Appendix

Overview of Courses Offered for Non-Degree Students (2025 AY)

1) MPH Courses

Category	Course Code	Course Title	Course Overview	Credits	Semester	Day	Time*	Prerequisites**
Epidemiology 疫学	5001010	Epidemiological Methods 疫学概論	●	3	Spring	Mon	4th	
	5001020	Clinical Epidemiology 臨床疫学	●	3	Fall	Mon	4th	
	5001030	Chronic Disease Epidemiology 慢性疾患疫学	●	3	Spring	Sat	3rd	(The course title might be changed.)
	5001040	Public Health Research Methods 公衆衛生学研究法	●	2	Fall	Fri	4th	Completion of Biostatistics I and either Epidemiological Methods/Clinical Epidemiology
	5001050	Systematic Reviews and Meta-analyses システマティックレビューとメタ分析	●	3	Fall	Tue	3rd	Completion of Biostatistics I and either Epidemiological Methods/Clinical Epidemiology
Biostatistics and Bioinformatics 生物統計学・生物情報科学	5002010	Biostatistics I 生物統計学 I	●	3	Spring	Thu	4th	
	5002020	Biostatistics I Practicum 生物統計学実習 I	●	2	Spring	Wed	4th	Completed or concurrent enrollment in Biostatistics I
	5002030	Biostatistics II 生物統計学 II	●	3	Fall	Thu	3rd	Completion of Biostatistics I
	5002040	Biostatistics II Practicum 生物統計学実習 II	●	2	Fall	Wed	3rd	Completed or concurrent enrollment in Biostatistics II
	5002050	Health Informatics and Decision Making 健康情報・決断科学	●	3	Spring	Tue	4th	
Health Policy and Management 医療政策管理学	5003010	Health Policy and Management 医療政策管理学	●	3	Spring	Tue	4th	
	5003030	Health Economics 医療経済学	●	3	Spring	Mon	4th	
	5003040	Pharmaco-Epidemiology and Pharmaco-Economics 薬剤疫学・薬剤経済学	●	3	Fall	Fri	4th	
	5003060	Introduction to Health Technology Assessment 医療技術評価概論	●	2	Fall	Mon	3rd	Completion of Biostatistics I and either Epidemiological Methods/Clinical Epidemiology
Health and Behavioral Sciences 健康・行動科学	5004010	Health and Behavioral Science 健康・行動科学	●	3	Fall	Wed	4th	

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	Course Code		Course Title	Course Overview	Credits	Semester	Day	Time	Prerequisites
Environmental Health 環境保健学	5005010		Introduction to Environmental Health 環境保健学入門	●	3	Fall	Thu	4th	
	5005020		Advanced Topics in Environmental Health 環境保健学特論	●	1	Spring	Thu	3rd	Prior knowledge of statistics and R and biostatistics
	5005030		Practical measurement in Environmental Health 環境保健の実測実習	●	1	Spring	Tue	3rd	
	5005040		Environmental Phycology 環境心理学	●	1	Fall	Tue	3rd	
	5005050		Air Quality Model Simulations in Public Health 公衆衛生における空気質のモデルシミュレーション	●	1	Spring	Tue	3rd	
Global Health Sciences 国際保健科学	5006010		Global Health 国際保健学	●	3	Spring	Sat	2nd	
	5006020		Maternal and Child Health 母子保健学	●	3	Spring	Fri	3rd	
	5006040		Global Infectious Diseases 国際感染症学	●	3	Fall	Tue	4th	
Interdisciplinary Sciences 学際健康科学	5007030		Public Health Nutrition 公衆栄養学	●	3	Fall	Fri	3rd	Completed or concurrent enrollment in Epidemiological Methods, Biostatistics I, Health and Behavioral Science

2) Doctoral courses

Course Code	Course Title	Course Overview	Credits	Semester	Day	Time*	Prerequisites**
6000001	Doctoral Seminar Doctoral セミナー	●	3	Fall	Thu	4th	
6000002	Strategies in Academic Writing アカデミックライティング法	●	2	Fall	Tue	4th	
6000003	Advanced Epidemiology 疫学特論	●	3	Spring	Thu	4th	
6000004	Advanced Epidemiology Practicum 疫学特論実習	●	2	Fall	Sat	3rd	Mandatory to complete: Advanced Epidemiologic Methods
6000005	Advanced Biostatistics 生物統計学特論	●	3	Spring	Mon	4th	Recommended: Biostatistics I, Biostatistics II
6000006	Advanced Biostatistics Practicum 生物統計学特論実習	●	2	Fall	Wed	4th	Biostatistics I (mandatory), Advanced Biostatistics (recommended)
6000007	Biostatistics Seminar 生物統計学セミナー	●	3	Fall	Fri	4th	

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6000008	Environmental Epidemiology 環境疫学	●	3	Spring	Wed	4th	
6000009	Infectious Disease Modeling 感染症モデリング	●	3	Spring	Fri	4th	Recommended courses prior to enrollment: Biostatistics II and Biostatistics practicum II. If possible, complete courses related to infectious disease and/or global health
6000010	Economic Evaluation in Healthcare 医療における経済的評価	●	3	Fall	Sat	1st	
6000011	Applied Behavioral Science 応用行動サイエンス	●	3	Spring	Wed	4th	
6000012	Global Health Seminar 国際保健学セミナー	●	3	Fall	Sat	2nd	

*Schedule of Class Time
   1st period： 9：25～11：40
   2nd period：12：40～14：55 [only for Wednesday 13：20～15：35]
   3rd period：15：05～17：20 [only for Wednesday 15：45～18：00]
   4th period：18：00～20：15 [only for Wednesday 18：10～20：25]

** If the instructor recognizes that the student has sufficient knowledge equivalent to those who have completed the course, the student is accepted.

科目名 Course Name	(MPH) 臨床疫学　Clinical Epidemiology
科目種別 Course Type	(Curriculum 2025 and after)　　　☐ Required　　☒ Selective　　☐ Elective　　* This is for degree students
授業形態 Format	☒ Lecture 講義　　☐ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☒ In class　　☒ Online Live　　☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☐ 前期 Spring　　　　☒ 後期 Fall　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☒ Mon 月　☐ Tue 火　☐ Wed 水　☐ Thu 木 ☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	西　信雄　NISHI Nobuo
授業概要 Course Overview	臨床現場の問題を解決するために診療データを用いて科学的厳密性を確保したエビデンスを発信する、または、それを支援する上で必要な臨床疫学の知識を身につける。学習の基本は、疫学の手法を応用して臨床現場から得られる情報・データの扱い方に重点を置く。診断、予後、治療、予防、リスクに関する臨床研究に特徴的な研究デザインについて学習する。講義の後は実際の臨床研究の論文を基にスモールグループディスカッションにて理解を深める。提出された課題に対してはフィードバックを行う。 Students will gain the competence in clinical epidemiology necessary for a hospital-based study to solve clinical questions, generating rigorous scientific evidence based on clinical data. All course activities will focus on the application of epidemiological methods to handle data, especially those obtained from clinical settings. Students will become familiar with the characteristics of various clinical study designs as they relate to diagnosis, prognosis, treatment, prevention, and risk. After lectures, understanding is deepened through practical small-group discussions of published clinical studies. Feedback will be provided on assignments and class activities.
授業の目的 Course Objectives	臨床現場からの診療データを利用し臨床研究を自ら施行するまたは指導するために必要な臨床疫学の知識を身につける。 本科目に関連するディプロマポリシー：1, 3 To obtain the fundamental knowledge of clinical epidemiology necessary to perform independent, hospital-based clinical research in terms of collecting and applying the clinical data. Diploma Policy related to this course: 1 and 3
到達目標 Learning Outcomes	・臨床現場からの問題点を研究問題として構造化できる。 ・臨床研究デザインの特徴を列挙できる。 ・臨床研究で得られた結果を報告できる。 ・Ability to structure problems in the clinical site into a research question. ・Ability to describe the characteristics of the clinical research designs. ・Ability to effectively report the results obtained from clinical research.

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[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	1) Apply epidemiological methods to the breadth of settings and situations in public health practice (evidence-based approach) 2) Select quantitative and qualitative data collection methods appropriate for a given public health context (evidence-based approach)
授業計画 Topics and Activities	The course topics include but not limited to: 1) はじめに　Introduction 2) 頻度　Frequency 3) 異常　Abnormality 4) 診断　Diagnosis 5) リスク：基本原理　Risk: Basic Principles 6) リスク：曝露から疾患　Risk: Exposure to Disease 7) リスク：疾患から曝露　Risk: From Disease to Exposure 8) 予後　Prognosis 9) 治療　Treatment 10) 予防　Prevention 11) 偶然　Chance 12) 原因　Cause 13) エビデンスの要約　Summarizing the Evidence 14) ナレッジ・マネジメント　Knowledge Management 15) まとめ　Summary
評価方法 Assessments	講義・グループワークへの貢献度（オンデマンド参加時はマナバ上の意見交換で評価）：30%、課題：30%, プレゼンテーション：40% Contribution toward the lecture/group work (When participating in the on-demand program, the exchange of opinions on Manaba will be evaluated.): 30%, Assignment: 30%, Presentation: 40%
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	Clinical Epidemiology the Essentials (Six edition)　(Lippincott Connect)：Grant S. Fletcher
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: no use of AI generative tools such as ChatGPT for all assignments.

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科目名 Course Name	慢性疾患疫学 Chronic Disease Epidemiology (*The course title might be changed.)
科目種別 Course Type	(Curriculum 2025 and after) ⊠ Required □ Selective □ Elective * This is for degree students
授業形態 Format	□ Lecture 講義 □ Practicum 実習 ⊠ Seminar 演習
授業実施方法 Teaching Platforms	⊠ In class ⊠ Online Live ⊠ On Demand* (□ full / ⊠ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	⊠ 前期 Spring □ 後期 Fall □ 通年 Full-year
曜日・時限 Day・Time	□ Mon 月 □ Tue 火 □ Wed 水 □ Thu 木 □ Fri 金 ⊠ Sat 土 □ Other □ 1st period □ 2nd period □ 3rd period □ 4th period □ Other
単位認定教員 Lead Instructor	Sachiko Ohde
授業概要 Course Overview	Due to changes in the epidemiological structure, the incidence rate and mortality rate of chronic diseases are increasing yearly. As a result, early detection/prevention by screening and post-onset management are becoming more and more important. This applies to other countries as well and is a task which needs to be addressed based on international cooperation. Evaluation of the efficacy of examinations and treatment will be carried out, and an opportunity to learn about over-diagnosis and over-treatment, which have become recent issues, will be provided. In addition, Dissemination and Implementation research will be considered from the quality of life and health economic aspects. Selected diseases will be summarized and presented by groups in order to promote understanding and learn to make budget plan for screening and post-onset management and intervention. 疾病構造の変化により慢性疾患の罹患率や死亡率は年々増加し、それらのスクリーニングによ る早期発見・予防、罹患後の管理は益々重要性が増している。それは他の国々でも同様であり 国際共同で取り組むべき課題である。そこで、本講義ではエビデンスに基づいた慢性疾患患者 のスクリーニング・管理・モニタリングについて双方向的に学習し実際に予防策を立案し実施 する知識を習得する。検査や治療などの効率性を評価し、過剰診断、過剰治療の弊害について も学ぶ機会を提供する。また、最近特に問題になっている、研究結果を実際に普及し実行する ための手法(Dissemination and Implementation study)も取り上げる。選択した慢性疾患について グループで、発表し理解を促し、スクリーニング・管理・モニタリング・介入にかかる予算立案についても学ぶ。
授業の目的 Course Objectives	To gain an understanding of the screening/management/monitoring of patients with chronic disease and the ability to develop the plan of evidence-based prevention. This course is related to the Graduate School of Public Health diploma policy item 1 and 3. 慢性疾患のスクリーニング・マネージメント・モニタリングについて理解し根拠に基づいた予 防対策を立案・実施・提案することができる。 Diploma Policy related to this course: 1,3 本科目に関連するディプロマポリシー : 1,3

到達目標 Learning Outcomes	・Ability to make an international comparison of the changes in the chronic disease structure ・Ability to select a clinical research design related to chronic diseases ・Ability to select a clinical research analysis method related to chronic diseases ・Ability to cite the main risk factors for chronic diseases ・Ability explain the prevention and management of major chronic diseases and the problems ・Ability explain the dissemination and implementation study and the Evidence-Practice gap of the chronic disease. ・慢性疾患構造の推移と国際比較ができる ・慢性疾患に関連した臨床研究のデザインを選択できる ・慢性疾患に関連した臨床研究の分析法を選択できる ・慢性疾患の主なリスク因子を挙げることができる ・主な慢性疾患の予防と管理とそれらの問題点について述べることができる ・普及実装(D & I)研究・evidence-practice gap について説明することができる
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	6.Discuss the means by which structural bias, social inequities, and racism undermine health and create challenges to achieving health equity at organizational, community and systemic levels 10. Explain basic principles and tools of budget and resource management
授業計画 Topics and Activities	The course topics include but not limited to: 1) Learn the concept of chronic disease care model proposed by Edward Wagner. 2) Synthesize the published information to summarize regarding non-communicable diseases, including descriptive epidemiology, significance of the disease and public health burden, treatment, prevention strategy. 3) Show the example of current evidence-based interventions and propose intervention plan with setting and target population as well as budget plan
評価方法 Assessments	Reports: 45%, Presentation: 55% レポート：45%, プレゼンテーション：55%
履修要件 Pre-requisites	☐ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☒ Recommended 推奨: Epidemiological Methods ☐ Others その他:
教科書（必須） Textbooks (mandatory)	
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: no use of AI generative tools such as ChatGPT for all assignments.

科目名 Course Name	生物統計学Ⅰ　Biostatistics I
科目種別 Course Type	(Curriculum 2025 and after)　　　☒ Required　　☐ Selective　　☐ Elective　* This is for degree students
授業形態 Format	☒ Lecture 講義　　☐ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☒ In class　　☒ Online Live　　☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☒ 前期 Spring　　　　　　☐ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☐ Wed 水　☒ Thu 木 ☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	Stuart Gilmour
授業概要 Course Overview	生物統計学Ⅰでは、健康科学研究における一般的な研究デザインに対応した記述統計、推測統計の基本を学ぶ。履修生は本講義を通じ、様々な結果変数に対し適切な統計手法を選択し、使用できるようになる。コースの後半では、回帰モデル、生存時間解析といった発展的手法についても触れていく予定である。Fundamentals of Biostatistics （Bernard Rosner, Cengage Learning, 8th edition）を教科書として用いる予定である。 担当教員は、課題（試験やレポート等）にコメントを付けて返却する。 Biostatistics I will introduce the concepts of different study designs that are commonly used in health research. Different descriptive statistical methods will be discussed in the course so that students are able to use appropriate statistical tools to analyze different types of data. The last part of the course will deal with statistical inference. Feedback will be provided to students on assignments and class activities.
授業の目的 Course Objectives	本科目は、研究上必要な統計手法を理解するとともに、特に統計解析をするために必要な知識の修得を目的とする。 This course will provide students with an understanding of statistical methods necessary for research, and to specifically obtain the theoretical knowledge involved in statistical analysis. Diploma Policy related to this course: 1, 3 本科目に関連するディプロマポリシー：1, 3
到達目標 Learning Outcomes	本科目修了時には、様々な種類のデータに対して適切な記述統計を用いることができるようになる。また、必要な仮説を検定することができ、（p 値や信頼区間などに関する）その結果を解釈できるようになる。 By the end of the course, students will be able to use appropriate descriptive statistics for different types of data. Students will also be able to formulate the necessary hypotheses and interpret (in terms of p-values, confidence intervals, etc.) the results.

