

2026 Akita University Faculty of Medicine Syllabus

Category	: 医療・社会・行動科学 III
Course Title	: Clinical Research and Lifestyle-related Diseases
Eligible Students	: grade 3 Related Course
Code	: 71583006
Schedule	: week 17
Credits	: 1

1. Lead Instructor

Kyoko Nomura (Professor, Department of Environmental health science and Public Health, 6086)

2. Instructors

Kyoko Nomura (Professor, Department of Environmental health science and Public Health, 6086)
Katsutoshi Nakayama (Professor, Department of Respiratory Medicine, 6436)
Masatomo Miura (Professor, Department of Pharmacy, 6310)
Hiroshi Takano (Hospital Associate Professor, Dentistry and Oral Surgery, 6188)
Songee Jung (Assistant Professor, Department of Environmental health science and Public Health, 6088)
Masahiro Iwakura (Assistant Professor, Department of Environmental health science and Public Health, 7032)
Takeichiro Tominaga (Assistant Professor, Department of Environmental health science and Public Health, 6474)
Miharu Maeda (Assistant Professor, Department of Biological Informatics and Experimental Therapeutics, 6067)
Kanae karita (Part-time Lecturer, Kyorin University)
Daisuke Tadokoro (Part-time Lecturer, Health Policy Division, Health and Welfare Bureau, Sendai City)
Kouhei Tooda (Part-time Lecturer, Japanese Red Cross Society)
Masato Toyoshima (Part-time Lecturer, Daisen Health Center, Akita Prefecture)
Yuu Watanabe (Part-time Lecturer, Meguro Ward Health Promotion Division (Public Health Center))

3. Course Description Outline(Course Objectives)

【ねらい】

臨床現場で必要となる各疾患の病態を習得して診療を実践していくために、生活習慣（食生活を含む）とそのリスクについて学ぶ。

また、関連するプロフェッショナリズム、倫理、医療行動科学、医療安全、医療法（制度）、EBM 等について学ぶ。

3-3～7, 5-1～5

【授業の概要】

生活習慣（食生活を含む）に関連した疾病の種類、病態と予防治療について学習する。

医療の発展における臨床研究の重要性について学習する。

関連するプロフェッショナリズム、医の倫理、医療安全、医療法（制度）、EBM について説明できる。

【Aim】

To learn about lifestyles (including dietary habits) and their risks, in order to master the pathophysiology of each disease and practice medical treatment required in clinical practice.

In addition, students will learn about related topics such as professionalism, ethics, medical behavioral science, medical safety, medical law (system), EBM, etc.

3-3～7, 5-1～5

【Class Outline】

To learn about the type of disease related to lifestyle (including dietary habits), pathology, and preventive treatment.

To learn about the importance of clinical research in the development of medicine.

Students will be able to explain relevant professionalism, medical ethics, medical safety, medical law (system), and EBM.

4. Textbook/Reference Books

NEW 予防医学・公衆衛生学（南江堂、改訂版第4版 2018年）
疫学 - 医学的研究と実践のサイエンス（メディカル・サイエンス・インターナショナル、2010年）
シンプル衛生公衆衛生学（南江堂、2025年度版）
公衆衛生がみえる（MEDIC MEDIA、2024-2025）

5. Assessment

統一試験、形成評価（60%未達の場合は課題を課す）

Comprehensive examination, formative assessment (additional assignment will be given when a total score of 60% is not achieved)

6. Out of Class Study/Message

最後の講義時間に形成試験を行うので、配布資料・教科書等により予習・復習を行うこと。

Since the formative assessment is conducted on the final day, preliminary studies and reviews should be conducted using textbooks and distributed materials.

