アフリカの潜在力と日本の科学技術融合によるSDGs貢献人材育成プログラム

受講生募集

上記プログラムによる講義

“Global Management 2023”を開講します

“Global Management” はアフリカ６大学と宇都宮大学の国際共同ウエブ講義です。

- ガーナ大学 (ガーナ)
- アディスアベバ大学 (エチオピア)
- ジョモ・ケニヤッタ農工大学 (ケニア)
- メル科学技術大学 (ケニア)
- ダルエスサラーム大学 (タンザニア)
- ネルソンマンデラアフリカ科学技術大学院大学 (タンザニア)
- 宇都宮大学 (日本)

講義の目的

新型コロナウイルス（COVID-19）のパンデミックは世界中に様々な影響を与え、教育分野では一挙にデジタル化が進みました。一方で、2030年に向けて国連が推進するSDGs（持続可能な開発目標）を達成するために、国際協力やそれを支える人材が必要とされています。

そこで本プログラムは、SDGs達成に必須の社会構造に基づいた持続可能な開発を実現するために、地域社会の可能性を理解し、アフリカと日本の共同活動に貢献できる人材の育成を目的として、アフリカの6大学と宇都宮大学が共同でアフリカ、SDGs、そして科学を理解して考えて自ら成長することを目標に、必修集中講義「Global Management」を開講します。このような広範囲な国際連携講義は画期的な試みです。

この講義は6月1日(木)から7月18日(火)の期間にC-learningを用いて開講され、１５回の講義が含まれます。うち１３回はオンデマンド講義です。単位は２単位です。

またこの講義はアフリカの大学と宇都宮大学の相互学生交流の基礎となり、本講義を受講した修士課程の学生の中から年間６名(１か月以内短期３名、３か月以上１年以下長期３名)が、旅費と滞在費の支援を受けてアフリカの６大学に留学が可能です。

本プログラムではより一層の学びを深めるために、必修集中講義に続き「国際連続シンポジウム」「臨地研究」「学生サミット2024」を開催・開講しますので、奮ってご参加ください。