[MPH only] 本科目で扱うコンピテンシー　Competencies addressed in this course	2) Select quantitative and qualitative data collection methods appropriate for a given public health context (evidence-based approach) 3) Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate (evidence-based approach) 4) Interpret results of data analysis for public health research, policy or practice　(evidence-based approach) 24:C2) Use statistical reasoning and inference to properly analyze and answer problems in public health, epidemiology and demography (biostatistics)
授業計画 **Topics and Activities**	The course topics include but not limited to: 　1)　Introduction to and uses of statistics 　2)　Descriptive statistics and basic tools 　3)　Probability theory and probability distributions 　4)　Estimation and inference 　5)　Specific statistical tests (One-sample and two-sample statistical tests)
評価方法 **Assessments**	小試験：10%、宿題：30%、 半期試験：　30%、期末試験：30% Quizzes：10%, Homework assignments：30%, Mid-semester exam：30%, Final exam：30%
履修要件 **Pre-requisites**	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） **Textbooks (mandatory)**	Fundamentals of Biostatistics (8th edition), by B. Rosner
その他 **Others**	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: No AI tools will be accepted for use in this class

科目名 Course Name	生物統計学実習Ⅰ　Biostatistics I Practicum
科目種別 Course Type	(Curriculum 2025 and after)　　　☐ Required　　☒ Selective　　☐ Elective　* This is for degree students
授業形態 Format	☐ Lecture 講義　　☒ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class　　☒ Online Live　　☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	2
開講期 Semester	☒ 前期 Spring　　　　　☐ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☒ Wed 水　☐ Thu 木 ☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	Stuart Gilmour
授業概要 Course Overview	生物統計学実習Ⅰでは、統計プログラミング言語である Stata が概観される。本科目修了時には、記述統計や推測統計を実践する手段に関する理解に加え、プログラミング言語を用いることができる技術も習得している。Excel を使用数理的な分析も教えます。 担当教員は、課題（試験やレポート等）にコメントを付けて返却する。In this course, the statistical software Stata will be taught. At the end of this course, students are expected to have the skill to use this programming language independently to interpret descriptive and inferential statistical tools. We will also introduce the use of Excel for basic statistical and numerical tasks, and the use of Word for preparation of professional reports. Feedback on quizzes, assignments, and reports will be provided
授業の目的 Course Objectives	本科目は、研究上必要な統計手法を理解するとともに、統計解析をするために必要な技術の修得を目的とする。 The purpose of this course is to provide students with an understanding of statistical methods necessary for research, and to obtain the skills involved in statistical analysis. Diploma Policy related to this course: 1,3 本科目に関連するディプロマポリシー：1,3
到達目標 Learning Outcomes	本科目修了時には、記述統計学や推測統計学において実際に統計分析ソフトウェアを用いることができる技術を習得している。 By the end of the course, students will have the skills to use statistical analysis software and also basic office productivity tools (including Excel).
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	1)Apply epidemiological methods to the breadth of settings and situations in public health practice (evidence-based approach) 3) Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate (evidence-based approach) 4) Interpret results of data analysis for public health research, policy or practice　(evidence-based approach)

Appendix

授業計画
Topics and Activities
	The course topics include but not limited to:
	   1) *Introduction to computers*
	   2) Using MS Excel for advanced calculations
	   3) Working directories and good programming practice
	   4) Importing and manipulating data in Stata
	   5) Graphing and graphical tools in Excel and Stata
	   6) Statistical tests in Stata

評価方法 **Assessments**	講義・グループワークへの貢献：10%、 宿題：90% Contribution to the class：10%, Homework assignments：90%,
履修要件 **Pre-requisites**	☐ None なし ☐ Mandatory to complete 修得済み: ☒ Required to complete/concurrently take 修得済みまたは同時履修: 生物統計学Ⅰ/Biostatistics 1 ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） **Textbooks (mandatory)**	Stata/BE18, the statistical software. This is available on 30 computers in the media room, and some computers in the computer room of the main building. You don't need to buy it if you are able/willing to work in those rooms.
その他 **Others**	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: *No AI Tools are accepted in this class*

科目名 Course Name	(MPH) 生物統計学Ⅱ, BiostatisticsⅡ
科目種別 Course Type	(Curriculum 2025 and after)　　□ Required　　□ Selective　☒ Elective　* This is for degree students
授業形態 Format	□ Lecture 講義　　□ Practicum 実習　☒ Seminar 演習
授業実施方法 Teaching Platforms	□ In class　☒ Online Live　☒ On Demand* (☒ full / □ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	□ 前期 Spring　　　　☒ 後期 Fall　　　　□ 通年 Full-year
曜日・時限 Day・Time	□ Mon 月　□ Tue 火　□ Wed 水　☒ Thu 木 □ Fri 金　□ Sat 土　□ Other □ 1st period　□ 2nd period　☒ 3rd period　□ 4th period　□ Other
単位認定教員 Lead Instructor	小野洋平 (Yohei ONO)
授業概要 Course Overview	公衆衛生を含む健康科学に関する多くの研究は，連続データ，二値データ，計数データ,生存時 間データなど様々な形式の健康上のアウトカムと，それらに関連する要因を扱う。そのため， これらのデータを解析する主要な統計手法の利用方法を理解し，検証する能力が重要となる。 　本授業は生物統計学Ⅰを更に発展させた内容を扱い，基礎的な統計学の素養を持ち，健康科 学における推測統計学とモデリングの更なる探究を希望する学生を対象とする。 　本授業は，基本的な生物統計(生物統計学I)の簡単な復習から始まる。本授業は，主として 一般的な線形モデル(ANOVA, 線形，ロジスティックおよびポアソン回帰)を扱う。健康科学や 医学では生存時間データに頻繁に直面するため，本授業では生存分析についても紹介する。 教員は、課題(試験やレポート等)に対するフィードバックを行う。 As most studies on health sciences, including public health, address common health outcomes (i.e., continuous, binary, count and time-to-event data) and their associated factors, ability to understand and verify the use of these key statistical methods is important. This course is a continuation of the introductory course Biostatistics I or for those who have some basic statistical background and wish to further study on inferential statistics and/or modelling in health sciences. The course starts with a brief review on basic biostatistics (Biostatistics I). The central parts of the course will deal with general linear models (ANOVA, linear, logistic and Poisson regression). As in health/medical sciences, time-to-event data is quite common, survival analysis models are also introduced in this course. The instructor will provide feedback comments on assignments (quizzes, assignments, and other works of students).

授業の目的 Course Objectives	本講義は，健康科学の研究デザインと分析に使用される主要な統計的手法に関する理論的知識 とスキルを学生に提供することを目的とする。生物統計学 II のトピックには，分散分析（ANOVA），線形回帰モデル，ロジスティック回帰モデル，ポアソン回帰モデル，生存分析が含まれる。 This course is intended to provide students with theoretical knowledge and skills on key statistical methods used in the design and analysis of studies in health sciences. Topics in Biostatistics II include analysis of variance (ANOVA), linear, logistic and Poisson regression model and survival analysis. Diploma Policy related to this course: 1, 3 本科目に関連するディプロマポリシー：1, 3
到達目標 Learning Outcomes	受講者は次のことができるようになる。 1) 授業で紹介した主要な統計概念が説明できる 2) 関心のある研究の統計的な部分をデザインすることができる 3) ANOVA, 線形, ロジスティック, ポアソンと Cox 回帰モデリングや他の基本的な生存分析に おける統計分析の結果を解釈することができる。 なお、本科目は、本学のコンピテンシーリスト 1,3,4, 24 に関連する。
[MPH only] 本科目で扱うコンピテンシー ー Competencies addressed in this course	1. Apply epidemiological methods to settings and situations in public health practice 3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate 4. Interpret results of data analysis for public health research, policy, or practice 24. Use statistical reasoning and inference to properly analyze and answer problems in public health, epidemiology and demography (biostatistics)
授業計画 Topics and Activities	The course topics include but not limited to: Class 1: 本授業の概要: 授業の構成, 履修要件, 評価 生物統計学 I の復習 Intro to the course: Structure, Requirements and Evaluations. Review on Biostatistics I Class 2: 分散分析 I: t 検定の復習; 分散分析の導入; 一元配置分散分析 ANOVA I: Review of t-tests; intro to ANOVA; One- way ANOVA Class 3: 分散分析 II: 二元配置分散分析; F 検定; 解釈 ANOVA II: Two-way ANOVA; F-tests; interpretations Class 4: 線形回帰モデル I: 相関係数; 単回帰;最小二乗（OLS）推定およびそれに関する仮定; 予測値と残差; 仮説検定

Linear regression model I: Correlation coefficient; simple linear regression; ordinary least squares (OLS) estimation and related assumptions; fitted values and residuals; hypothesis tests

Class 5:
線形回帰モデル II: 重回帰モデルと解釈; 種々の予測変数, 変数の中心化と変換や解釈
Linear regression model II: Multiple linear regression models and interpretations; different types of predictors, centering and transformation of variables and interpretations

Class 6:
線形回帰モデル III: 交絡; 媒介; 交互作用と解釈
Linear regression model III: confounding

Class 7:
ロジスティック回帰モデル I: 分割表; 関連性の尺度と検定; 解釈
Logistic regression model I: Contingency tables; measures and test of associations; interpretations

Class 8:
ロジスティック回帰モデル II: 単一予測変数によるロジスティック回帰モデル; パラメータの解釈 Logistic regression model II: Single predictor logistic regression model; interpretation of parameters

Class 9;
ロジスティック回帰モデル III: 複数の予測変数によるロジスティック回帰モデル; 仮定と尤度比検定
Logistic regression model III: Multi-predictor models; assumptions and likelihood ratio tests

Class 10:
ロジスティック回帰モデル IV: 交絡; 媒介; 交互作用と解釈
Logistic regression model IV: Confounding; mediation; interaction and interpretations

Class 11:
ポアソン回帰モデル
Poisson regression model

Class 12:
生存解析 I: 生存期間; 打ち切り; 生存関数; カプ ラン・マイヤー推定とログランク検定
Survival analysis I: Survival time; censoring; survival functions; Kaplan-Meier estimate and Log-rank Test

Class 13:
生存解析 II: ハザード関数; 比例ハザードモデル; モデルパラメータの解釈
Survival analysis II: Hazard functions; proportional hazards model; interpretation of the model parameters

	Class 14: ベイズ統計学入門: 事前分布; 尤度; 事後分布; ベイズ統計学における信頼区間の理解 Introduction to Bayesian statistics: Prior distribution; likelihood function; posterior distribution; credible interval Class 15: レビュー: 講義 1-15 Review: Lecture 1-Lecture 15
評価方法 Assessments	クイズ(8 回のクイズ): 20%　(8 回のクイズの中で上位 5 回の得点が成績に反映される) 課題(3 つの課題): 60%　(3 つの課題の中で上位 2 回の課題の得点が成績に反映される) 論文読解レポート: 20% Quiz (8 quizzes): 20% (The top five scores are reflected in your final grade) Assignments (3 assignments): 60% (The top two scores are reflected in your final grade) Reading article report: 20%
履修要件 Pre-requisites	☐ None なし ☒ Mandatory to complete 修得済み: 生物統計学Ⅰ, Biostatistics　Ⅰ ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	Rosner, B. (2016). Fundamentals of Biostatistics (8th edition). Cengage Learning, Boston, USA
その他 Others	オンライブで zoom から授業に参加する場合、授業中にはカメラをオンにする必要がある。 Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: 生成系 AI の利用を認めない。No use of Generative AI 注: 8 つのクイズ(第 3 週, 第 5 週, 第 6 週, 第 7 週, 第 9 週, 第 11 週, 第 12 週, 第 13 週)を予定している。それぞれの回答時間は約 20~30 分である。このクイズの目的は, 講義の 主要な概念と内容に関する学生の理解度を継続的に評価することである。第 5 週, 第 7 週, 第 8 週, 第 9 週, 第 11 週, 第 13 週, 第 14 週, 第 15 週の月曜日午後 11 時までに, 氏名と ID をそえて Manaba 経由で提出すること。 　課題 1,2 および 3 は, それぞれ第 10 週, 第 13 週および第 16 週の月曜日午後 11 時までに, 氏名と ID をそえて提出すること。これらの課題では, 様々なタイプのアウトカム(連続, 二値, 計数およびイベントまでの時間)に関連する統計モデルの選択, 説明および解釈までの一連の能力を評価する)。 　論文読解レポートの締め切りについては授業中に発表する。 Notes: There are 8 quizzes in week 3, 5, 6, 7, 9, 11, 12, and 13, each of which takes around 20-30 minutes. The aim of these quizzes is to serve a continuous assessment of students' understanding of key concepts and contents in the course. Submit via Manaba with your name and ID by 11PM Monday of week 5, 7, 8, 9, 11, 13, 14 and 15, respectively. -Submit assignments 1, 2, and 3 at 11PM Monday of week 10, 13, and 16, respectively via Manaba with your name and ID. The

Appendix

	goal of these assignments is to assess students' ability to apply theories to select, explain and interpret a statistical model relevant to each type of outcomes, continuous, binary, count, and time-to-event. -The due date of reading article report is to be announced in class.

Appendix

科目名 Course Name	(MPH) 生物統計学実習Ⅱ, BiostatisticsⅡ practicum
科目種別 Course Type	(Curriculum 2025 and after) ☐ Required ☐ Selective ☒ Elective * This is for degree students
授業形態 Format	☐ Lecture 講義 ☒ Practicum 実習 ☐ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class ☒ Online Live ☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	2
開講期 Semester	☐ 前期 Spring ☒ 後期 Fall ☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月 ☐ Tue 火 ☒ Wed 水 ☐ Thu 木 ☐ Fri 金 ☐ Sat 土 ☐ Other ☐ 1st period ☐ 2nd period ☒ 3rd period ☐ 4th period ☐ Other
単位認定教員 Lead Instructor	小野洋平 (Yohei ONO)
授業概要 Course Overview	公衆衛生における適切な意思決定や政策提案は,統計的分析により統合された多くの良質な情報 とエビデンスに基づき行われる。健康科学や公衆衛生における統計的分析のほとんどは, 連続, 二値, 計数および生存時間などの重要な健康アウトカムと関係している。したがって, これら のアウトカムと関連する因子の影響を検討するだけでなく, こうしたアウトカムをどのように 解析するかを理解し実践することは, 健康科学や公衆衛生上の問題を解決する鍵となる。 本講義では, 健康に関連する事象や, 健康に関して議論となっている問題を統計学によって モデリングし, 保健/公衆衛生の政策決定や実践の現場へ説明する能力を涵養する。 教員は、課題(試験やレポート等)に対するフィードバックを行う。 A good public health decision and/or initiative is driven upon good information and evidence which is synthesized in large part from statistical analyses. As most of these analyses in health/public health perspective are related to key health outcomes such as continuous, binary, count and time-to-event, understanding and applying of how to analyze these outcomes as well as to examine factors associated with each of these outcomes are key to addressing health/public health concerns. This course builds statistical competencies on modelling and explaining these health phenomena/issues to inform health/public health policies and practices. The instructor will provide feedback comments on assignments (assignments, reports, and other works of students).
授業の目的 Course Objectives	本授業では統計ソフトウェア(Stata)を使用し, 回帰モデルを用いた実データの分析に必要な全ての手順を実演する。コース修了時に学生は, 統計ソフトウエアを用い, 独立した連続データ, 二値データ, カウントデータに適した回帰モデルを適用し, その結果を解釈する能力を習得する。授業では, 回帰モデルの適合結果を視覚的に示すための諸手法についても考察する。 Statistical software (Stata) will be used in this course to demonstrate all the necessary steps for analyzing real life data using regression models. At the end of the course, it is expected that students will be able to use statistical software for fitting regression

	models for independent continuous, binary, and count response, and to interpret the results. Different procedures for graphically presenting the results of regression model fits will also be discussed in the class. Diploma Policy related to this course: 1, 3 本科目に関連するディプロマポリシー：1, 3
到達目標 **Learning Outcomes**	受講者は次のことができるようになる。 1)統計ソフトウェア(Stata)を使用し，連続，二値，計数および生存時間などの健康 アウトカムをモデル化することができる。 2) ANOVA, 線形回帰, ロジスティック回帰, ポアソン回帰, Cox 回帰や他の基本的な生存分析 の結果を提示し，解釈することができる。 3) 統計ソフトウェア(R)を使用し、データの前処理ができるようになる After the course, students will be able to: 1)model different health outcomes - continuous, binary, count and time-to-event using a statistical program (Stata) 2)present and interpret the result of such statistical analyses as ANOVA, linear, logistic, Poisson and Cox's regression modelling and other basic survival analyses. 3) preprocess the data using R language.
[MPH only] 本科目で扱うコンピテンシー　**Competencies addressed in this course**	2. Select quantitative and qualitative data collection methods appropriate for a given public health context 3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming, and software, as appropriate 4. Interpret results of data analysis for public health research, policy, or practice 24. Use statistical reasoning and inference to properly analyze and answer problems in public health, epidemiology and demography (biostatistics)
授業計画 **Topics and Activities**	The course topics include but not limited to: Class 1: R の概要 (1) Introduction to R (1) Class 2: R の概要 (2) Introduction to R (2) Class 3: R によるデータの前処理(1) Data preprocessing using R language (1) Class 4: R によるデータの前処理(2) R から Stata へのデータ受け渡し