Topics and Contents of class, Course Objectives						
	Class Date	Period	Class Format	Topics and Contents of class, Course Objectives	Instructors	Class Room
1	8 / 31 (Mon)	1-2	Lecture	<p>Theme: 医学研究と倫理 Medical research and ethics 臨床研究、臨床試験、治験と市販後臨床試験の違いを概説できる。 臨床試験・治験（第Ⅰ・Ⅱ・Ⅲ・Ⅳ相試験、医薬品の臨床試験の実施の基準 (Good Clinical Practice GCP)）を説明できる。</p> <p>The differences between clinical, and post-marketing studies can be outlined. Clinical trials (phase I, II, III and IV studies, Good Clinical Practice GCP) can be explained.</p>	Kyoko Nomura	医学系研究棟 4階 6講義室
2	8 / 31 (Mon)	3-4	Lecture	<p>Theme: 健康管理 Health management ライフステージに応じた健康管理と環境・生活習慣改善（環境レベル、知識レベル、行動レベルと行動変容）を説明できる。</p> <p>Students will be able to explain health management and environmental and lifestyle modification (environmental level, knowledge level, behavioral level and behavior change) according to life stages.</p>	Kyoko Nomura	医学系研究棟 4階 6講義室
3	8 / 31 (Mon)	5-6	Lecture	<p>Theme: 飲酒と疾病 Alcohol consumption and diseases 飲酒（状況、有害性、アルコール依存症からの回復支援）を説明できる。</p> <p>Students will be able to explain alcohol associated public health issues (circumstances, harmfulness, support for recovery from alcoholism).</p>	Takeichiro Tominaga	医学系研究棟 4階 6講義室
4	8 / 31 (Mon)	7-8	Lecture	<p>Theme: 生活習慣とオーラルヘルス Lifestyle and oral health 歯科疾患（う蝕、歯周病等）とその全身への影響や口腔機能管理を概説できる。ライフステージに応じた健康管理と環境・生活習慣改善（環境レベル、知識レベル、行動レベルと行動変容）を説明できる。</p> <p>It provides an overview of dental diseases (caries, periodontal diseases, etc.) and their systemic effects and oral function management. Health management and environmental and lifestyle improvement (environmental level, knowledge level, behavioral level, and behavioral change) according to the life stage can be explained.</p>	Daisuke Tadokoro	医学系研究棟 4階 6講義室
5	8 / 31 (Mon)	9-10	Lecture	<p>Theme: 薬害 Harmful effect of medicine 医薬品等による健康被害、医薬品副作用救済制度、および安全対策規定</p> <p>Regulations for Relief System for Health Damage Due to Drugs, Adverse Drug Reactions, and Safety Measures</p>	Miharu Maeda	医学系研究棟 4階 6講義室

Topics and Contents of class, Course Objectives						
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6	9/1 (Tue)	1-4	Lecture	<p>Theme: 生活習慣と癌 Lifestyle and Cancer 健康日本 21, 健康増進法, がん対策基本法, 予防・疾病対策, 健康診断・指導, 生活習慣について概説できる。</p> <p>ライフステージに応じた健康管理と環境・生活習慣改善(環境レベル、知識レベル、行動レベルと行動変容)を説明できる。</p> <p>生活習慣病とリスクファクター、健康寿命の延伸と生活の質 (quality of life QOL) 向上、行動変容、健康づくり支援のための環境整備等を説明できる。</p> <p>It provides an overview of Healthy Japan 21, Health Promotion Law, Basic Law on Cancer Control, Prevention and Disease Control, Medical Examination and Guidance, and Lifestyle.</p> <p>Health management and environmental/lifestyle improvement (environmental level, knowledge level, behavioral level, and behavioral change) according to the life stage can be explained.</p> <p>It explains lifestyle-related diseases and risk factors, extension of healthy life expectancy, improvement of quality of life, behavioral change, and improvement of environment to support health promotion.</p>	Kyoko Nomura	医学系研究棟 4階 6講義室
7	9/1 (Tue)	5-6	Lecture	<p>Theme: 高血圧とガイドライン Hypertension and guidelines 診療ガイドラインの種類と使用上の注意を列挙できる。</p> <p>診療ガイドラインの推奨の強さについて違いを説明できる。</p> <p>Types of practice guidelines and precautions can be listed.</p> <p>Differences in the strength of recommendations in practice guidelines can be explained.</p>	Kyoko Nomura	医学系研究棟 4階 6講義室
8	9/1 (Tue)	7-8	Lecture	<p>Theme: 身体活動の疫学研究 Epidemiological research on physical activity 身体活動と生活習慣病(心血管疾患、がん、糖尿病)発症リスクとの関係について説明できる。</p> <p>The association between physical activity and the risk of lifestyle-related (non-communicable) diseases such as cardiovascular disease, cancer, and type 2 diabetes can be explained.</p>	Takeichiro Tominaga	医学系研究棟 4階 6講義室