以下、本講義の講師と講義のタイトルを紹介します。

講師および講義タイトル

Univerisity name	Lecturer name	Title of the lecture (on-demand)	Outline of the lecture (about 100 words)	SDGs	Photo	E-mail Adress
Jomo Kenyatta University of Agriculture and Technology (Kenya)	Dr. Mathew Gitau GICHEHA	Nexus between Climate Change, Food Systems, SDGs and Livelihoods	Climate change is having a significant impact on global food systems, threatening food security and livelihoods, particularly in developing countries. The changing climate is leading to extreme weather events such as droughts, floods, and storms, which can significantly impact crop yields and livestock production. As a result, farmers and other stakeholders in the food system are facing challenges in adapting to these changes and maintaining their livelihoods. Climate change also affects the availability and quality of water resources, which are essential for crop production and livestock rearing. The impacts of climate change on food systems are particularly significant in the context of achieving the SDGs, particularly SDG 2, which aims to end hunger, achieve food security and improve nutrition. Climate change is undermining efforts to achieve this goal, as it threatens the availability and accessibility of food for the most vulnerable populations, particularly in developing countries. At the same time, there are opportunities to mitigate the impacts of climate change on food systems and support sustainable livelihoods through the implementation of the SDGs. For example, SDG 13 focuses on climate action, and achieving this goal could help to mitigate the impacts of climate change on food systems. SDG 12 focuses on sustainable consumption and production, and promoting sustainable agriculture and food systems can contribute to achieving this goal. Overall, the nexus between climate change, food systems, SDGs, and livelihoods is complex and requires a multi-disciplinary approach to address. There is a need for coordinated action across different sectors and stakeholders to promote sustainable food systems that are resilient to the impacts of climate change, support livelihoods, and contribute to achieving the SDGs.	SDG 2 Zero Hunger SDG 12 Responsible Consumption and Production SDG 13 Climate Action		gicheham@jkuat.ac.ke
Meru University of Science and Technology (Kenya)	Dr. Dorothy Kagendo	The SDG aims at improving healthy lives and wellbeing for everyone	One health is an approach that enhances human health, animal health and their interactions with the environment/ecosystem. The three are studied together in one health rather than keeping them separate. This approach had been adopted because in one way or the other, the three, either directly or indirectly affect each other. When it comes to infectious diseases for instance, man interferes with the environment and ecosystems which are habitats for most animals and many organisms in nature. When man encroaches animal habitation, there is often exchange of diseases that we call zoonotic diseases. Often, animals defecate in the environment. As man clear bushes, herds cattle, collects fire hood, cuts down trees, collects herbs, harvests honey, or hunts animals for food, they often leave trails of human pathogens in the animal habitat and ecosystem. Similarly, they carry animal pathogens with them. This exchange can lead to potentially harmful and extremely virulent pathogens exchanged between the two environments. Most often, and due to various reasons, the exchanged pathogens are not susceptible to commonly used therapeutic agents. The aftermath is increased mortality due to emerging and reemerging zoonotic diseases that are now spread across human populations and across the animal populations and the subsequent environments.	SDG 3 Good Health and Well-Being		dkagendi@must.ac.ke
Addis Ababa University (Ethiopia)	Prof. Tadesse Fetahi	The contribution of aquatic ecosystem services to meet SDGs	Ecosystem services (ES) represent the benefits that humans obtain from ecosystems (MEA, 2005), which include supporting services, regulating services, provisioning services, and cultural services. Aquatic ecosystems provide drinking water, fishing, irrigation, power generation, transportation, flood control, and aesthetic values (Abhachire, 2014). Correspondingly, human well-being is fundamentally dependent upon these services. In 2005, the Millennium Ecosystem Assessment found that 70% of the 1.1 billion people surviving on less than USD 1 per day depended directly on natural ecosystems. Thus, the amount and quality of ES depend on the types of ecosystems, pollution status, and land use/land cover in the catchment (Negussie et al., 2019). The Sustainable Development Goals (SDGs) proposed for water and sanitation (SDG 6) and ecosystems (SDG 15) have targets for restoring and maintaining ecosystems to provide water-related services. The targets require to integrate ecosystem services and values into planning, development processes, and strategies for reducing poverty. Thus, a balance between the exploitation of natural resources for socio-economic development, protecting the ecosystems from point and non-point pollutions, and conserving ecosystem services that are critical to everyone's well-being and livelihoods are key components for sustainable development (Falkenmark et al., 2007). In the lecture, I will discuss: 1. Different aquatic ecosystem services – tangible and non-tangible 2. Link the ecosystem services with SDGs 3. Major factors that change the ecosystem services and consequences 4. Solutions a. Balance socio-economic development/exploitation and ecosystem services (link people, development such as agriculture and ecosystems) b. Mind your water footprint c. Ecosystem-based approach management d. Begin the end in mind (while development intervention is necessary, the long-term impact should be thought very well – the Design) 5. Concluding and take-home messages	SDG 6 Clean Water and Sanitation SDG 15 Life On Land		tadesse.fetahi@aau.edu.et
University of Dar es Salaam (Tanzania)	Dr. Lilian Kaale	Chilling of Fresh Foods: State-of-the-art and New Development of Technology	Chilling foods Chilling methods Superchilling technology – 'shell freezing' Superchilling methods Supercooling technology	SDG 2 Zero Hunger SDG 3 Good Health and Well-Being		elykaale@gmail.com
Nelson Mandela African Institution of Science and Technology (Tanzania)	Dr. Janeth Jonathan Marwa	Innovation and Entrepreneurship Management	This course aims provide the knowledge to the leaner in terms of describing the development of knowledge systems for innovation, forming strategies for sustainable futures through initiatives of partnerships, sustainable policy development to curb challenges of the basic needs, resource management, efficiency and digital inclusion.	SDG 1 No Poverty SDG 2 Zero Hunge SDG 4 Quality Education SDG 17 Partnerships for the Goals		janeth.marwa@nm-aist.ac.tz