	Data preprocessing using R language (2): Loading the preprocessed data into Stata
	Class 5: Stata による生物統計学 Ⅰ の復習 (1) Review of Biostatistics I: with Stata (1)
	Class 6: Stata による生物統計学 Ⅰ の復習 (2) Review of Biostatistics I: with Stata (2)
	Class7: Stata による分散分析 Analysis of Variance (ANOVA) in Stata 個別課題 1: 分散分析演習(Stata) Individual Assignment 1: ANOVA exercise (Stata)
	Class 8: Stata による単純および多重線形回帰モデル: 仮定, モデル適合 Simple and Multiple Linear Regression Models: assumptions, model fit in Stata 個別課題 2: 線形回帰モデル(Stata) Individual Assignment 2: Linear regression model (Stata at students' choice)
	Class 9: Stata によるロジスティック回帰モデル: 単一 および複数の予測変数によるモデル; 仮定, モデル適合およびパラメータ推定値の 解釈 Logistic Regression Models: Single and multiple predictor models; assumptions, model fits and interpreting the parameters' estimates in Stata
	Class 10: Stata によるロジスティック回帰モデルの応用 (1): Applied logistics regression using Stata (1)
	Class 11: Stata によるロジスティック回帰モデルの応用 (2): Applied logistics regression using Stata (2)
	Class 12: Stata によるポアソン回帰分析 Poisson regression in Stata 個別課題 3: ロジスティック回帰モデルとポア ソンモデル(Stata) Individual Assignment 3: Logistic regression and Poisson model (Stata at students' choice)

	Class 13: Stata によるポアソン回帰分析の応用: Applied poisson regression using Stata Class 14: Stata による生存分析（1）Survival analysis in Stata (1) 個別課題 4: 生存分析(R または Stata) Individual Assignment 4: Survival analysis (Stata at students' choice) Class 15: Stata による生存分析（2) Survival analysis in Stata (2) 個別課題 4: 生存分析(Stata) Individual Assignment 4: Survival analysis (Stata at students' choice)
評価方法 Assessments	1. 課題(4 つの課題): 100% 1. Assignments (4 assignments): 100%
履修要件 Pre-requisites	☐ None なし ☐ Mandatory to complete 修得済み: ☒ Required to complete/concurrently take 修得済みまたは同時履修: 生物統計学Ⅱ, Biostatistics Ⅱ ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	1.Vittinghoff, E., Glidden, D.V., Shibosky, S.C. & McCulloch, C. E. (2012). Regression methods in biostatistics: Linear, logistic, survival, and repeated measures models (second edition). Springer, Springer, New York, USA. (for Stata) 2. Peter Dalgaard (2008). Introductory Statistics with R. Springer, 2nd ed. (for R)
その他 Others	オンライブで zoom から授業に参加する場合、授業中にはカメラをオンにする必要がある。 Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: 生成系 AI の利用を認めない No use of AI generative tools 注:課題では，授業で紹介されたさまざまなモデルを実行するための統計パッケージ(Stata)の理解と適用について評価する。 Notes: -The aim of these assignments is to assess students' understanding and applying a statistical package (Stata) to work on different models introduced in the course.

Appendix

科目名 Course Name	Health Informatics and Decision Making 健康情報・決断科学
科目種別 Course Type	(Curriculum 2025 and after) □ Required □ Selective ⊠ Elective * This is for degree students
授業形態 Format	□ Lecture 講義 □ Practicum 実習 ⊠ Seminar 演習
授業実施方法 Teaching Platforms	□ In class ⊠ Online Live □ On Demand* (□ full / □ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	⊠ 前期 Spring □ 後期 Fall □ 通年 Full-year
曜日・時限 Day・Time	□ Mon 月 ⊠ Tue 火 □ Wed 水 □ Thu 木 □ Fri 金 □ Sat 土 □ Other □ 1st period □ 2nd period □ 3rd period ⊠ 4th period □ Other
単位認定教員 Lead Instructor	Wong, Zoie S.Y.
授業概要 Course Overview	This course will equip students with the ability to understand, critique, and synthesize relevant digital health and evidence-based public health contexts as essential skills necessary to achieve MPH foundational competencies. Upon completion of the course, students will comprehend how informatics contributes to shape health care system, facilitate effective system planning to promote health, and influence public health policies. The course emphasizes on the application of health informatics theories and evidence-based approaches to facilitate effective public health decision-making. Through an inter-professional group project, students will have opportunities to practice leadership, communication, and system thinking skills in designing digital health initiatives. Feedback will be provided to students on assignments, projects and class activities.
授業の目的 Course Objectives	This course aims to introduce the concepts, theories and technologies that are integral to the field of information science and decision-making in public health settings. Diploma Policy related to this course: 1,3,4 本科目に関連するディプロマポリシー：1,3,4
到達目標 Learning Outcomes	Students will acquire knowledge of foundational principles and approaches in public health and, upon successful completion of the course, will be able to do the following: 1. Describe the methods and applications of informatics in the health sector and the potential of advanced IT for improving health services quality. 2. Understand the science of health informatics which can be applied to facilitate evidence-based decision making. 3. Acquire and demonstrate the ability to design health informatics innovations that can improve decision-making processes in public health context. 4. Apply system thinking, leadership and communication skills to address informatics challenges in public health.

	This course addresses Competency 1,2,5,6, 12,18,21,24 of the MPH Competency List. 本科目で扱うコンピテンシー：1,2,5,6, 12,18,21,24
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	This course addresses Competency 1,2,5,6, 12,18,21,24 of the MPH Competency List. 本科目で扱うコンピテンシー：1,2,5,6, 12,18,21,24 1)Apply epidemiological methods to the breadth of settings and situations in public health practice (evidence-based approach) 2)Select quantitative and qualitative data collection methods appropriate for a given public health context (evidence-based approach) 5) Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings (healthcare systems) 6) Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels (healthcare systems) 12) Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence (policy) 18) Select communication strategies for different audiences and sectors (communication) 21) Perform effectively on interprofessional^ teams (interprofessional) 24:C2) Use statistical reasoning and inference to properly analyze and answer problems in public health, epidemiology and demography (biostatistics)
授業計画 Topics and Activities	The course topics include but not limited to: Overview of Health Informatics Science and Decision-Making, Electronic Health Records (EHRs) and Health Information Exchange (HIE), Consumer Health Informatics, Telehealth and mhealth, Medical Data, Coding, and Digital Health for Health System Strengthening, Informatics Applied to Quantitative and Qualitative Health Data I (Theory, Methods, Hands-on), Digital Tools Supporting Patient Health Management, Health Information Privacy, Security and Ethics, Clinical Decision Support Systems, Digital Health Evaluation, Patient Safety Informatics, Public Health Informatics 健康情報・決断科学の概要、電子カルテと医療情報交換、消費者医療情報科学（CHI）と mhealth、データの標準化と診療情報のコーディング、医療データ解析 I、II, III，患者の健康管理をサポートするデジタルツール、医療情報のプライバシー、セキュリティ、臨床決定支援システム、健康技術評価、患者安全と医療情報技術、公衆衛生情報科学
評価方法 Assessments	個人評価: 課題提出(20%),中間試験(15%), 期末試験(30%) グループ課題評価: グループ課題の提出、中間発表、リポート提出（グループ）、発表 （10%+10%+15%). 中間試験では履修生の健康情報科学の概念、原理の理解度を見る。プロジェクトにより、学際的なグループ環境下において、修得した健康情報科学の概念、理論、および技術を、公衆衛生情報科学の課題に適用する能力を見る。期末試験では、科目の内容全体についての修得度を評価する。

	Individual: Mid-term quiz (15%), Final quiz (30%), Assignments (20%) Project: Group project proposal, interim group presentation, and final presentation (10%+10%+15%). The project allows students to demonstrate their abilities to apply the acquired health informatics concepts, theories and techniques to a public health informatics problem under a multidisciplinary group environment. After-class exercises/practices that are not contributing to final score will also be provided after sessions. Feedback will be provided to students on assignments
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	Hoyt RE and Hersh WR. *Health informatics practical guide.*8th ed. Informatics Education; 2022. *This book was adopted by various famous universities in the US and the world, including Harvard Medical School and Johns Hopkins University. 本書は、ハーバード大学医学部やジョンズホプキンス大学を含む米国および各国の主要な大学院で採用されている。 Optional textbook Almond H and Mather C. 2024. Digital Health A Transformative Approach. Elseiver.
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: The use of AI generative tools such as ChatGPT for all assignment writings, quiz, and final exam are not acceptable

Appendix

科目名 Course Name	(MPH) Health Policy and Management 医療政策管理学
科目種別 Course Type	（Curriculum 2025 and after）　　　☒ Required　　☐ Selective　　☐ Elective　＊This is for degree students
授業形態 Format	☒ Lecture 講義　　☐ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☒ In class　　☒ Online Live　　☒ On Demand*（☐ full / ☒ partial） *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☒ 前期 Spring　　　　　☐ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☒ Mon 月　☐ Tue 火　☐ Wed 水　☐ Thu 木 ☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	加藤承彦　Tsuguhiko Kato
授業概要 Course Overview	日本および他国における保健医療政策に関する様々な側面（制度の設計、歴史、社会人口構造の変化）や政策立案のプロセスについて学び、健康を増進するための政策に関連する機関や専門性について理解を深める。講義・ディスカッション・グループワークを通じて、日本およびその他の国々が抱える健康に関する課題を知り、解決の糸口を探る経験を積む。課題やクラス活動に対しては、教員によるフィードバックを提供する。 This course provides the opportunities to learn about various aspects of health policies in Japan and other countries, including system design, history, changes in socio-demographic structures, and the policymaking process and deepen understanding of organizations and expertise related to policies that promote health. Through lectures, discussions, and group work, students gain insight into health-related challenges faced by Japan and other countries and explore potential solutions. Feedback on assignments and class activities will be provided by the instructor.
授業の目的 Course Objectives	本コースの目的は、日本の保健医療政策を、政治、経済、世論等の医療を取り巻く環境などの多様な視点から学ぶことである。特に、医療保険制度、保健制度、規制や法律、社会的格差と健康、政策決定プロセスとアドボカシー等について、最新の動向も含めて学習する。なお、日本を中心に取り上げるが、グローバルな視点からの比較や、他国への意味合いについても同時に学ぶ。 The purpose of this course is to study Japanese health policy from various perspectives, including the environment surrounding healthcare and public health system, such as politics, economics, and public opinion. In particular, the course will cover the latest trends in the healthcare insurance system, regulations and laws, social disparity and health, and policy making process and advocacy. The focus will be on Japan, but students will also learn about comparisons from a global perspective and the implications for other countries. Diploma Policy related to this course: 1, 2 本科目に関連するディプロマポリシー：1, 2

到達目標 Learning Outcomes	受講生は、保健医療政策の基礎知識や集団の健康を向上させるため知識やスキルについて学び、コースを修了することにより、以下を習得する。 1. 日本の保健医療政策（予防政策、健康増進を含む）および保健医療制度の組織、構造、機能について、その歴史、理念、政策決定プロセス、グローバルな視点を含めて説明できる。 2. 健康の社会的、政治的、文化的、経済的な決定要因と、それらが集団の健康や健康格差に与える影響を説明できる。 3. 保健医療政策と健康増進に関する政策的アプローチのために、予算と資源管理、具体的なプログラムや介入の概要を設計できるようになる。 4. 集団の健康に影響を与える政策について、利用可能な資源とその制約、および利害関係者を特定し協力する方法を考慮して、戦略を立てることができる。 5. 政策決定プロセス、メディアや世論の影響、倫理やエビデンスを考慮して、集団の健康を改善するための政策やプログラムのためのアドボカシー活動を策定することができる。 6. 主要な健康政策課題を評価するためのフレームワークを適用し、グローバルな視点から比較して、自国における重要な課題と実現可能な解決策を特定することができる。 Students will learn the fundamentals of health policy and the knowledge and skills to improve the health of populations, and upon completion of the course, will be able to do the following: 1. Explain the organization, structure, and function of Japan's health policy (including prevention policy and health promotion) and health system, including its history, philosophy, policy-making process, and global perspective. 2. Describe the social, political, cultural, and economic determinants of health and their impact on population health and health disparities. 3. Design an outline of budget and resource management, a specific program or intervention for a policy approach on health policy and health promotion. 4. Develop strategies for policies that affect population health, considering available resources and their constraints, the roles of ethics and evidence, as well as ways to identify and collaborate with stakeholders. 5. Formulate advocacy activities for policies and programs to improve population health, considering the policy-making process and the influence of media and public opinion. 6. Apply frameworks for evaluating major health policy issues and be able to compare them from a global perspective to identify key issues and feasible solutions for their country.
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	Competency: 12) Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence 13) Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes 14) Advocate for political, social or economic policies and programs that will improve health in diverse populations Foundational knowledge: 9) Explain the cultural, social, political, and economic determinants of health and how the determinants relate to population health and health inequities Concentration competency: 3) Evaluate key health policy issues, analyze recent health policy issues, and identify key challenges and feasible solutions related to Japan such as low fertility, hyper-aging, and population decline.

Appendix

授業計画 Topics and Activities	本コースで扱うトピック例 1）日本および海外の保健医療制度 2）社会保障制度の歴史 3）保健医療における倫理 4）根拠に基づく保健医療政策の決定 5）日本および海外での保健医療政策の決定プロセス 6）ヘルスコミュニケーション 7）ヘルスプロモーション 8）保健医療政策の分析 9）健康の文化・社会・政治・経済的決定要因が健康と健康格差に与える影響 10）保健医療政策に関する提言 The course topics include but not limited to: 1) Healthcare system in Japan and other countries 2) History of social security system 3) Ethics in health policies 4) Evidence-based policy making 5) Policy making process in Japan and other countries 6) Health communication 7) Health promotion 8) Analysis of health policies 9) Cultural, social, political, and economic determinants of health 10) Advocacy on health policies
評価方法 Assessments	グループ課題とプレゼンテーション：50% 期末レポート：50% Group assignment and presentation: 50% Final report: 50%
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	N/A
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: *No use of AI generative tools such as ChatGPT for all assignments.*

科目名 Course Name	(MPH) 医療経済学　Health Economics
科目種別 Course Type	（Curriculum 2025 and after）　　　□ Required　　□ Selective　　□ Elective　* This is for degree students
授業形態 Format	☒ Lecture 講義　　□ Practicum 実習　　□ Seminar 演習
授業実施方法 Teaching Platforms	□ In class　　☒ Online Live　　□ On Demand* (□ full / □ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☒ 前期 Spring　　　　　　□ 後期 Fall　　　　　　□ 通年 Full-year
曜日・時限 Day・Time	☒ Mon 月　□ Tue 火　□ Wed 水　□ Thu 木 □ Fri 金　□ Sat 土　□ Other □ 1st period　□ 2nd period　□ 3rd period　☒ 4th period　□ Other
単位認定教員 Lead Instructor	星野絵里　Eri Hoshino
授業概要 Course Overview	医療制度・医療経済学・医療技術評価の基本的な概念の理解を目指す。 課題については、教員よりフィードバックを受ける。 To learn the basic theory of health system, health economics and health technology assessment (HTA). Feedback will be provided to students on assignments and class activities.
授業の目的 Course Objectives	医療の特殊性である平等性、不測性、医師と患者の情報の非対称性、及び治療結果の不確実性を理解したうえで、国民・患者の視点から医療経済の課題を学修する。マクロの視点として、国全体としての医療支出と医療アウトカムとの関連性を検証し、さらに医療資源分配の際の指標となる、様々な医療プログラムの効果の評価法について学修する。ミクロの視点として、臨床現場での決断分析について具体的な事例を用いながら医療介入・治療選択の際の効果の評価法について学修する。最後に薬剤評価の具体例を提示することで、経済評価の基本的な考え方を学修する。なお、医療機関、医師・医療従事者の課題については、本科目と対をなす医療政策管理学で学修する。 なお、本科目は、本学のディプロマポリシー1と2に関連する。 The purpose of this course is to understand the key aspects determining healthcare: egalitarian principle, unpredictability of need, information asymmetry between physician and patient, and uncertainty of outcome. From a macro-perspective, the general relationship between health expenditures and health outcome across nations is examined. Next, impact assessment methods of health programs or policies which are important for resource allocation decisions will be examined. Next, from a micro-perspective viewpoint, methods for clinical decision analysis are introduced by the use of rigorous case-studies. Lastly, health technology assessment and pharmaco-economic analysis

	will be explained using concrete examples. This course is related to Graduate School of Public Health diploma policy item 1 and 2.
到達目標 Learning Outcomes	マクロ・ミクロの視点に基づき医療資源配分と医療アウトカムについての課題と分析方法を理解する。 Students will understand the issues and methodology used for evaluating medical resource allocation and medical outcomes in both macro- and micro-perspective viewpoints.
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	本科目は、本学のコンピテンシーリスト 3,13,14,15,16 に関連する。 This course addresses Competency 3,13,14,15 and16 of the MPH Competency List.
授業計画 Topics and Activities	The course topics include but not limited to: 1. Key Healthcare Aspects (医療の特殊性) 2. Macro-level Analysis (マクロ視点での分析) 3. Micro-level Analysis (ミクロ視点での分析) 4. Health Technology Assessment (医療技術評価)
評価方法 Assessments	1. 課題提出＋課題の発表(履修人数により個人、または、グループで設定する) 2回 70% (35% 1回) 2. 授業への貢献度 30%(授業内での発言や提案で評価) 1. Quality of assignment presentations (#1&#2) 70% (35% each) 2. Class participation and contribution evaluated as in-class comments and suggestions 30%
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須) Textbooks (mandatory)	特にない No requirements 参考書 (optional references) Methods for the Economic Evaluation of Health Care Programmes 3rd Edition by Michael F. Drummond, Mark J. Sculpher, George W. Torrance, Bernie J. O'Brien
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class.