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9	9/1 (Tue)	9-10	Lecture	<p>Theme: 口腔ケアと疾病 Oral Care and Disease 口腔疾患（う蝕、歯周病等）とその全身への影響や口腔機能管理を概説できる。ライフステージに応じた健康管理と環境・生活習慣改善（環境レベル、知識レベル、行動レベルと行動変容）を説明できる。</p> <p>It provides an overview of oral diseases (caries, periodontal diseases, etc.) and their systemic effects and oral function management. Health management and environmental and lifestyle improvement (environmental level, knowledge level, behavioral level, and behavioral change) according to different life stages can be explained.</p>	Hiroshi Takano	医学系研究棟 4階 6講義室
10	9/2 (Wed)	1-2	Lecture	<p>Theme: 医学と倫理と医療関連法規 Medical science, ethics, and medical laws and regulations 医師法、医療法等の医療関連法規を概説できる。医療関連法規に定められた医師の義務を列挙できる。医療従事者の資格免許、現状と業務範囲、職種間連携を説明できる。</p> <p>The Medical Practitioners Law, Medical Care Law, and other medical-related regulations can be outlined. Students will be able to list the physician's obligations set out in medical regulations. Students will be able to explain the qualifications and licenses of medical professionals, current status and scope of work, and inter-occupational linkages.</p>	Kyoko Nomura	医学系研究棟 4階 6講義室
11	9/2 (Wed)	3-4	Lecture	<p>Theme: 喫煙と疾病 Smoking and illness 喫煙（状況、有害性、受動喫煙防止、禁煙支援）を説明できる。</p> <p>Students will be able to explain smoking (status, harm, prevention of secondhand smoke, support for quitting).</p>	Katsutoshi Nakayama	医学系研究棟 4階 6講義室
12	9/2 (Wed)	5-6	Lecture	<p>Theme: 食事と糖尿病 Diet and diabetes 糖尿病の治療（食事療法、運動療法、薬物治療）を概説できる。栄養、食育、食生活を説明できる。</p> <p>The treatment of diabetes (diet, exercise, and drug therapy) can be outlined. Nutrition, dietary education, and dietary life can be explained.</p>	Takeichiro Tominaga	医学系研究棟 4階 6講義室
13	9/2 (Wed)	7-8	Lecture	<p>Theme: 生活習慣と脳卒中 Lifestyle and Stroke 脳卒中とリスクファクター、健康づくり支援のための環境整備等について説明できる。</p> <p>Students will be able to explain stroke and risk factors, as well as the development of an environment to support health development, etc.</p>	Masato Toyoshima	医学系研究棟 4階 6講義室

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14	9/2 (Wed)	9-10	Lecture	<p>Theme: 保健所の業務と感染症対策 Services of Health Centers and Infectious Diseases Control 感染症法の概要と届出義務を説明できる。 地域における、保健（母子保健、学校保健、成人・高齢者保健、地域保健、精神保健）・医療・福祉・介護の分野間及び多職種間（行政を含む）の連携の必要性を説明できる。 結核症、非結核性（非定型）抗酸菌症の症候と診断と治療及び予防法を説明できる。 保健、医療、福祉と介護のチーム連携における医師の役割を説明できる。 キャリア開発能力を獲得する。</p> <p>The outline of the Infectious Disease Law and the obligation to report it can be explained. It can explain the necessity of cooperation between the areas of health (maternal and child health, school health, adult and elderly health, community health, mental health), medical care, welfare, and long-term care, as well as between different occupations (including government). Symptoms, diagnosis, treatment, and prophylaxis of tuberculosis, nontuberculous (atypical) mycobacteriosis can be explained. The role of physicians in teams of health, medical care, welfare and care can be explained. Career development skills can be acquired.</p>	Masato Toyoshima	医学系研究棟 4階 6講義室
15	9/3 (Thu)	1-4	Lecture	<p>Theme: 環境衛生 Environmental Health 都市化および高度情報化がもたらす生活空間の変容と、現代社会特有の労働形態が心身の健康に及ぼす影響を理解できる。さらに、病因論に基づき、環境リスク低減に向けた個人の保健行動（ヘルスプロモーション）と、持続可能な環境保全活動との関連性を具体的に説明できる。</p> <p>Students can understand the impact of changes in living spaces brought about by urbanization and advanced informatization, as well as the effects of modern society's unique work patterns on physical and mental health. Furthermore, based on etiological theory, students will be able to specifically explain the relationship between individual health promotion behaviors aimed at reducing environmental risks and sustainable environmental conservation activities.</p>	Kanae karita	医学系研究棟 4階 6講義室
16	9/3 (Thu)	5-6	Lecture	<p>Theme: 認知症と公衆衛生 Dementia and public health 認知症高齢者の医療・介護・福祉政策について説明できる。</p> <p>Students will be able to explain medical, nursing care, and welfare policies for the elderly with dementia.</p>	Songee Jung	医学系研究棟 4階 6講義室