講師および講義タイトル

University of Ghana (Ghana)	Dr Daniel Brain Akakpo	Crop-Livestock Integration for Circular Agriculture	The current global agricultural system has impacted the environment in many ways. The system is responsible for about a quarter of all greenhouse gases released by human activity, drives deforestation and loss of biodiversity, pollutes fresh and marine waters. As a result, the manner in which agriculture is practised to produce food has become a point of contention in many high-income countries, and increasingly across the world. There are mounting concerns about a range of issues such as farm size, farm profitability, animal welfare and the risk to human health of zoonotic diseases. There are many kinds of research being conducted to make intensified agricultural systems more sustainable to maintain the natural resource base. The sustainable intensification of the system cannot be enhanced without crop-livestock integration to promote circularity in the use of resources of the system. The concept of circularity aimed to reduce resource consumption and emissions to the environment by closing the loop of materials and substances. Hitched in this concept, losses of materials and substances are prevented and rather recovered for reuse, remanufacturing and recycling. After this course, students should: i. Understand the underlying principles and pillars of circularity. ii. Understand and adopt sustainable agricultural practices such as: a. Crop rotation and intercropping. b. Planting cover crops and perennials. c. Reducing or eliminating tillage. d. Applying integrated pest management (IPM). e. Integrating livestock and crops. f. Adopting best agroforestry practices. iii. Be familiar with some mitigation measures against climate challenges.	SDG 1 Zero Poverty SDG 2 Zero Hunger SDG 13 Climate Action		dbakakpo@ug.edu.gh