科目名 Course Name	医療技術評価概論 Intro to Health Technology Assessment
科目種別 Course Type	（Curriculum 2025 and after）　　　□ Required　　□ Selective　　☒ Elective　* This is for degree students
授業形態 Format	□ Lecture 講義　　□ Practicum 実習　　☒ Seminar 演習
授業実施方法 Teaching Platforms	□ In class　　☒ Online Live　　☒ On Demand* (☒ full / □ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	2
開講期 Semester	□ 前期 Spring　　　　　☒ 後期 Fall　　　　　□ 通年 Full-year
曜日・時限 Day・Time	☒ Mon 月　□ Tue 火　□ Wed 水　□ Thu 木 □ Fri 金　□ Sat 土　□ Other □ 1st period　□ 2nd period　☒ 3rd period　□ 4th period　□ Other
単位認定教員 Lead Instructor	Sachiko Ohde
授業概要 Course Overview	毎回、担当教員による授業およびエクセルを用いたプラクティカムを実施する。 医療技術評価に必要なアウトカムの設定、状態推移確率の考え方、、生活の質尺度の考え方、また医療技術評価における文献の批判的吟味ついて、わが国及び諸外国におけるポリシーのディスカッション講義を行う。最終課題は、批判的吟味のレポートのフィードバックを受ける。 All classes include lectures by faculty and practicum, using excel software. Lectures include outcome setting, state transition probability, and health technology policy assessment in and outside of Japan. Feedback for final assignment (critical appraisal) will be provided.
授業の目的 Course Objectives	本コースはわが国の医療技術評価における制度の概要を学び、さらに HTA における実務を担う上で必要な基本的な知識と技術を習得することを目的とする。講義・実習・統計ソフトを活用した実践などの組み合わせにより授業をおこなう。 The purpose of this course is to learn the outline of medical technology assessment scheme in Japan, and to acquire the basic knowledge and skills necessary for carrying out practical work in HTA. Classes will be conducted by combining lectures, practical training, and practice using statistical software. Diploma Policy related to this course: 1,2 本科目に関連するディプロマポリシー：1,2
到達目標 Learning Outcomes	このコースの履修終了時に、学生は以下のことができるようになる。 7.　ヘルスケアシステムにおける医療技術評価の役割と必要性が説明できる。 8.　医療技術評価における意思決定モデリング、アウトカム測定、結果の統合及び経済評価にのプロセスを述べることができる。

	Students will acquire knowledge of foundational principles and approaches in public health and, upon successful completion of the course, will be able to do the following: 1. Understand the role and necessity of health technology assessment in health care systems. Explore decision analytic modelling, outcome measurement, evidence synthesis and economic evaluation for health technology assessment.
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	Competencies addressed in this course: 1,2,3,4 本科目で扱うコンピテンシー：1,2,3,4 1. Apply epidemiological methods to the breadth of settings and situations in public health practice (evidence-based approach) 2. Select quantitative and qualitative data collection methods appropriate for a given public health context (evidence-based approach) 3. Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate (evidence-based approach) 4. Interpret results of data analysis for public health research, policy or practice （evidence-based approach）
授業計画 Topics and Activities	The course topics include but not limited to: 1) Concept of economic evaluation 2) Procedure to establish for economic modelling.
評価方法 Assessments	ファイナルアサイメントの成果物：50% プラクティカムアサイメントの成果物：30% レクチャーアサイメントの成果物:20% Final Assignment 50%. Practicum assignment: 30% Lecture assignment:20% Feedback will be provided to students on assignments
履修要件 Pre-requisites	☐ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☒ Recommended 推奨: complete/concurrently take:Biostatistics I,Epidemiological Methods ☐ Others その他:
教科書（必須） Textbooks (mandatory)	
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: no use of AI generative tools such as ChatGPT for all assignments.

Appendix

科目名 Course Name	(MPH) Health and Behavioral Science　健康・行動科学
科目種別 Course Type	(Curriculum 2025 and after)　　　⊠ Required　　□ Selective　　□ Elective　* This is for degree students
授業形態 Format	⊠ Lecture 講義　　□ Practicum 実習　　□ Seminar 演習
授業実施方法 Teaching Platforms	⊠ In class　　⊠ Online Live　　⊠ On Demand* (⊠ full / □ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	□ 前期 Spring　　　　　⊠ 後期 Fall　　　　　□ 通年 Full-year
曜日・時限 Day・Time	□ Mon 月　□ Tue 火　⊠ Wed 水　□ Thu 木　□ Fri 金　□ Sat 土　□ Other □ 1st period　□ 2nd period　□ 3rd period　⊠ 4th period　□ Other
単位認定教員 Lead Instructor	Satomi Sato
授業概要 Course Overview	本コースでは、公衆衛生介入に使用される理論、方法、プログラム評価の原則も紹介し、現在の公衆衛生問題の解決に向けた理論と方法の適用に重点を置きます。コースは３つの段階で構成されます。第一段階では、社会心理的要因に注目し、個人の健康行動を探ります。第二段階では、社会構造を理解し、行動原理を考察します。第三段階では、医療や公衆衛生の介入事例を通じて、健康行動の変化を検証します。 さらに、学生は課題やグループディスカッションを通じて学び、担当教員がレポートの総評を授業内に行います。 This course introduces the theories, methods, and principles of program evaluation used in public health interventions, with an emphasis on the application of these theories and methods to address current public health issues. The course is structured in three stages. In the first stage, the focus is on psychosocial factors, exploring individual health behaviors. In the second stage, students will examine social structures and consider behavioral principles. In the third stage, students will assess changes in health behaviors through case studies of healthcare and public health interventions. Additionally, students will learn through assignments and group discussions, with the instructor providing a summary evaluation of reports during class.
授業の目的 Course Objectives	健康は行動から切り離すことはできない。このコースでは、個人の水準、対人関係や集団の水 準、そしてコミュニティや総合的なレベルを区分する、エコロジカルモデルについて慣れ親し んでもらう。そして、健康信念モデル、合理的行動モデル、計画的行動モデル、理論横断的モ デルを含む、個人の健康行動の理論に焦点を当てる。このコースを修了すると、上記のトピッ クに表されるような、ヘルスケアと行動におけるリサーチクエスチョンを組み立てることがで きる。Health is inseparable from behavior. This course will familiarize students with the ecological models: the individual, the interpersonal or group level, and the community or aggregate level. We focus on theories of individual health behavior including the Health Belief Model, the Theory of Reasoned Action, Theory of Planned Behavior, and the Transtheoretical Model. At the end of this course, students should feel comfortable building research questions that explore the above topics in the context of healthcare and behavior.

Appendix

	Diploma Policy related to this course: This course is related to the Graduate School of Public Health Diploma Policy 1 and 4. 本科目に関連するディプロマポリシー：なお、本科目は、本学のディプロマポリシー1と4に関連する。
到達目標 Learning Outcomes	このコース修了した学生は以下のことができる。エコロジカルモデル、健康信念モデル、合理的行動理論、計画的行動理論、理論横断的モデルを含む、個人の健康行動の理論について説明することができる。社会学的、行動学的な決定因子を査定し、公衆衛生プログラムの評価をするために、定量的・定性的な様々な調査理論を理解することができる。ヘルスケアと行動の関係を具体的な例を示して説明し、実践プログラムを提案することができる。 Students who complete this course will be able to: explain theories of individual health behavior, including the ecological model, health belief model, theory of reasoned action, theory of planned behavior, and transtheoretical model. They will be able to assess sociological and behavioral determinants, understand various quantitative and qualitative research methods for evaluating public health programs, and explain the relationship between healthcare and behavior with concrete examples. They will also be able to propose practical programs. Competencies addressed in this course: This course is related to Competency List 2, 3, 19, and 27. 本科目で扱うコンピテンシー：なお、本科目は、コンピテンシーリスト 2, 3, 19, 27 に関連する。
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	2) Select quantitative and qualitative data collection methods appropriate for a given public health context (evidence-based approach) 3) Analyze quantitative and qualitative data using biostatistics, informatics, computer-based programming and software, as appropriate (evidence-based approach) 19) Communicate audience-appropriate public health content, both in writing and through oral presentation (communication) 27:C5) Develop health behavioral intervention based on research and to evaluate health programs (HSB)
授業計画 Topics and Activities	The course topics include but not limited to: 1) Ecological model 2) Health Belief Model 3) Theory of Reasoned Action 4) Theory of Planned Behavior 5) Transtheoretical Model 6) Qualitative/Quantitative Research 7)
評価方法 Assessments	Discussion/ Assignments (25%) Mid-term Paper (25%), Final Presentation (25%), Partner's Communication (25%) Partner's communication: Each student reports via the manaba on the discussion of a partner outside the class, regardless of the course method.
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み:

Appendix

	☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） **Textbooks (mandatory)**	Health Behavior: Theory, research and practice/ editors. Karen Glanz, Barbara K. Rimer, and K. Viswanath-5th edition. Jossey-bass. 2015.
その他 **Others**	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: No use of AI generative tools such as ChatGPT for all assignments.

科目名 Course Name	(MPH) 環境保健学入門 Introduction to Environmental Health
科目種別 Course Type	（Curriculum 2025 and after）　　☒ Required　　☐ Selective　　☐ Elective　＊ This is for degree students
授業形態 Format	☒ Lecture 講義　　☐ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☒ In class　　☒ Online Live　☒ On Demand* (☐ full / ☒ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☐ 前期 Spring　　　　　☒ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☐ Wed 水　☒ Thu 木 ☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	大西一成（ONISHI Kazunari）
授業概要 Course Overview	This course aims to provide students with a basic understanding of how the ambient environment affects public health. The first part of the course will cover the basic principles of environmental health. In the second part of the course, various substantive topics in environmental health will be covered. Emphasis will be given to environmental epidemiology on air pollution, climate change, and one health. Feedback will be provided to students on assignments and student presentations. 環境保健学入門講座では、周辺環境が公衆衛生にどう影響を与えるのかの基礎的理解を目的とし、本コース序盤には、環境保健の基本原理を概観し、確認していく。本コース中盤では、環境保健における実例の検証及び事例を検討し考察していく。大気汚染や気候変動、ワンヘルスをはじめとした環境問題を軸にした環境疫学については重点的に考察する。担当教員は、課題（試験やレポート等）にフィードバックを行う
授業の目的 Course Objectives	This course is designed to provide a basic introduction to environmental health for students in the Master of Public Health program. This course is related to the Diploma Policy 1 and 3 of the university. This course is related to the St. Luke's Graduate School of Public Health diploma policy 1 and 3. 公衆衛生学修士履修生に対して、環境保健の基礎的な知識、原理を理解し、環境が公衆衛生に及ぼす影響を考察することを学修目的とする。なお、本科目は、本学のディプロマポリシー1と 3 に関連する。 Diploma Policy related to this course: 1,3

	本科目に関連するディプロマポリシー：1,3
到達目標 Learning Outcomes	By the end of the course, students will be able to: - Understand the basic principles of environmental health - Describe the potential health effects of environmental hazards このコースを修了した学生は以下のことができる。 環境保健の基礎原理を理解する。 環境災害の健康への潜在的影響を説明できる。
[MPH only] 本科目で扱うコンピテンシー　Competencies addressed in this course	16) Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making (leadership) 17) Apply negotiation and mediation skills to address organizational or community challenges (leadership) C4) Assess current issues in environmental health at the global, national, or community level (EH)
授業計画 Topics and Activities	The course topics include but not limited to: 1) One Health, Zoonosis 2) Climate Change 3) Air Pollution 4) Water Pollution 5) EH Simulation Discussion 6) Student Presentation (Any topics for related EH)
評価方法 Assessments	Midterm exam (40%), Final exam (40%), Student presentation and Discussion contribution (Number of live or bulletin board of manaba interaction) (20%) 中間試験（40％）、最終試験(40％)、プレゼンテーション、ディスカッションへの貢献度（ライブまたは掲示板でのやり取り回数）(20％)
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	N/A
その他 Others	Online live (attending the class over zoom): Students are requested to turn the zoom camera on during the class. Student presentations must be done by attending your presentation time live online. **Use of AI generative tools**: AI generative tools such as ChatGPT are not used for all assignments.

	参考図書： Introduction to Environmental Health One Health Understanding Environmental health: how we live in the world, 2nd Ed. Maxwell, NI., Jones and Bartlett Publishers, 2009

科目名 Course Name	(MPH) 環境保健学特論 Advanced Topics in Environmental Health
科目種別 Course Type	(Curriculum 2025 and after)　　☐ Required　　☐ Selective　☒ Elective　* This is for degree students
授業形態 Format	☐ Lecture 講義　　☒ Practicum 実習　　☒ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class　　☒ Online Live　　☒ On Demand* (☐ full / ☒ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	1
開講期 Semester	☒ 前期 Spring　　　　　☐ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☐ Wed 水　☒ Thu 木　☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☒ 3rd period　☐ 4th period　☐ Other
単位認定教員 Lead Instructor	Mihye Lee
授業概要 Course Overview	This course is to presents specialized topics in Environmental Health. Topics can vary by year and the instructor choses current topics or timely issues. Emphasis is on hands-on learning.
授業の目的 Course Objectives	This course aims to provide for advanced topics in environmental health for students in the Master of Public Health program. This course is related to Graduate School of Public Health diploma policy item 1 and 3.
到達目標 Learning Outcomes	By the end of the course, students will be able to understand the advanced topics in environmental health.
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	This course addresses Competency 3 and 26 of the MPH Competency List.
授業計画 Topics and Activities	The course topics include but not limited to: 1) Uses of satellite data in environmental health 2) Machine learning for environmental health 3) Causal mediation analysis

	4) Data crawling and scraping
評価方法 **Assessments**	Student presentation (100%)
履修要件 **Pre-requisites**	☐ None なし ☒ Mandatory to complete 修得済み: Introduction to Environmental Health, Biostatics I ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☒ Recommended 推奨: Skills for R ☐ Others その他:
教科書（必須） **Textbooks (mandatory)**	Presentation slides will serve as lecture notes. Tutorials will be distributed through the course website.
その他 **Others**	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: N*o use of AI generative tools such as ChatGPT for all assignments.*

科目名 Course Name	(MPH) 環境保健の実測実習 Practical measurement in Environmental Health
科目種別 Course Type	(Curriculum 2025 and after)　　☐ Required　　☐ Selective　☒ Elective　* This is for degree students
授業形態 Format	☐ Lecture 講義　　☐ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class　　☒ Online Live ☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	1
開講期 Semester	☒ 前期 Spring　　　　　☐ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☒ Tue 火　☐ Wed 水　☐ Thu 木 ☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☒ 3rd period　☐ 4th period　☐ Other
単位認定教員 Lead Instructor	大西一成（ONISHI Kazunari）
授業概要 Course Overview	This course explores how to interpret and enlighten findings using scientific data relevant to public health, drawing on news and expert commentary. While public awareness through the media is important for improving health literacy, we will decipher data and information sources and address special considerations based on the design of epidemiologic studies, efficacy issues, and approaches to measuring, analyzing, and evaluating exposures. The instructor will provide feedback on presentations and assignments. このコースでは、公衆衛生に関連した科学データを用いた知見の解釈と啓発の方法について、ニュースや専門家のコメントを題材として考察を深める。 健康を左右するヘルスリテラシーの向上にメディアを介した啓発は重要であるが、データや情報ソースを読み解き、疫学研究の計画、有効性の問題、曝露の測定、分析、評価へのアプローチなどをもとに特別に考慮すべき事項を取り上げる。 担当教員は、提出課題にコメントを付けて返却する。
授業の目的 Course Objectives	In this course, students will understand how to obtain environmental and epidemiological data, as well as their accuracy and limitations, based on actual cases. In addition, we will consider the interpretation of such information from the standpoint of both the sender and the receiver of science communications that provide appropriate explanations to the public. Discuss the acquisition of data and interpretation of the results, which will lead to the reliability of the analysis results. This course is related to St. Luke's Graduate School of Public Health diploma policy item 1, 2 and 4.