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	Class Date	Period	Class Format	Topics and Contents of class, Course Objectives	Instructors	Class Room
17	9/3 (Thu)	7-10	Lecture	<p>Theme: ワクチンと感染症 Vaccines and Infections 予防接種の意義と現状を説明できる。国際保健・医療協力の現場における文化的な摩擦について、文脈に応じた課題を設定して、解決案を提案できる。保健、医療に関する国際的課題を理解し、説明できる。日本の医療の特徴を理解し、国際社会への貢献の意義を理解している。</p> <p>Students will be able to explain the significance and current status of immunization. It is possible to propose solutions to cultural friction in the field of international health and medical cooperation by setting issues according to the context. Students will be able to understand and explain international health and medical issues. Students will be able to understand the characteristics of Japanese medical care and understands the significance of its contribution to the international community.</p>	Kouhei Tooda	医学系研究棟 4階 6講義室
18	9/4 (Fri)	1-2	Lecture	<p>Theme: 医薬品と法令 Pharmaceuticals and Laws and Regulations 薬物に関する法令を概説し、医薬品の適正使用に関する事項を列挙できる。 副作用と有害事象の違い、報告の意義（医薬品・医療機器等安全性情報報告制度等）を説明できる。</p> <p>Drug-related laws and regulations can be outlined and items related to the proper use of drugs can be listed. The difference between adverse reactions and adverse events and the significance of the report (e.g., the Pharmaceuticals and Medical Devices Safety Information Reporting System) can be explained.</p>	Masatomo Miura	医学系研究棟 4階 6講義室
19	9/4 (Fri)	3-4	Lecture	<p>Theme: 臨床研究 Clinical research 介入研究（臨床研究、ランダム化試験）を概説できる。</p> <p>Intervention studies (clinical studies, randomized trials) can be outlined.</p>	Takeichiro Tominaga	医学系研究棟 4階 6講義室

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	Class Date	Period	Class Format	Topics and Contents of class, Course Objectives	Instructors	Class Room
20	9/4 (Fri)	5-8	Lecture	<p>Theme: 東京都の保健衛生行政 Health and hygiene administration in Tokyo Prefecture 感染症法の概要と届出義務を説明できる。 地域における、保健（母子保健、学校保健、成人・高齢者保健、地域保健、精神保健）・医療・福祉・介護の分野間及び多職種間（行政を含む）の連携の必要性を説明できる。 結核症、非結核性（非定型）抗酸菌症の症候と診断と治療及び予防法を説明できる。 保健、医療、福祉と介護のチーム連携における医師の役割を説明できる。 保健、医療に関する国際的課題を理解し、説明できる。 キャリア開発能力を獲得する。</p> <p>Students will be able to explain the outline of the Infectious Diseases Law and the obligation to report. Students will be able to explain the need for cooperation between the fields of health (maternal and child health, school health, adult / elderly health, community health, mental health), medical care, welfare, and nursing care, and between multiple occupations (including administration) in the community. The symptoms, diagnosis, treatment and prevention of tuberculosis and nontuberculous (atypical) mycobacteriosis can be explained. The role of physicians in team collaboration between health, medical, welfare and nursing care can be explained. International issues related to health and medical care can be understood and explained. Career development ability can be acquired.</p>	Yuu Watanabe	医学系研究棟 4階 6講義室
21	9/4 (Fri)	9-10	Formative assesment	<p>Theme: 終了時客観試験 Objective test at the end</p>	Kyoko Nomura Songee Jung Masahiro Iwakura Takeichiro Tominaga	医学系研究棟 4階 6講義室