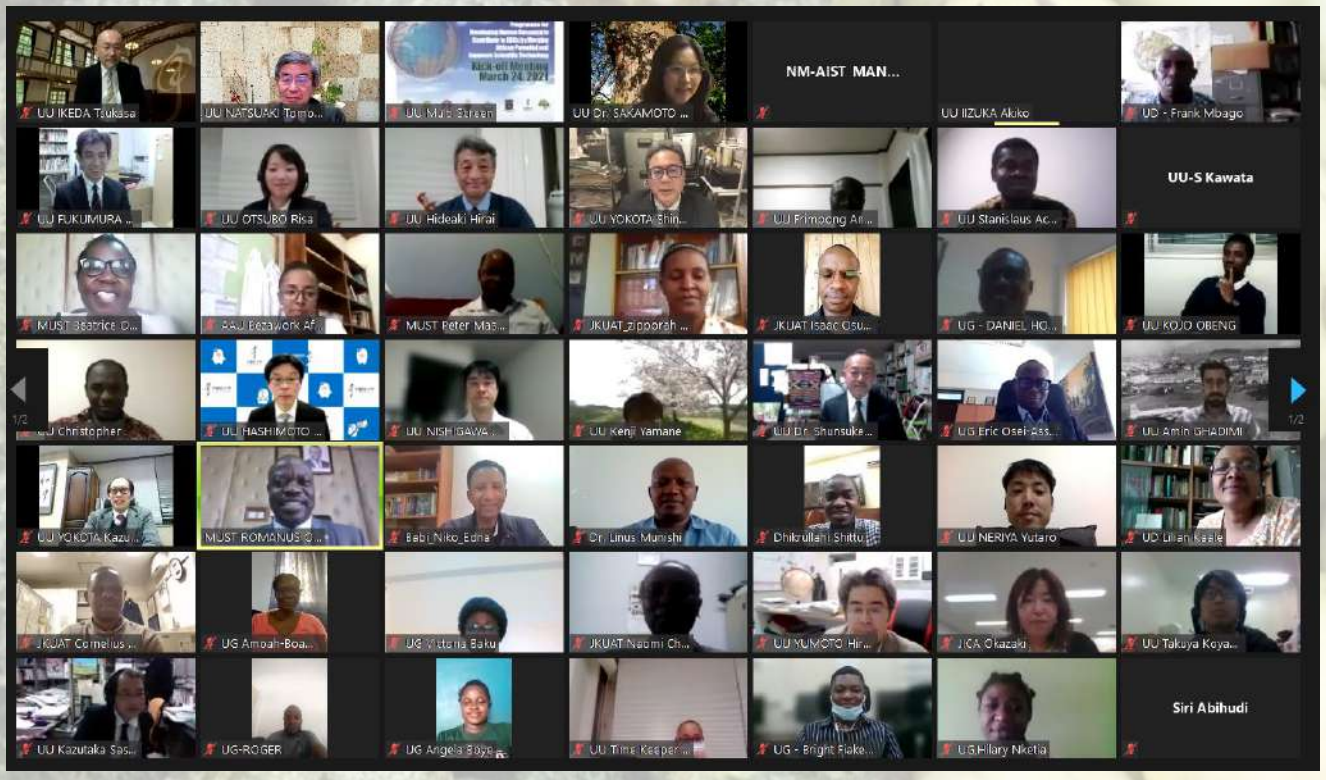
Univerisity name	Lecturer name	Title of the lecture (on-demand)	Outline of the lecture (about 100 words)	SDGs	Photo	E-mail Adress
	Dr. Nao IGARASHI	Poetry, Language, and the World	Many poets from former British colonies write about social issues, and yet the language they use, English, is in many cases a cause of the problems. This lecture invites students to examine how the poets' complex emotions regarding language, home, and identity are explored and illustrated in their poems. The lecture focuses not only on works of African poets but also on several poems written by the Caribbean and Irish poets. Some common themes in those poems, including the influence of history on the present, will encourage students to understand and overcome inequalities and injustice that still exist in the world.	Goal 5 Gender Equality Goal 10 Reduced Inequalities Goal 16 Peace, Justice and Strong Institutions		nao.igarashi@cc.utsunomiya-u.ac.jp
	Dr. Mie SATO	VR and AR technologies to change our lives	VR (virtual reality) and AR (augmented reality) technologies have been rapidly developed in the past few years and are expected to continue to grow more and more in the near future. This lecture explains what VR and AR are from a technical perspective and introduces the applications of VR and AR in the various fields such as medicine and education. We also look into the future possibilities and problems that VR and AR technologies will bring.	SDGs 9 Industry, Innovation and Infrastructure		mie@is.utsunomiya-u.ac.jp
	Dr. Sugit Arjon	Political Dynamics and Sustainable Development in Post-Conflict Regions.	Political Dynamics and Sustainable Development in Post-Conflict Regions is a lecture that will explore the importance of sustainable development in regions that have experienced conflict. The lecture will begin with an introduction that defines post-conflict regions and discusses the significance of sustainable development in these areas. The political dynamics in post-conflict regions will be examined, highlighting the importance of political stability, democratic process, and the roles of government and international actors in promoting sustainable development. The impact of power-sharing arrangements will also be explored. The lecture will then delve into the concept of sustainable development, defining it and exploring its importance in post-conflict regions. Key areas of sustainable development in these regions will be discussed. The challenges to achieving sustainable development in post-conflict regions will also be examined, including limited institutional capacity, lack of resources, and political and social unrest. Strategies for achieving sustainable development in post-conflict regions will be discussed in the lecture, focusing on strengthening governance and institutional capacity, encouraging economic growth and development, and promoting social cohesion and reconciliation. The lecture will conclude with a recap of the key points and an emphasis on the importance of sustained efforts towards sustainable development in post-conflict regions. The need for political will and commitment to achieving sustainable development in these regions will also be highlighted.	SDG 1 No Poverty SDG 8 Decent Work and Economic Growth SDG 11 Sustainable Cities and Communities SDG 16 Peace, Justice and Strong Institutions		sugit@cc.utsunomiya-u.ac.jp
	Dr. hiroshige FUJII	Introduction to Armed Conflict and Emergency Humanitarian Assistance	This lecture will provide an overview of emergency humanitarian assistance in armed conflict situations. Armed conflicts are still occurring in many parts of the world today. Emergency humanitarian assistance is essential to protect people's lives, but not everyone wants it. The lecturer has experience in UN peacekeeping operations as a Japanese government official and would like to discuss with students the complex challenges and the efforts in the field.	Goal 16 Peace, Justice and Strong Institutions		fujiih@cc.utsunomiya-u.ac.jp
	Dr. Atsuo IKEGUCHI	Sustainable management and Precision Livestock Farming (PLF) contibuted to one health approch	One health is an integrated, unifying approach that aims to sustainably balance and optimize the health of humans, domestic and wild animals, plants and ecosystems. The One Health Joint Plan of Action has been set by FAO, UNEP, WHO, and WOAH(OIE). In livestock production precision livestock farming (PLF) contributes to one health approach. The role of the IoT and PLF in improving productivity and the concept of PLF are overviewed in the world. The Japanese situation of PLF is introduced for large size faming and small size farming (family farming). Key considerations for farmers in adopting PLF are introduced including financial factors.	SDG 2 Zero Hunger, SDG 9 Industry, Innovation and Infrastructure SDG 13 Climate Action		ikeguchi@cc.utsunomiya-u.ac.jp
	Dr. Takaho ITOIGAWA	Inducing behavior change by applying nudges	This lecture will introduce the application of nudges as an approach to induce behavior change. This lecture will consist of the following three parts. 1. an overview of nudges 2. Introduction of case studies of bias 3. Case studies of nudge application This lecture aims to enable students to examine how nudges can be used to induce ideal behaviors such as energy-saving and healthy behaviors.	SDG 13 Climate Action		itoigawa@cc.utsunomiya-u.ac.jp
	Dr. Shinso YOKOTA	Edible mushroom cultivation and its applications in Japan	In this lecture, types of edible mushroom and their cultivation methods are explained. In addition, their applications are elucidated, especially focussing on biomass utilization.	SDG 2 Zero Hunger SDG 13 Climate Action		yokotas@cc.utsunomiya-u.ac.jp