	本コースでは、実際の事例をもとに環境データおよび疫学データの取得方法やその正確性や限界を理解する。さらに、それらの情報の解釈について、適切に一般へ説明を行うサイエンスコミュニケーションについて、発信側と受信側の両方の立場で考察を行う。解析結果の信頼性にもつながるデータの取得及び結果の解釈についてディスカッションを行う。 本科目は、本学研究科のディプロマポリシー[No.1,2,4]に対応する科目である。 Diploma Policy related to this course: 1,2,4 本科目に関連するディプロマポリシー：1,2,4
到達目標 Learning Outcomes	By the end of the course, students will be able to: 1. You can explain what data a story is based on and discuss the accuracy of the information. 2. Learn how to receive information. In relation to the environment and health, one can make judgments from one's own experimental experience and explain potential effects without having to swallow information from books, papers, etc. 3. Estimation of the accuracy and authenticity of data can be judged through experience. 4. You can understand how to assess health effects, taking into account environmental factors as potentially important covariates. このコースを修了した学生は、以下のことを習得する。 1. どのようなデータに基づいて、ストーリーが生まれているのかを説明し、情報の正確性について議論できる。 2. 情報の受け取り方を学ぶ。環境と健康への関連において、本や論文などから得た情報を鵜呑みすることなく、自らの実験の経験で判断し潜在的な影響を説明できる。 3. データの正確性や信憑性についての匙加減を、経験を通じて判断できる。 4. 健康影響を評価する際に、潜在的に重要な共変量としての環境因子を加味して行う方法を理解できる。
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	2. Select quantitative and qualitative data collection methods appropriate for a given public health context (evidence-based approach) 4. Interpret results of data analysis for public health research, policy or practice （evidence-based approach） 26:C4) Assess current issues in environmental health at the global, national, or community level (EH)
授業計画 Topics and Activities	The course topics include but are not limited to: 1) COVID-19 Vaccination paper and news 2) TV and Newspaper related public health
評価方法 Assessments	Presentation: 70%, Motivation, Survey contents and Discussion: 30% 最終発表：70%, 動機と調査内容と考察：30%
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:

Appendix

教科書（必須） Textbooks (mandatory)	N/A
その他 Others	In television and newspapers, we delve into and debate whether stories that are supposed to be "data-based" are really data-based arguments or writers' assumptions. Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: AI generative tools such as ChatGPT are not used for all assignments.

科目名 Course Name	(MPH) 環境心理学 Environmental Psychology
科目種別 Course Type	(Curriculum 2025 and after)　　　□ Required　　□ Selective　⊠ Elective　* This is for degree students
授業形態 Format	□ Lecture 講義　　□ Practicum 実習　　⊠ Seminar 演習
授業実施方法 Teaching Platforms	⊠ In class　　⊠ Online Live　⊠ On Demand* (⊠ full / □ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	1
開講期 Semester	□ 前期 Spring　　　　　⊠ 後期 Fall　　　　　□ 通年 Full-year
曜日・時限 Day・Time	□ Mon 月　⊠ Tue 火　□ Wed 水　□ Thu 木 □ Fri 金　□ Sat 土　□ Other □ 1st period　□ 2nd period　⊠ 3rd period　□ 4th period　□ Other
単位認定教員 Lead Instructor	大西一成(Kazunari Onishi)
授業概要 Course Overview	This course offers an overview of methods and topics in environmental epidemiology. The course will focus on the concepts of epidemiologic methods as they are applied in occupational and environmental epidemiology. The course will cover epidemiologic study designs, issues of validity, measurement of exposure, approaches to analysis, and special considerations for studying the health of a working population or the effects of environmental exposures. It aims at the problem solving which exists in the reality using the knowledge of principle and theory clarified in the basic psychology. The instructor will provide feedback on presentation and assignments. このコースでは、環境心理学すなわち人と物理的環境との関連について概説する。物理的な環境要因が行動に影響するという概念に焦点を当て、知識を実践（行動）に変える方法、人と環境の関係を理解して改善することについて理解、考慮すべき事項を取り上げる。 このコースでの環境(environment)は、家、オフィス、学校、道路のような構築環境(built setting)、および公園や原野のような自然環境(natural setting)を取り扱う。基礎心理学で明らかにされた原理や理論の知見を用いて現実にある問題解決を目指す。担当教員は、課題（発表等）にコメント、フィードバックを付けてディスカッションの機会を与える。
授業の目的 Course Objectives	The course is designed to provide environmental psychology basics and discussion for students in the Master of Public Health program. Two teachers in charge will talk about environmental psychology. In this process, students learn how environmental psychology affects people's lives and behavior. It is often difficult to act on concerns about global environmental problems that humans must address, even if they have sufficient knowledge of them. There are current dilemmas

	that have resulted in public health deterioration and health effects. In environmental psychology, students acquire a stage model from knowledge to action, that is, cues that enhance goal intentions, behavioral intentions, and performance intentions to action. このコースは公衆衛生学修士課程の学生に環境心理学の基本とディスカッションを提供するように設計されている。2 名の担当教員がトーク形式で、環境心理学について話を進めていく。その中で、環境心理学がどう人の生活や行動に影響していくのかを読み取りながら学ぶ。地球環境問題で危惧され、人間が対応しなければならないことについては、知識として十分に理解していたとしても、なかなか行動に移せないことが多い。結果的に公衆衛生の悪化を招いたり健康影響を引き起こしたりしている現状のジレンマがある。環境心理学では、知識から行動を起こすまでのステージモデル、つまり目標意図、行動意図、実行意図までを高めて行動へつなぐ手がかりを習得する。 Diploma Policy related to this course: 1,2,4 本科目に関連するディプロマポリシー：1,2,4
到達目標 Learning Outcomes	By the end of the course, students will be able to: 1. The ability to understand and explain what environmental psychology is 2. Explain student thoughts about potential academic implications and potential remedies (ideas) in relation to the physical environment, health, and human behavioral psychology. 3. Improving public health in the work environment solves work efficiency and stressrelated problems and demonstrates leadership skills. 4. Research methods in environmental psychology and related research and analysis techniques can be used to assess the relationship between the environment and psychology. 5. Understanding dilemmas in the relationship between humans and nature and taking action to improve the environment and public health. It can explain and apply the steps leading up to. このコースを修了した学生は、環境心理学について以下のことを習得する。 1.環境心理学とは何かを理解し説明できること 2.物理的環境と健康、人間の行動心理との関連において、潜在的な学術的な意味や改善策（アイデア）について自分の考えを説明できること。 3.職場環境における公衆衛生の向上が、仕事の効率化やストレスに関連した問題を解決し、リーダーシップスキルを発揮する。 4. 環境心理学における研究方法や関連した調査や分析の手法を用いて環境と心理の関係を評価できる。 5. 人間と自然との関わりにおけるジレンマを理解し、環境や公衆衛生の向上へつなげる行動至る段階を説明し応用できる。

Appendix

[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	8. Apply awareness of cultural values and practices to the design or implementation of public health policies or programs (planning/management health promotion) 16. Apply principles of leadership, governance and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making (leadership) 26. C4) Assess current issues in environmental health at the global, national, or community level (EH)
授業計画 **Topics and Activities**	The course topics include but not limited to: 1) Psychology 2) Observation of the field
評価方法 **Assessments**	Final Presentation 100%.
履修要件 **Pre-requisites**	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） **Textbooks (mandatory)**	N/A
その他 **Others**	This class conducted Hybrid format. The presentation is smooth to attend in person or on live. Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. Enquiring about your surroundings and observing and surveying cafes and other nearby facilities (Student presentation) **Use of AI generative tools**: AI generative tools such as ChatGPT are not used for all assignments. 参考図書 Environmental Psychology: An Introduction, Linda Steg, Judith I. M. de Groot. Wiley-Blackwell; 2nd Edition (2019/1/22) - 環境心理学-心理学と仕事 17- 太田信夫,羽生和紀北大路書房

科目名 Course Name	公衆衛生における空気質のモデルシミュレーション Air Quality Model Simulations in Public Health
科目種別 Course Type	（Curriculum 2025 and after）　　　□ Required　　□ Selective　　☒ Elective　* This is for degree students
授業形態 Format	☒ Lecture 講義　　□ Practicum 実習　　□ Seminar 演習
授業実施方法 Teaching Platforms	□ In class　　☒ Online Live　　☒ On Demand* (☒ full / □ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	1
開講期 Semester	☒ 前期 Spring　　　　　□ 後期 Fall　　　　　□ 通年 Full-year
曜日・時限 Day・Time	□ Mon 月　☒ Tue 火　□ Wed 水　□ Thu 木　□ Fri 金　□ Sat 土　□ Other □ 1st period　□ 2nd period　☒ 3rd period　□ 4th period　□ Other
単位認定教員 Lead Instructor	Ching Ping Pui
授業概要 Course Overview	This course delves into the intersection of population health and air quality through the use of advanced modeling simulations. Students will explore the impact of air quality on public health at both individual and population levels. A brief discussion of the impact of climate change on public health will also be given.
授業の目的 Course Objectives	To provide a comprehensive understanding of air quality modeling and its implications for public health. To develop practical skills in utilizing simulation tools to assess the health effects of air pollution. To explore the relationship between demographic factors, environmental exposures, and health outcomes. To foster critical thinking in evaluating and interpreting model results for public health decision-making. Diploma Policy related to this course: 1,2,4 本科目に関連するディプロマポリシー：1,2,4
到達目標 Learning Outcomes	By the end of the course, students will be able to: 1. Understand the basics of atmospheric modeling and its applications in public health research 2. Explain the relationship between atmospheric science, air quality and impact on public health. 3. Explore the impact of climate change on public health. 4. Apply simple modeling techniques to evaluate the environmental impacts on public health.

Appendix

[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	This course addresses Competency 6,7 and 16 of the MPH Competency List. Competencies addressed in this course: 6,7,16 本科目で扱うコンピテンシー：6,7,16
授業計画 Topics and Activities	The course topics include but not limited to: 1) Introduction to atmospheric modeling and relationship between air quality and health 2) Relationship between air quality and health 3) Application of simple models in air quality and public health research 4) Introduction to climate change and public health
評価方法 Assessments	Quiz (40%): Students will answer a quiz to evaluate their understanding of the relationship between air quality, climate change and public health. Research Paper (60%): Students will write a research paper discussing the application of atmospheric modeling on a specific public health issue related to air quality and/or climate change
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	N/A
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: no use of AI generative tools such as ChatGPT for all assignments.

Appendix

科目名 Course Name	国際保健学　Global Health
科目種別 Course Type	（Curriculum 2025 and after）　　　☒ Required　　☐ Selective　☐ Elective　* This is for degree students
授業形態 Format	☒ Lecture 講義　　☒ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class　　☒ Online Live　☐ On Demand*（☐ full / ☒ partial） *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☒ 前期 Spring　　　　　☐ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☐ Wed 水　☐ Thu 木 ☐ Fri 金　☒ Sat 土　☐ Other ☐ 1st period　☒ 2nd period　☐ 3rd period　☐ 4th period　☐ Other
単位認定教員 Lead Instructor	Junko Yasuoka　安岡潤子
授業概要 Course Overview	発展途上国及び先進国の人々の健康の現状、ならびにその向上のための国際協力の仕組み（二国間協力・多国間協力・官民パートナーシップ等）、更には国際保健を担う実施機関（WHO、 JICA、国際 NGO 等）について、最新のトピックを提供する。講義・ディスカッション・グループワークを通して、国際保健が直面する課題や、それに取り組む様々なプロジェクト・研究について学習する。 This course provides students with an in-depth understanding of the current health status of people in developing and developed countries as well as the mechanism of international collaboration (bilateral, multilateral, public-private partnership, etc.) and its players (WHO, JICA, INGOs, etc.). Through lectures, discussions, and groupwork, students will acquire knowledge about current issues in global health and a variety of projects/research that are carried out to tackle the issues.
授業の目的 Course Objectives	本コースを通して、世界の人々の健康の現状と課題、改善のための国際協力の仕組みや取り組みについて、包括的に理解する基盤を構築する。また、講師陣とのディスカッションを通して、21 世紀の国際保健の課題や方向性について、創造的に提案、建設的に議論するスキルを習得する機会を提供する。 By the end of this course, students will achieve a comprehensive understanding of the current health status of people in the world and the mechanism of international collaboration to tackle global health issues. Through interactive lectures, students will gain skills to suggest creative ideas and enjoy constructive discussions on the direction for global health in the 21st century. Diploma Policy related to this course: 1, 2, 4 本科目に関連するディプロマポリシー：1, 2, 4
到達目標 Learning Outcomes	コース修了時、国際保健の基本原則を理解し、次の項目に挙げる知識とスキルを習得する。 - 国際保健学の歴史とコンセプト、および世界の主要な感染症・非感染性疾患の疾病負荷について説明できる。 - 世界の人口動態について理解し、国際保健政策と人々の健康の変化との関係について述べることができる。 - ヘルスプロモーションや教育を含む疾病予防の取り組みついて述べることができる

	- 国際協力のメカニズムについて説明し、国際保健を担う多様な機関・組織の構造や機能について比較し論じることができる。 - 特にマイノリティや辺境の地に暮らす人々について、国際環境問題や人々の行動・心理的要因が、健康に及ぼす影響について説明することができる。 - 文章やプレゼンテーションを通したコミュニケーションの中で、国際保健学の内容を適切に読者・聴衆に伝えることができる。 Students will acquire knowledge of foundational principles and approaches in global health and, upon successful completion of the course, will be able to do the following: - Describe global health history and concepts as well as global burden of communicable and noncommunicable diseases. - Understand the changing patterns of demography and discuss the relationship between global health policy and changes in population health. - Discuss the science of prevention in population health, including health promotion and education. - Describe the mechanism of international collaboration, and compare the organization, structure and function of major global health players. - Explain global environmental issues and human behavioral/psychological factors that affect population's health, especially among ethnic minorities and hard-to-reach populations. - Communicate audience-appropriate global health content, both in writing and through oral presentations
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	5) Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings (healthcare systems) 7) Assess population needs, assets and capacities that affect communities' health (planning/management health promotion) 8) Apply awareness of cultural values and practices to the design or implementation of public health policies or programs (planning/management health promotion) 15) Evaluate policies for their impact on public health and health equity (policy)
授業計画 Topics and Activities	本コースで扱うトピック例 1) 国際保健の歴史とマイルストーン 2) 国際保健の担い手（国連、NGO、アカデミア） 3) 二国間・多国間国際協力 4) SDGs 5) 世界の人口動態 6) セーフティプロモーション 7) 渡航医学 8) メンタルヘルス 9) コミュニティ参加・エンパワーメント The course topics include but not limited to: 1) History and milestones of Global Health 2) Major players of Global Health (UN, NGO, Academia, etc.) 3) Bilateral and multilateral cooperation 4) SDGs 5) World population trend 6) Safety promotion 7) Travel medicine

	8) Mental health 9) Community participation/empowerment
評価方法 **Assessments**	個人課題とプレゼンテーション：60%、グループ課題とプレゼンテーション：40% Individual assignment and presentation: 60%、Group assignment and presentation: 40%
履修要件 **Pre-requisites**	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） **Textbooks (mandatory)**	N/A
その他 **Others**	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: No use of AI generative tools such as ChatGPT for all assignments.

