MBG 409: Analytical Techniques in Life Sciences

Achievement towards SDG

SDG 3: Good Health and Well-being

- Reduction of the global maternal mortality ratio and neonatal mortality and under 5 mortality resulting from infectious diseases
- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution

SDG 8: Decent Work and Economic Growth

- higher levels of economic productivity through diversification, technological upgrading and innovation

SDG 9: Industry, Innovation and Infrastructure

- Promotion of inclusive and sustainable industrialization
- Enhanced scientific research, upgrade of the technological capabilities of industrial sector

SDG 12: Responsible Consumption and Production

- Environmentally sound management of chemicals and all wastes

SDG 14: Life below Water

- Implementation of science based management plans

SDG 17: Partnerships for the Goals

- TECHNOLOGY: Promotion of the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favorable terms

MBG 410: Quality Control of Food and Pharmaceuticals

Achievement towards SDG

SDG 3: Good Health and Well-Being

- Achieving an universal health coverage and access to quality essential health care
- Substantial reduction of the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution
- A stronger capacity of all countries, particularly developing countries, for early warning, risk reduction and management of national and global health risks

SDG 4: Quality Education

- Substantial increase the number of technically skilled youth and adults
- All learners should acquire the knowledge and skills needed for sustainable development
- Upgraded education facilities for inclusive and effective learning environments for all

SDG 6: Clean Water and Sanitation

- Expanded international cooperation support to developing countries in water and sanitation related activities

MBG 411: Public Health and Epidemiology

Achievement towards SDG

SDG 3: Good Health and Well-Being

- Reduction of the global maternal mortality ratio to less than 70 per 100,000 live births
- End of preventable deaths of newborns and children under 5 years of age
- Aim to reduce neonatal mortality to 12 and under 5 mortality to 25 per 1,000 live births
- Reduction of the global maternal mortality ratio and neonatal mortality and under 5 mortality resulting from infectious diseases
- End of preventable deaths of newborns and children under 5 years of age
- End of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable diseases

SDG 4: Quality Education

- Access to quality early childhood development care and pre-primary education
- An equal access for all to affordable and quality technical, vocational and tertiary education
- Upgraded education facilities for inclusive and effective learning environments for all

SDG 11: Sustainable Cities and Communities

- Reduction of the number of deaths and the number of people affected by disease
- Contributing to the early warning, risk reduction and management of national and global health risks

SDG 13: Climate Action

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters

Course Offered by the Department of Microbiology for Other Departments

MBG 200: General Microbiology

Achievement towards SDG

SDG 3: Good Health and Well Being

- Ensure healthy life by end of the epidemics of AIDS, tuberculosis, malaria and NTDs and combat hepatitis, water borne diseases and other communicable diseases.

SDG4: Quality Education

- Substantial increase the number of technically skilled youth and adults and increased supply of qualified teachers

SDG 6: Clean water and Sanitation

- Improvement of water quality by reducing pollution and universal and equitable access to safe and affordable drinking water

SDG 13: Climate Action

- Integration of climate change measures into national policies, strategies and planning

SDG14: Life Below Water

- Sustainable management and protection of marine and coastal ecosystems and Implementation of science based management plans, to restore fish stocks