講義の詳細

- **本講義は１５回**：この講義は新しいデジタル時代に向けた前例のない画期的な国際共同ウエブ講義で、前のページのようにアフリカ６大学の教員が６回、宇大教員が７回の計１３回はオンデマンド講義です。開講期間中はいつでもC-learningの講義資料にアクセスできます。
- **１回目(6月２日(金))と１５回目(7月18日(火))の２回はZoomによるリアルタイムで11～12時限(17:40～19:10)に開講します。**
- **開講期間：6月1日(木)～7月18日(火)**
  C-learningを使用します。
- **言語：英語**（オンデマンドなので何回でも繰り返して聴講できます）
- **単位：２単位**（地域創生科学研究科選択必修「地域創生リテラシー」の「実践力」の「Global Management」として付与）
- **登録先**：C-learning 講義コード B100017
  「Global Management」
- **締切**： ５月７日（日）
- **採点**：開講期間中に各講義のC-learningに掲載のレポートか小テストに解答してください。15回の講義の合計150点満点で採点されます。
- **問合せ先**：留学生・国際交流センター事務室
  TEL: 028-649-5100
  E-mail: tenkai@miya.jm.utsunomiya-u.ac.jp

アフリカ留学：本講義を受講した地域創生科学研究科修士課程の学生から年間６名(１か月以内短期３名・３か月以上長期３名)が、旅費と滞在費の支援を受けてアフリカに留学可能です。2022年度短期留学生の報告会の動画は近日中にWebサイトで公開します。

Come and join us!



問合せ先

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