科目名 Course Name	母子保健学　Maternal & Child Health
科目種別 Course Type	（Curriculum 2025 and after）　　　□ Required　　□ Selective　⊠ Elective　* This is for degree students
授業形態 Format	⊠ Lecture 講義　　□ Practicum 実習　　□ Seminar 演習
授業実施方法 Teaching Platforms	⊠ In class　　⊠ Online Live　　⊠ On Demand* (⊠ full / □ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	⊠ 前期 Spring　　　　　□ 後期 Fall　　　　　□ 通年 Full-year
曜日・時限 Day・Time	□ Mon 月　□ Tue 火　□ Wed 水　□ Thu 木 ⊠ Fri 金　□ Sat 土　□ Other □ 1st period　□ 2nd period　⊠ 3rd period　□ 4th period　□ Other
単位認定教員 Lead Instructor	Olukunmi Balogun　オルクミ・バログン
授業概要 Course Overview	Lectures and discussions are conducted by practitioners and researchers in the field of maternal and child health in Japan and overseas. Students offer presentations on main concepts and basic approaches in maternal and child health in Japan and overseas, as well as on health problems, risk factors and public-health approaches. Drawing on these presentations, students discuss these topics to deepen their understanding of them. Finally, students conduct searches of the public-health literature on topics of interest in the field of maternal and child healthcare, and carry out discussions to inquire into possibilities for and methods of research. Feedback will be provided to students on assignments and presentations わが国の母子保健、および国際母子保健に関する実践者・研究者の講義とディスカッションを行う。また、母子保健および国際母子保健における主要概念や基本的な考え方、健康問題、リスクファクター、公衆衛生学的アプローチについてプレゼンテーションを行い、それを踏まえたディスカッションで理解を深める。また、母子保健領域の関心あるトピックスについて公衆衛生学研究の文献検討を行い、ディスカッションを通して、研究の可能性と方法を考察する 担当教員は、プレゼンテーションにコメントでフィードバックを行う
授業の目的 Course Objectives	The objectives of the course are: To provide an understanding of the basic knowledge and methodology of maternal and child health in Japan and overseas; to enable students to inquire about the limits of the effectiveness of maternal and child health; to deepen students' inquiry into maternal and child health from the perspective of public-health research; and to foster the spirit of inquiry that drives research. わが国の母子保健、および国際母子保健における基本的知識と方法論を理解し、その有効性と限界を考察する。また、母子保健領域の公衆衛生学研究の視点から考察を深め、研究に対する探究心を養う。 Diploma Policy related to this course: 1, 2

	本科目に関連するディプロマポリシー：1,2
到達目標 Learning Outcomes	1. Students will understand the main concepts of and basic approaches in maternal and child health in Japan. They will understand health problems, risk factors and public-health approaches, and will inquire into the limits of the effectiveness of those approaches. 母子保健における主要概念と基本的な考え方、健康問題とリスクファクターおよび公衆衛生学的アプローチを理解し、その有効性と限界を考察する。 2. Students will understand the main concepts of and basic approaches in international maternal and child health, as well as the actual state of activities in this field, and will inquire into the limits of the effectiveness of those approaches and activities. 国際母子保健における主要概念と基本的考え方、および活動の実際を理解し、その有効性と限界を考察する。 3. Students will deepen their inquiry into the possibilities for public-health research in solving problems in the field of maternal and child health. They will develop a research perspective and spirit of inquiry. 母子保健領域の課題解決に資する公衆衛生学研究の可能性と方法に関する考察を深め、研究的視点と探究心を養う。
[MPH only] 本科目で扱うコンピテンシー Competencies addressed in this course	Competencies addressed in this course: 5, 14, 18 本科目で扱うコンピテンシー：5, 14, 18 5) Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings (healthcare systems) 14) Advocate for political, social or economic policies and programs that will improve health in diverse populations (policy) 18) Select communication strategies for different audiences and sectors (communication)
授業計画 Topics and Activities	The course topics include but not limited to: 1) Global maternal, neonatal and child health 2) Maternal and child health at country level (Bangladesh, Philippines, Nigeria) 3) Maternal and Child Health Handbook for promoting continuum of care 4) Universal Health Coverage (UHC) and maternal and child health 5) Interrelations between child health and family health/ father's involvement in child health 6) Prenatal screening and diagnosis/ genetic counseling in Japan
評価方法 Assessments	Active participation in discussions during the class (live participation) or lecture assignments (for on demand students): 20% 授業で行われる討論への積極的な参加（ライブ授業）または課題（オンデマンド）：20% Student presentation: 40% 学生によるプレゼンテーション：40% Quizzes: 40% クイズ: 40% Feedback will be provided to students on assignments and presentations 担当教員は、プレゼンテーションにコメントでフィードバックを行う
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み:

Appendix

	☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） **Textbooks (mandatory)**	N/A
その他 **Others**	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: The use of AI generative tools such as ChatGPT is NOT allowed for ALL writing assignments.

科目名 Course Name	（MPH）国際感染症学 Global Infectious Diseases
科目種別 Course Type	（Curriculum 2025 and after）　　□ Required　　□ Selective　　☒ Elective　* This is for degree students
授業形態 Format	☒ Lecture 講義　　□ Practicum 実習　　□ Seminar 演習
授業実施方法 Teaching Platforms	☒ In class　　☒ Online Live　　□ On Demand* (□ full / □ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	□ 前期 Spring　　　　　☒ 後期 Fall　　　　　□ 通年 Full-year
曜日・時限 Day・Time	□ Mon 月　☒ Tue 火　□ Wed 水　□ Thu 木 □ Fri 金　□ Sat 土　□ Other □ 1st period　□ 2nd period　□ 3rd period　☒ 4th period　□ Other
単位認定教員 Lead Instructor	大曲　貴夫　　　Ohmagari, Norio
授業概要 Course Overview	・グローバルレベルでの感染症の現状と背景となる課題を講義によって総括的に提示する。 ・感染症対策の専門家による講義・供覧 ・期末プレゼンテーションを課し、最後に発表会を開催する。 ・講師は、発表内容についてフィードバックを行う。 ・Lecture on the current status of infectious diseases and its background ・Lecture by infectious diseases control experts ・Students will be required to give a final presentation. A presentation session will be held at the end of the course. The instructor and students who have chosen the course will discuss the content of the presentation. ・The instructor will provide feedback on the presentation.
授業の目的 Course Objectives	三大感染症と言われるエイズ／HIV・結核・マラリア、インフルエンザなどパンデミックを引き起す急性感染症、フィラリア症をはじめとした Neglected Tropical Diseases、西アフリカにおける大規模アウトブレイクを起こしたエボラ出血熱、そして近年社会的に大きな課題となっている薬剤耐性（AMR）の問題など、２１世紀に入り世界の人々の健康を脅かしている感染症の現状とその背景にある課題を学修する。これにより現代の社会で問題となっている感染症の問題を概観し、かつそこで役割を果たす専門家の役割を理解できるようになる事を目標とする。 なお、本科目は、本学のディプロマポリシー1と２に関連する。 The purposes of this course are; 1) to understand the current status of infectious diseases affecting the health of the people in the world including so-called "three big infectious diseases", which are HIV/AIDS, tuberculosis and malaria, Neglected Tropical Diseases such as filariasis, acute infectious diseases which cause large outbreaks such as influenza and Ebola, and the issue of antimicrobial resistance. 2) to have an overview of infectious diseases that are a problem in modern society. 3) to understand the role of public health experts for outbreak control, biosecurity and biodefence.

	This course is related to Graduate School of Public Health diploma policy item 1 and 2.
到達目標 Learning Outcomes	・世界の感染症の現状とその状況の原因となる課題を理解する。 ・Emerging Diseases のアウトブレイクやバイオセキュリティ、バイオディフェンスなどの基本を理解し、実習を通じて公衆衛生専門家としての役割の概要を掴む。 ・ By the end of this course, students will be able to understand the current status of infectious diseases and its background. ・By the end of this course, students will be able to understand principles of control measures for outbreak of emerging diseases, biosecurity and biodefence and to experience the role of public health experts through field exercise.
[MPH only] 本科目で扱うコンピテンシー　 Competencies addressed in this course	5) Compare the organization, structure and function of health care, public health and regulatory systems across national and international settings (healthcare systems) 12) Discuss multiple dimensions of the policy-making process, including the roles of ethics and evidence (policy) 14) Advocate for political, social or economic policies and programs that will improve health in diverse populations (policy)
授業計画 Topics and Activities	The course topics include but not limited to: 1) *Please list the topics of each class, as much as possible* 2) …
評価方法 Assessments	グループディスカッションへの貢献（６０％）、期末プレゼンテーション（４０％） Contribution to group discussion: 60%, course-term presentation: 40%
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	特になし None
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class.

Appendix

科目名 Course Name	公衆衛生学概論 Introduction to Public Health
科目種別 Course Type	（Curriculum 2025 and after）　　⊠ Required　　□ Selective Required　□ Elective　* This is for degree students
授業形態 Format	⊠ Lecture 講義　　□ Practicum 実習　　□ Seminar 演習
授業実施方法 Teaching Platforms	⊠ In class　　⊠ Online Live　　⊠ On Demand*（□ full / ⊠ partial） *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	⊠ 前期 Spring　　　　　□ 後期 Fall　　　　　□ 通年 Full-year
曜日・時限 Day・Time	□ Mon 月　□ Tue 火　□ Wed 水　□ Thu 木 ⊠ Fri 金　□ Sat 土　□ Other □ 1st period　□ 2nd period　□ 3rd period　□ 4th period　□ Other
単位認定教員 Lead Instructor	高橋エミリー Emilie Takahashi
授業概要 Course Overview	修士プログラム開始にあたって、今後、公衆衛生分野における知識と能力を得ていくために、 本コースでは、公衆衛生の基本的な要素の基盤となりうる学際的なトピックを提供する。関連する専門知識を持つ教員のチームによる講義とディスカッションに加え、本プログラムのコ ンピテンシー教育の概要 についてオリエンテーションを行う。また、課題として、公衆衛生関連の問題に関する個別レポートと最終課題としてグループ発表を実施する。課題やクラス活 動に対しては、教員によるフィードバックを提供する。 This course comprises interdisciplinary topics in foundational elements of public health to provide students with a strong basis for further expanding their knowledge and competencies across the core disciplines through other coursework. This course includes lectures and discussion by a team of faculty with relevant expertise as well as an orientation for our program including competency education. Students will write a mid-term individual report on a public health related issue and make group presentations as a final activity in this course. Feedback will be provided to students on assignments and class activities.
授業の目的 Course Objectives	本コースでは、公衆衛生の歴史と哲学、日本および世界における公衆衛生の発展について学 び、人口動態とライフスタイルの変化による疾病構造の変化とそれに伴う公衆衛生の実践と政 策の変化を学ぶ。またリスク削減の原則を理解し、公衆衛生分野で頻繁に用いられる疾病負荷 の計算方法を習得する。本科目は、本学のディプロマポリシー1, 2, 4 に関連する。 In this foundational course, students will learn about the history and philosophy of public health, its development in Japan and globally, as well as understand the changes in disease patterns due to demographic and lifestyle changes, and the accompanying changes in public health practices and policies. This course also provides an understanding of the principles of harm reduction underlying much of public health practice as well as an introduction to calculating the burden of disease. This course is related to University Diploma Policy 1, 2, and 4.
到達目標 Learning Outcomes	コース修了時、次の項目に挙げる公衆衛生の基本原則とアプローチの知識を習得する。 1. 公衆衛生学の歴史と哲学、および国内外の主要な疾患の罹患・死亡の主な原因について説 明できる 2. 人口動態と病気の変化するパターンを理解し、健康政策と人口の健康の変化との関係について述べることができる 3. 公衆衛生政策の作成における危害削減の原則の理解をし、適用できる 4. 現代の公衆衛

	生において果たす役割の理解し、疾病負荷の推定値を批判的に評価できる 5. 公衆衛生における危機管理に対し、リーダーシップスキルが適用できる 6. 主要な公衆衛生の機能とサービスが定義でき、システム思考アプローチを公衆衛生上の問 題に適用できる なお、本科目は、本学のコンピテンシーリスト 18, 19, 20 に関連する。 Students will acquire knowledge of foundational principles and approaches in public health and, upon successful completion of the course, will be able to do the following: 1. Describe the history and philosophy of public health and major causes of morbidity and mortality within a national and global setting. 2. Understand the changing patterns of demography and disease and discuss the relationship between health policy and changes in population health 3. Understand and apply harm reduction principles in preparing public health policy 4. Critically appraise disease burden estimates and understand the role they play in modern public health 5. Apply leadership skills to crisis management in public health 6. Define the core public health functions and services and apply a systems thinking approach to public health issues This course is related to the MPH Competency List of 18, 19, 20.
[MPH only] 本科目で扱うコンピテンシー　Competencies addressed in this course	Competencies addressed in this course: 18, 19, 20 本科目で扱うコンピテンシー：18, 19, 20 18) Select communication strategies for different audiences and sectors (communication) 19) Communicate audience-appropriate public health content, both in writing and through oral presentation (communication) 20) Describe the importance of cultural competence in communicating public health content (communication)
授業計画 Topics and Activities	The course topics include but not limited to: 1) History of public health (Japan and World), its philosophy and values, working hour 2) Principles of harm reduction and estimation of disease burden 3) Health inequality, monitoring and surveillance; core functions of public health and the 10 essential services 4) Mini-Epi (Study Design, Research Question; data handling, quality improvement); rural medicine, ethics 5) Nutrition and public health; maternal and child health 6) Student group presentations
評価方法 Assessments	eAprin: 5% クイズ (6)：10%*6、記述個別レポート 20%、グループプレゼンテーション 15% eAprin: 5%; Quizzes (6)：10%*6; Mid-tem individual written report: 20%; Group presentation: 15%
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	None.
参考書（推奨） Optional References	・国民衛生の動向 2021/2022（第 68 巻第 9 号）出版：厚生労働統計協会 https://www.hwskyokai.or.jp/publishing/type/magazine/103-magazine-list/2519-eiseidoko2021.html ・Mary-Jane Schneider. Introduction to Public Health, 6th Edition, Jones & Bartlett Learning, 2021.

科目名 Course Name	公衆栄養学 Public Health Nutrition
科目種別 Course Type	（Curriculum 2025 and after）　　☐ Required　　☐ Selective　　☒ Elective　　* This is for degree students
授業形態 Format	☒ Lecture 講義　　☐ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☒ In class　　☒ Online Live　　☒ On Demand*（☐ full / ☒ partial） *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☐ 前期 Spring　　　　☒ 後期 Fall　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☐ Wed 水　☐ Thu 木 ☒ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☒ 3rd period　☐ 4th period　☐ Other
単位認定教員 Lead Instructor	Olukunmi Balogun　オルクミ・バログン
授業概要 Course Overview	This course will introduce the field of public health nutrition. We will discuss the need for a healthier diet, which is greater than ever, and how this can be achieved. Students will be able to understand and critically evaluate the scientific evidence and recommendations for improving nutrition-related disease occurrence and prognosis. 本授業は公衆栄養学分野の入門講座である。これまで以上に高まっている、より健康的な食に対するニーズ、またそのようなニーズがどのようにして満たされるのかについて検討する。栄養に関連する疾病の発症及び予後の改善に関する科学的エビデンス、提言を理解し、それらを批判的に評価できるようになることを目標とする。 Every lecture will be divided into a theoretical part, which introduces new concepts, ideas and trends in public health nutrition; and a practical part with activities and/or discussions using various materials. Throughout the course, students will determine the value of scientific literature, guidelines and policies regarding human nutrition and health. 講義は毎回「理論」と「実践」に分けて行う。「理論」においては、公衆栄養学の新しい概念、見解、傾向等を紹介する。「実践」においては、各種資料を用い、アクティビティ、ディスカッションを行う。授業全般を通し、人の栄養及び健康に関する科学文献、ガイドライン、政策等の有用性を判断できるようになることを目標とする。
授業の目的 Course Objectives	The objectives of this course are to gain an understanding of the role of nutrition in health and disease, and to assess and evaluate nutrition interventions aimed to improve health at the individual and population level. 本授業は、栄養が健康及び疾病に果たす役割を理解するとともに、個人及び集団レベルでの健康向上を目的とする栄養介入を評価することを目的とする。

	Diploma Policy related to this course: 1,2 本科目に関連するディプロマポリシー：1,2
到達目標 Learning Outcomes	After completing this course, students will be able to: 本授業終了時、学生は以下に挙げる目標を達成することが求められる。 1. Describe the impact of malnutrition (i.e. under- and overnutrition) on human health at different stages of life 　　栄養不良（低栄養、過栄養等）が様々なライフステージにおける人の健康に及ぼす影響について説明する 2. Acquire, read and understand scientific literature, guidelines and policies in the field of public health nutrition 　　公衆栄養学分野の科学文献、ガイドライン、政策等から知識を習得し、それらを読み取り理解する 3. Critically appraise study quality and research findings 　　研究の質及び研究結果を批判的に評価する
[MPH only] 本科目で扱うコンピテンシー　Competencies addressed in this course	Competencies addressed in this course: 6, 7, 15 本科目で扱うコンピテンシー：6, 7, 15 6) Discuss the means by which structural bias, social inequities and racism undermine health and create challenges to achieving health equity at organizational, community and societal levels (healthcare systems) 7) Assess population needs, assets and capacities that affect communities' health (planning/management health promotion) 15) Evaluate policies for their impact on public health and health equity (policy)
授業計画 Topics and Activities	The course topics include but not limited to: 1) Population surveillance and monitoring 2) Nutrition epidemiology and assessment of dietary intake 3) Monitoring and evaluation in nutrition programs 4) Nutrition-related disease burdens in high- and low- and middle-income countries 5) Nutrition transition and environmental determinants of nutrition related health 6) Nutrition related policies in high-income countries
評価方法 Assessments	Active participation in discussions during the class (live participation) or lecture assignments (for on demand students), and quizzes: 60% 授業で行われる討論への積極的な参加（ライブ授業）または課題（オンデマンド）：60% Student presentation: 40% 学生によるプレゼンテーション：40% Feedback will be provided to students on assignments and presentations
履修要件 Pre-requisites	☐ None なし ☐ Mandatory to complete 修得済み： ☐ Required to complete/concurrently take 修得済みまたは同時履修： ☒ Recommended 推奨：Epidemiological Methods or Clinical Epidemiology, Biostatistics I, Health and Behavioral Science ☐ Others その他：
教科書（必須） Textbooks (mandatory)	N/A

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その他 **Others**	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **<u>Use of AI generative tools:</u>** The use of AI generative tools such as ChatGPT is NOT allowed for ALL writing assignments.

科目名 Course Name	(Doctoral) Doctoral セミナーDoctoral Seminar
科目種別 Course Type	(Curriculum 2024 and after)　　☒ Required　　☐ Elective　* This is for degree students
授業形態 Format	☐ Lecture 講義　　☐ Practicum 実習　　☒ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class　　☒ Online Live　　☐ On Demand* (☐ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☐ 前期 Spring　　　　　☒ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☐ Wed 水　☒ Thu 木　☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	ウォン・ス・イー (Zoie Shui Yee Wong)
授業概要 Course Overview	The purpose of PHD seminar is to equip first year PHD students with competencies intended to produce transformative academics and leaders in public health profession. Critical appraisal, and open-ended discussions/peer-led presentations, students will have the opportunities to acquire essential disciplinary knowledge, skills and attitudes for undertaking the doctoral program, and get themselves ready to undergo evidence-based public health research. Dedicated sessions will cover aspects of essential skills in PH communication, and skills and attitudes development. The course will cover competencies in the aspects of leadership, communication, system thinking, and interprofessional practice. Discussions/debates, reflections, and system-level approaches are encouraged throughout the course. The course emphasizes providing students with interprofessional perspectives in PH These sessions are designed to enable students to gain exposure to common PH research methods, research design, analysis and their real life application across the designated disciplines, which will set students be ready to make plans for their PHD study. Furthermore, activities designed to hone skills in professional activities will be introduced with topics including communication and presentation skills, public health academic writing, grantsmanship, ethics, and professional service to the community. The course will nurture students with the broad-based knowledge, qualities and skills necessary for a successful public health professional, and research career. PHD students will be invited to share their ongoing doctoral experience. The course intends to prove beneficial to students' upcoming professional development as a PHD student, equip them to be professional/academic job-oriented and stimulate their professional aspirations. Feedback will be provided to students on assignments and class activities.

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授業の目的 **Course Objectives**	This course aims to provide doctoral students' perspectives in essential public health disciplines and useful research methods, to equip them with the essential knowledge, skills, and attitude for their PHD study. Throughout the course, students will need to demonstrate critical thinking and independent qualities that allow the development of their future research themes. Diploma Policy related to this course: 1-4 本科目に関連するディプロマポリシー：1-4
到達目標 **Learning Outcomes**	Through a designated competence-based design, students will acquire knowledge of foundational methods, principles and approaches in public health and, upon successful completion of the course, will be able to do the following: • Explain the role and significance of doctoral-level professional experience in public health; • Critically appraise public health related topics and methods suitable for researching in the field; • Demonstrate the ability to design public health research activities suitable for public health population and professionally communicate emerging public health topics with wide audience.
授業計画 **Topics and Activities**	The course topics include but not limited to: An overview of research in public health I & II, Best practices in designing research activities and communicate ideas with audience, Critical appraisal of journal article, Communicating and disseminating research, public health academic writing I & II, Grantsmanship and professional service to the community (panel discussion), Ethics in the public health profession; Strategies to improve inclusion and equality in public health, Collaborating with internal and external partners through research (debated and reflection), PHD/DrPH alumni experience sharing, Proposal presentation, private consultation with students to evaluate research experience across aspects of public health leadership capacities 公衆衛生研究の概要 I & II、研究活動の設計と聴衆へのアイデアの伝達におけるベストプラクティス、ジャーナル記事の批判的評価、研究の伝達と普及、公衆衛生学術執筆 I & II、助成金獲得とコミュニティへの専門的サービス（パネルディスカッション）、公衆衛生専門職の倫理、公衆衛生における包摂性と平等性を改善するための戦略、研究を通じた内部および外部のパートナーとの協力（討論と考察）、PHD / DrPH 卒業生の経験の共有、提案のプレゼンテーション、公衆衛生リーダーシップ能力の側面にわたる研究経験を評価するための学生との個別相談
評価方法 **Assessments**	Active participation in discussions/debates/ Contribution to the class (30%); Research portfolio presentation (20%); Peer-led journal article review (20%); Proposal presentation (30%) Attendance in class will be counted according to GSPH regulations. In this course, the instructor requires students to contribute their experience and ideas in order to enrich the content for all class participants. Therefore, active participation in different sessions will be expected and evaluated. The instructor will provide assignments on teaching skill development. Students will be required to design research activities and present their research portfolio together with their past project experience. Critical appraisal and review skills will be covered. Thesis proposal presentation will allow students to practice qualities in academic professionalism. The instructor will provide feedback comments on the above assessment items.
履修要件 **Pre-requisites**	☐ None なし ☒ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: Biostatistics II and Biostatistics practicum II. If possible, we expect students will complete courses related to

	infectious disease and/or global health *before* beginning study this course. □ Others その他:
教科書（必須） Textbooks (mandatory)	Academic and Professional Publishing. 2012. Edited by: Robert Campbell, Ed Pentz and Ian Borthwick. Oxford: Chandos Publishing.
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: The use of AI generative tools such as ChatGPT for all assignment writings are not acceptable

科目名 Course Name	アカデミックライティング法　Strategies in Academic Writing
科目種別 Course Type	（Curriculum 2024 and after）　　☐ Required　　☒ Elective　　* This is for degree students
授業形態 Format	☐ Lecture 講義　　☐ Practicum 実習　　☒ Seminar 演習
授業実施方法 Teaching Platforms	☒ In class　　☒ Online Live　　☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	2
開講期 Semester	☒ 前期 Spring　　　　☐ 後期 Fall　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☒ Tue 火　☐ Wed 水　☐ Thu 木 ☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	Olukunmi Balogun　オルクミ・バログン
授業概要 Course Overview	It is essential for public health professionals to have the ability to assemble and organize written materials that clearly express their academic work and interests. Activities where this becomes particularly important for doctoral level professionals include project proposal development and grant writing, as well as manuscript preparation for publication in academic journals. This is not an English writing course, which teaches syntax and grammar. Rather, the goal of this course is to assist doctoral students in building their skills for maneuvering successfully through the process of written proposal development, possible grant submission, and manuscript publication in English. The instructor will provide feedback comments on assignments (e.g. assignments, presentations, etc.). 公衆衛生専門職が学術的な著作や関心を表現する材料を集め、まとめる力を持つことは必須である。博士レベルの専門職にとってそれが特に重要になる活動は、学術誌への発表準備をはじめ研究計画書や補助金申請である。ここは構文や文法を教える英語論文の書き方のためのコースではない。このコースの最終目標は、博士課程の学生が研究の計画書作成過程や、助成金申請、英語での論文発表の過程を通して、それらを扱うスキルを身に着ける手助けをすることである。 担当教員は、課題（試験やレポート等）にコメントを付けて返却する。
授業の目的 Course Objectives	The objective of this course is to assist doctoral students in building their skills for maneuvering successfully through the process of written protocol development for research, possible grant submission, and manuscript publication in English. Effective written communication of ideas and plans is an essential skill for any public health professional. このコースの目的は、博士課程の学生が研究論文の計画書作成や助成金申請、英語での論文発表の過程を通して、それらを扱うスキルを身に着ける手助けをすることである。 Diploma Policy related to this course: DrPH Diploma Policy item 2, 3, 4, and PhD Diploma Policy 1, 2, 3 本科目に関連するディプロマポリシー：　なお、本科目は、本学のディプロマポリシー2、3、4 に関連する。

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到達目標 Learning Outcomes	By the end of the course, students will have developed a draft of a research protocol on a topic of interest which may be used for dissertation research and/or grant applications. They will gain an understanding of the importance of grant writing in academia and how to assemble a proposal. Finally, students will gain familiarity with how to write a doctoral dissertation and manuscript for publication in a scientific journal. コース修了時には、学生は研究論文に使用する関心のあるトピックについての研究プロトコルの原稿を作成できるようになる。またアカデミアでの助成金申請や提案書の組み立て方の重要性を理解する。最終的に、学生は博士論文の書き方や科学誌への発表原稿の書き方の理解を深める。
授業計画 Topics and Activities	The course topics include but not limited to: 1) Research project proposal development 2) Tips in academic writing 3) Communicating methodological content 4) Dissertation writing 5) Grant funding needs in academia – grant proposal writing tips 6) Successful and responsible scientific publication
評価方法 Assessments	2 project proposal draft assignments, 20% each Student presentations, 30% Final written assignment, 30% 研究計画書ドラフト課題 2 回、それぞれ 20% プレゼンテーション、30% 最終研究計画書課題、30%
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	Readings will be provided
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: The use of AI generative tools such as ChatGPT is NOT allowed for ALL writing assignments

Appendix

科目名 Course Name	生物統計学特論 Advanced Biostatistics
科目種別 Course Type	（Curriculum 2024 and after） ☐ Required ☒ Elective * This is for degree students
授業形態 Format	☒ Lecture 講義 ☐ Practicum 実習 ☐ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class ☒ Online Live ☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☒ 前期 Spring ☐ 後期 Fall ☐ 通年 Full-year
曜日・時限 Day・Time	☒ Mon 月 ☐ Tue 火 ☐ Wed 水 ☐ Thu 木 ☐ Fri 金 ☐ Sat 土 ☐ Other ☐ 1st period ☐ 2nd period ☐ 3rd period ☒ 4th period ☐ Other
単位認定教員 Lead Instructor	Stuart Gilmour
授業概要 Course Overview	生物統計学特論では、主に独立した連続/カウント/二値反応のモデリングに通常用いられるパラメトリック回帰モデルに関連した内容について学ぶ。回帰モデルは公衆衛生研究において有用であり、特に補正された治療効果や暴露反応の推定および反応に対する重要因子の確定には有効である。これらの回帰モデルに関連する推定と推定法について簡潔に議論しながら、手元のデータに対する適切なモデル選択と、様々な適合回帰モデルから得られた推定値の解釈に重点を置いて講義をする。モデル診断（例：残差分析）に関連する手法やモデル選択についても講義の中で取り上げる予定である。 担当教員は、課題（試験やレポート等）にコメントを付けて返却する。 Advanced biostatistics course will mainly cover topics related to the parametric regression models that are commonly used for modeling independent continuous, count, and binary response. Regression models are useful in public health research, especially for estimating the adjusted effect of treatment/exposure on response or identifying important factors for the response. Beside briefly discussing the estimation and inference procedures related to these regression models, this course will emphasize selection of appropriate models for the data and interpretation of the estimates obtained from different regression models. Methods related to model diagnostics (e.g. residual analysis) and model selection will be briefly discussed in this course. The instructor will provide feedback comments on assignments(exams and reports)
授業の目的 Course Objectives	公衆衛生学のデータ解析のための回帰モデルの概念を学ぶ To introduce the concepts of regression models for analyzing public health data Diploma Policy related to this course (PhD): 1,2,3,4 Diploma Policy related to this course (DrPH): 1,2,3,4 本科目に関連するディプロマポリシー：1,2,3,4

到達目標 Learning Outcomes	コース終了時には、学生は公衆衛生公衆衛生のデータ分析における回帰モデルが理解、使用することができるようになる。学生は回答に応じで適切な回帰モデルを選択し、またモデル選択、残渣分析などの重要な概念を理解できるようになる。At the end of the course, students are expected to understand the use of regression models in analyzing public health data. Depending on the type of response, students should be able to select the appropriate regression model and also to understand the important concepts of model selection and assessment.
授業計画 Topics and Activities	1) Review of regression; overview of GLMs 2) Theory and practical use of GLMs for Poisson and binomial regression 3) Linear combinations and marginal effects 4) Prediction 5) Model-building and model selection 6) Multilevel models
評価方法 Assessments	課題(30%)、授業参加度(10%)、中間/期末試験(30%/30%) Assignment (30%), contribution to class [code files uploaded] (10%), midterm (30%), and final assessment (30%)
履修要件 Pre-requisites	☐ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☒ Recommended 推奨: 生物統計学１・２の履修 Biostatistics I, Biostatistics 2 ☐ Others その他:
教科書（必須） Textbooks (mandatory)	
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: NO AI tools are accepted in this course

科目名 Course Name	生物統計学特論実習 Advanced Biostatistics Practicum
科目種別 Course Type	(Curriculum 2024 and after) ☐ Required ☒ Elective * This is for degree students
授業形態 Format	☐ Lecture 講義 ☒ Practicum 実習 ☐ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class ☒ Online Live ☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	2
開講期 Semester	☐ 前期 Spring ☒ 後期 Fall ☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月 ☐ Tue 火 ☒ Wed 水 ☐ Thu 木 ☐ Fri 金 ☐ Sat 土 ☐ Other ☐ 1st period ☐ 2nd period ☐ 3rd period ☐ 4th period ☐ Other
単位認定教員 Lead Instructor	Stuart Gilmour
授業概要 Course Overview	Students will work together to generate a research project using real data, prepare analyses of the data, critique each others' work, and prepare a completed research project including writing a report based on the analysis, ideally at a level suitable for publication. 学生は実際のデータを用い、データ分析をして、お互いの結果を批評し、研究プロジェクトを終了まで一緒に協力する。
授業の目的 Course Objectives	To teach students the skills required to critically assess and correct statistical analyses in published work. 発表された論文の統計解析を批判的に吟味し、必要であれば改めることができる能力を修得する。 Diploma Policy related to this course (PhD): 1, 2, 3, 4 Diploma Policy related to this course (DrPH): 1, 2, 3, 4 本科目に関連するディプロマポリシー：1, 2, 3, 4
到達目標 Learning Outcomes	At the end of the course, students are expected to be able to fully understand, interpret, and critique published statistical analyses of arbitrary complexity, to identify the flaws in these analyses and to develop the correct analytical framework for published research studies and study protocols. 学生は発表された論文において用いられている複雑な統計分析を完全に理解し、解釈し、批判することができ、これらの分析の欠点が分かり、発表された研究と研究プロトコルのための正しい分析的枠組みを開発することができるようになることが期待されます。

授業計画 **Topics and Activities**	1) Project development 2) Data import and preparation 3) Statistical analysis and model-building 4) Presentation of results
評価方法 **Assessments**	授業への参加 Class participation [based on number of times code was shared] (20%) プレゼンテーションの内容 Presentation quality (40%) プレゼンテーション後のレポート/レター Post-presentation report/letter (40%)
履修要件 **Pre-requisites**	☐ None なし ☒ Mandatory to complete 修得済み: Biostatistics 1 /生物統計学 1 ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☒ Recommended 推奨: 生物統計学特論/ Advanced Biostatistics ☐ Others その他:
教科書（必須） **Textbooks (mandatory)**	
その他 **Others**	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: No AI tools are accepted in this class

Appendix

科目名 Course Name	生物統計学セミナー Biostatistics seminar
科目種別 Course Type	(Curriculum 2024 and after)　　☐ Required　☒ Elective　* This is for degree students
授業形態 Format	☐ Lecture 講義　　☐ Practicum 実習　　☒ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class　　☒ Online Live　　☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☐ 前期 Spring　　　　　☒ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☐ Wed 水　☐ Thu 木　☒ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	Stuart Gilmour
授業概要 Course Overview	ジャーナル・クラブ形式の授業において、学生は主要な公衆衛生ジャーナルで読んだ論文について批判的吟味を与え、これらの論文の問題点を議論して解決し、論文で使用される研究デザインの分析について確かな方法を特定します。可能であれば、批判的吟味をレター形式で作成することを求め、当該ジャーナルへの回答として提出します。担当教員は学生の成果物に関してフィードバックを行う。 In a journal club format, students will present critical assessment of papers they read in major public health journals, discuss and resolve problems with these papers and identify the correct methods for analysis in the research design used in these papers. Where possible, critical assessments will be prepared as a letter format and submitted as a response to the journal in question. The instructor will provide feedback on presentation.
授業の目的 Course Objectives	特に標本調査、複雑にクラスター化されたデータ及び縦断的研究デザインに焦点を当てて、発表された研究の統計解析を批判的に評価し、必要であれば改めることができる能力を修得する。 To teach students the skills required to critically assess and correct statistical analyses in published work, with a particular focus on sample surveys, complex clustered data and longitudinal study designs. Diploma Policy related to this course:　1,2,3,4 本科目に関連するディプロマポリシー：1,2,3,4
到達目標 Learning Outcomes	学生は発表された論文において用いられている複雑な統計分析を完全に理解し、解釈し、批判することができ、これらの分析の欠点が分かり、発表された研究と研究プロトコルのための正しい分析的枠組みを開発することができるようになることが期待されます。 At the end of the course, students are expected to be able to fully understand, interpret, and critique published statistical analyses of arbitrary complexity, to identify the flaws in these analyses and to develop the correct analytical framework for published research studies and study protocols.

Appendix

授業計画 **Topics and Activities**	The course topics include but not limited to: 1) *Weekly review of a journal article, with occasional methodological seminars depending on the journal article contents in previous weeks*
評価方法 **Assessments**	
履修要件 **Pre-requisites**	☐ None なし ☒ Mandatory to complete 修得済み: 生物統計学 I Biostatistics 1 ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☒ Recommended 推奨: 生物統計学特論 Advanced Biostatistics ☐ Others その他:
教科書（必須） **Textbooks (mandatory)**	
その他 **Others**	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: No AI tools are accepted in this class

科目名 Course Name	(Doctoral) 環境疫学 Environmental Epidemiology
科目種別 Course Type	(Curriculum 2024 and after)　　☐ Required　　☒ Elective　　* This is for degree students
授業形態 Format	☒ Lecture 講義　　☐ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class　　☒ Online Live　　☒ On Demand* (☐ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☒ 前期 Spring　　　　☐ 後期 Fall　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☒ Wed 水　☐ Thu 木 ☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	Mihye Lee 李 美慧（イ・ミヘ）
授業概要 Course Overview	This course offers an overview of methods and topics in environmental epidemiology. The course will focus on the concepts of epidemiologic methods as they are applied in occupational and environmental epidemiology. The course will cover epidemiologic study designs, issues of validity, measurement of exposure, approaches to analysis, and special considerations for studying the health of a working population or the effects of environmental exposures. Feedback will be provided to students on assignments and class activities.
授業の目的 Course Objectives	This course is designed to provide an introduction to environmental epidemiology for students in the Doctor of Public Health program. This course is related to the Diploma Policy 1 and 2 of the university. Diploma Policy related to this course: 1 and 2 本科目に関連するディプロマポリシー：
到達目標 Learning Outcomes	By the end of the course, students will be able to: - Understand the application of epidemiologic methods to the study of environmental health - Describe the potential health effects of environmental hazards
授業計画 Topics and Activities	The course topics include but not limited to: 1) Causal diagrams 2) Measurement error in environmental epidemiology …Ecological Fallacy
評価方法 Assessments	Midterm exam (35 %), final exam (35 %), student presentation (20 %), and class participation (10%)
履修要件	☐ None なし

Appendix

Pre-requisites	☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☒ Recommended 推奨: Courses on epidemiology, biostatistics ☐ Others その他:
教科書（必須） Textbooks (mandatory)	None
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: no use of AI generative tools such as ChatGPT for all assignments.

科目名 Course Name	(Doctoral) 感染症モデリング Infectious Disease Modeling
科目種別 Course Type	(Curriculum 2024 and after)　　☐ Required　☒ Elective　* This is for degree students
授業形態 Format	☐ Lecture 講義　☐ Practicum 実習　☒ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class　☒ Online Live　☒ On Demand* (☐ full / ☒ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☒ 前期 Spring　　　☐ 後期 Fall　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☐ Wed 水　☐ Thu 木　☒ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	ウォン・ス・イー (Zoie Shui Yee Wong)
授業概要 Course Overview	This course comprises key concepts, theories and methods to model infectious disease transmission and control strategies. It will cover theories in infectious disease epidemiology, surveillance methods, epidemic model construction, basic reproduction number estimation methods and stochasticity. The course will allow students to evaluate the impact of different control measures for different diseases using models and understand how models could inform policy-making with the support of national and global case-studies. In the hands-on sessions, students will learn how to effectively display and model a disease outbreak using computing software. Upon the course completion, students will be able to appreciate the value of disease modelling and its importance on evidence-based decision-making for emergency response and preparedness. Through the project experience, students will equip themselves with the right attitudes, skills and qualities appropriate for leading independent emerging disease studies, integrate knowledge from multiple professional and cultural dimensions and propose strategies for health improvement in practice. The course content is designed to make balance between practical insights and computational epidemiology theories, particularly suitable for students with medical/public health related background. Feedback will be provided to students on assignments and class activities.
授業の目的 Course Objectives	This course aims to introduce knowledge of infectious disease transmission and control and technical skills in modelling infectious diseases. These advanced skills and methodologies are essential to tackle practical public health infectious disease challenges. DrPH Diploma Policy related to this course: 1-3 PHD Diploma Policy related to this course: 1-4 本科目に関連するディプロマポリシー(DrPH)：1-3 本科目に関連するディプロマポリシー(PHD)：1-4

到達目標 Learning Outcomes	Students will acquire knowledge of foundational principles and approaches in public health and, upon successful completion of the course, will be able to do the following: • Indicate the role and importance of quantitative and qualitative methods in infectious disease analysis and the state-of-the art data handling and analysis methods. • Demonstrate the ability to design compartmental models to analyse real-life disease outbreak problems • Appreciate state-of-the-art disease modeling studies in improving public health emergency response and decision-making • Apply system thinking and broad-based skills to analyze disease transmission events using epidemiological case data published by health authorities.
授業計画 Topics and Activities	The course topics include but not limited to: Introduction to Infectious disease models, Disease epidemiology and disease surveillance, Basic reproduction number and herd immunity, Estimating parameters from outbreak data I & II (handson), Compartmental models, Designing infectious disease models I & II (Handson), Control infectious disease spread, Emergency response and policy-related disease models: Case studies, Calibrating model to observed outbreak I &II (handson), Space, networks and social context in disease modelling and its applications, Stochasticity, agent-based model and its applications 感染症モデリング概論，感染症疫学と感染症発生動向調査，基本再生産数と集団免疫，アウトブレイク発生時のデータによるパラメータ推定 I &II（実践），コンパートメントモデル，感染症モデルのデザイニング I & II（実践），感染症蔓延予防，緊急事態対応と政策関連疾患モデル：ケースステディ，認められたアウトブレイクのためのモデル調整 I & II（実践），疾病モデルとその用途における空間、ネットワークおよび社会的状況，統計性、エージェント・ベース・モデルとその用途
評価方法 Assessments	<u>Individual:</u> Homework assignments (15+15%), Quiz (20%) <u>Project work:</u> Project interim presentation, final report and final presentation (15%+ 20%+15%). Homework assignments allow students to demonstrate their understanding of the concepts and principles of disease modelling. Project allows students to demonstrate system thinking abilities to apply the theories and techniques learnt into a meaningful and in-depth disease outbreaks situation. Multiple sessions of project discussions and presentations will increase students' ability to select context-specific communication strategies to present study outcomes professionally. Final exam helps to assess the student's learning of the overall subject matter. After-class exercises/practices that are not contributing to final score will also be provided after sessions.
履修要件 Pre-requisites	☐ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☒ Recommended 推奨: Biostatistics II and Biostatistics practicum II. If possible, we expect students will complete courses related to infectious disease and/or global health *before* beginning study this course. ☐ Others その他:
教科書（必須） Textbooks (mandatory)	- Keeling MJ. Modeling infectious diseases in humans and animals. Rohani P, editor: Woodstock : Princeton University Press; 2008.
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: The use of AI generative tools such as ChatGPT for all assignment writings, quiz, and final exam are not acceptable

科目名 Course Name	(Doctoral) Applied Behavioral Science　応用行動サイエンス
科目種別 Course Type	（Curriculum 2024 and after）　　　☐ Required　　☒ Elective　　* This is for degree students
授業形態 Format	☒ Lecture 講義　　☐ Practicum 実習　　☐ Seminar 演習
授業実施方法 Teaching Platforms	☒ In class　　☒ Online Live　　☒ On Demand* (☒ full / ☐ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☒ 前期 Spring　　　　　☐ 後期 Fall　　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☒ Wed 水　☐ Thu 木 ☐ Fri 金　☐ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☐ 3rd period　☒ 4th period　☐ Other
単位認定教員 Lead Instructor	Satomi Sato
授業概要 Course Overview	本科目では、実社会における介入の実施に行動科学を応用するための幅広い概観を提供する。学生は、健康行動に影響を与える主要な理論を理解し、介入策の計画について考察する。コース全体を通して、すべての概念の相互作用が強調されるが、コースは大きく３つのモジュールに分かれている。モジュール 1 では、人間の健康行動の個人的側面に焦点を当て、健康の選択に影響を与える強力な要因である心理社会的問題に焦点を当てる。モジュール 2 では、さまざまな社会構造の紹介を通じて、人間の行動原理を定義する。モジュール 3 では、ヘルスケアの文脈における社会変化と、公衆衛生的介入の成功（および失敗）の社会的予測因子について検討する。学生は、現在の研究文献から様々なトピックを読み、活発なディスカッショングループを利用して、これらのトピックを探求していく。講師は、課題に対してフィードバックコメントを提供する。 This required introductory course will expose students to a broad array of social science concepts and processes from sociology, anthropology, and behavioral health that (1) impact individual human health, (2) influence the health of societies, and (3) affect healthcare delivery. Students will gain understanding of major theories that influence health behavior. Though we will emphasize throughout the course the interplay between concepts in all, the course will be divided into main 3 modules. Module 1 will focus on the individual aspect of human health behavior with a focus on psychosocial issues as a powerful factor impacting health choices. In Module 2, students will define the principles of human behavior through an introduction to various social structures. In Module 3, students will examine social change in the context of healthcare and social predictors of public health intervention success (and failure). Students will explore these topics by utilizing a variety of topical readings from the current research literature and active discussion groups. The instructor will provide feedback comments on assignments.

授業の目的 Course Objectives	このコースでは、個人レベル、対人・集団レベル、地域・集団レベルにおける介入の社会的実装について検討する。また、個人の健康行動に関する理論として、社会的認知理論に注目する。このコースの終了時には、上記のトピックをヘルスケアと行動の文脈で探求するリサーチクエスチョンを構築できるようになることが望ましい。 This course will examine the social implementation of interventions at the individual, interpersonal/group, and community/population levels. The course will also focus on social cognitive theory as a theory of individual health behavior. By the end of this course, students should be able to construct research questions that explore the above topics in the context of health care and behavior. Diploma Policy related to this course: This course is related to Graduate Public Health Diploma Policies 1 and 4. 本科目に関連するディプロマポリシー：このコースは、大学院公衆衛生学ディプロマ・ポリシー1および4と関連している。
到達目標 Learning Outcomes	このコースを修了すると、次のことができるようになる。社会的認知理論を含む個人の健康行動に関する理論を説明することができる。社会学的・行動学的決定要因を評価し、公衆衛生プログラムを評価するための様々な量的・質的研究理論を理解する。医療と行動の関係を具体的な事例を用いて説明し、実践プログラムを提案することができる。 Upon completion of this course, students will be able to: Explain theories of individual health behavior, including social cognitive theories. Understand various quantitative and qualitative research theories for assessing sociological and behavioral determinants and evaluating public health programs. Be able to explain the relationship between medical care and behavior using specific examples and propose a program of practice.
授業計画 Topics and Activities	The course topics include but not limited to: 1) Social Cognitive Theory 2) Social support 3) Social Network Theory 4) Stress and coping 5) Community intervention
評価方法 Assessments	Discussion/ Assignments (25%) Mid-term Exam (25%), Presentation (25%), Final Paper (25%)
履修要件 Pre-requisites	☒ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☐ Recommended 推奨: ☐ Others その他:
教科書（必須） Textbooks (mandatory)	Health Behavior: Theory, research and practice/ editors. Karen Glanz, Barbara K. Rimer, and K. Viswanath-5th edition. Jossey-bass. 2015.
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: No use of AI generative tools such as ChatGPT for all assignments.

科目名 Course Name	国際保健学セミナー Global Health Seminar
科目種別 Course Type	（Curriculum 2024 and after）　　☐ Required　☒ Elective　* This is for degree students
授業形態 Format	☐ Lecture 講義　☐ Practicum 実習　☒ Seminar 演習
授業実施方法 Teaching Platforms	☐ In class　☒ Online Live　☐ On Demand* (☐ full / ☒ partial) *On-demand option is only available for students who receive permission from faculty
単位数 Credits	3
開講期 Semester	☐ 前期 Spring　　　　☒ 後期 Fall　　　　☐ 通年 Full-year
曜日・時限 Day・Time	☐ Mon 月　☐ Tue 火　☐ Wed 水　☐ Thu 木 ☐ Fri 金　☒ Sat 土　☐ Other ☐ 1st period　☐ 2nd period　☒ 3rd period　☐ 4th period　☐ Other
単位認定教員 Lead Instructor	安岡潤子 Junko Yasuoka
授業概要 Course Overview	発展途上国における国際保健研究の現状と課題について、最新のトピックを共有する。また、研究デザイン・実施方法の改善策について、文献精読を通して検討し、プレゼンテーション・ディスカッションを行う。更に、発展途上国における健康課題のうち、難民問題および医薬品のサプライチェーンの課題に焦点を当て、ケースを用いて問題分析・解決策の議論を行う。 This seminar explores the current status and challenges of Global Health Research, with a particular focus on Low- and Middle-Income Countries (LMICs). Through literature reviews, student-led presentations, and dynamic discussions, participants will examine critical aspects of research design and implementation. Special attention will be given to pressing global health issues, including the challenges faced by refugees and the complexities of pharmaceutical supply chains in developing countries. Case studies will serve as a foundation for problem analysis, encouraging collaborative discussions on innovative and practical solutions.
授業の目的 Course Objectives	本セミナーを通して、世界の人々の健康の現状と課題を解明し改善するための国際保健研究について、包括的に理解する基盤を構築する。また、ケースを用いたディスカッションを通して、今後の国際保健研究・政策の展開や方向性について、創造的に提案、建設的に議論するスキルを習得する機会を提供する。 This seminar aims to help students build a solid foundation for understanding global health research comprehensively. It focuses on elucidating and addressing the current status and challenges of health worldwide. Additionally, the seminar offers opportunities to develop skills in creatively proposing and constructively discussing future directions and advancements in global health research and policy through case-based discussions. Diploma Policy related to this course: 2, 3, 4 本科目に関連するディプロマポリシー：2, 3, 4

Appendix

到達目標 Learning Outcomes	セミナー修了時、国際保健の基本原則を理解し、次の項目に挙げる知識とスキルを習得する。 ● 国際保健学のコンセプト、および世界の主要な感染症・非感染性疾患の疾病負荷について説明できる。 ● 国際保健研究（特に介入研究）の現状と課題、および健康と健康の公平性を目指す政策や実践への応用について述べることができる ● 特に発展途上国における健康課題に取り組む多様なステークホルダーの役割や協力関係について論じることができる。 ● 文章やプレゼンテーションを通したコミュニケーションの中で、国際保健研究の内容を適切に読者・聴衆に伝えることができる。 Upon completing this seminar, students will have a solid understanding of the principles of global health and will have gained the following knowledge and skills: - Explain the concepts of global health and the global burden of disease, focusing on major infectious and non-communicable diseases. - Describe the current status and challenges of global health research, particularly intervention research, and its application to policies and actions aimed at improving health and health equity. - Analyze the roles and collaborative efforts of various stakeholders in addressing health challenges, especially in developing countries. - Communicate effectively about global health research through both written and presentation-based formats, tailored to diverse audiences.
授業計画 Topics and Activities	本コースに含まれるトピック： 1）国際保健研究の現状 2）難民危機と公衆衛生 3）パブリックセクターのサプライチェーンへの民間セクターの統合 The course topics include but not limited to: 1) Current Landscape of Global Health Research 2) The Migrant Crisis and Public Health 3) Integrating the Private Sector into the Public Health Supply Chain
評価方法 Assessments	個人/グループ課題とプレゼンテーション：100% Individual/group assignment and presentations: 100%
履修要件 Pre-requisites	☐ None なし ☐ Mandatory to complete 修得済み: ☐ Required to complete/concurrently take 修得済みまたは同時履修: ☒ Recommended 推奨: Global Health Course for MPH students ☐ Others その他:
教科書（必須） Textbooks (mandatory)	Lecture materials and Case materials will be distributed in class.
その他 Others	Online live (attending the class over the zoom): Students are requested to turn the zoom camera on during the class. **Use of AI generative tools**: No use of AI generative tools such as ChatGPT for all assignments.