

2026 Akita University Faculty of Medicine Syllabus

Category	: 臨床医学 V (CC1)
Course Title	: Emergency&Critical Care Medicine
Eligible Students	: grade 5 Related Course
Code	: 71643002-20

1. Lead Instructor

Hajime Nakae (Professor, Department of Emergency and Critical Care Medicine, 6183, Office Hour: 8 : 30-17 : 00)

2. Instructors

Hajime Nakae (Professor, Department of Emergency and Critical Care Medicine, 6183, Office Hour: 8 : 30-17 : 00)

Manabu Okuyama (Associate Professor, Department of Emergency and Critical Care Medicine, 6184, Office Hour: 8 : 30-17 : 00)

Toshiharu Kitamura (Project Assistant Professor, General Medical Practice Center, 6185)

Kasumi Satoh (Assistant Professor, Department of Emergency and Critical Care Medicine, 6185)

Nobufumi Hirasawa (Project Assistant Professor, General Medical Practice Center, 6185)

Koumei Kameyama (Project Assistant Professor, General Medical Practice Center, 6185)

3. Course Description Outline(Course Objectives)

1. 授業の概要及びねらい

毎朝のカンファレンスに参加し、軽症から重症まで様々な病態、かつ様々な社会的背景を持つ患者の症例プレゼンテーションを聞き、病態に合わせた問題解決、総合的に患者・生活者を見る姿勢を学ぶ。また、一人一症例担当患者を決め指導医とともに診療し、その患者の徴候、治療、もしくは臨床的疑問点を調べ最終日に発表する。これは情報・科学技術を用いて最新の知識を入手し症例プレゼンテーションすることに加え、ピア・ラーニングで互いの知識を共有する目的で行う。また、小グループディスカッションで家庭医の診療と対して総合的に患者・生活者を見る姿勢について学ぶ。シミュレーションセンターでのシミュレーションでバイタルサインの測定とその評価、一次救命処置と二次救命処置を学ぶ

1) 症例カンファレンス参加 (1-1,2, 3-1,2,3,4,5, 4-1,2,3,4,5,6,7,8, 5-1,2,3,4,5, 6-1,2)

2) 救急外来での診療 (2-1,2,3,4,5,6,7,8, 3-1,2,3,4,5, 4-1,2,3,4,5,6,7)

3) 集中治療部での診療 (2-1,2,3,4,5,6,7,8, 3-1,2,3,4,5, 4-1,2,3,4,5,6,7)

4) 入院患者の診療 (2-1,2,3,4,5,6,7,8, 3-1,2,3,4,5, 4-1,2,3,4,5,6,7)

5) 救急医・集中治療医・総合診療医・家庭医について学ぶ (1-1,2, 2-1,2,3,4,5,6,7, 3-3,4,5,6,7)

6) シミュレーションでバイタルサインの測定とその評価、ショックへの対応を学ぶ (4-1,2,3,4,5,6,7)

7) シミュレーションで一次救命処置と二次救命処置を学ぶ (2-3,4,5,6,7, 3-2,3, 4-2,3,4,5,6,7)

8) 症例プレゼンテーション (ピア・ラーニング) (3-1,2,3,4,5, 4-1,2,3,4,5,6,7, 5-1,2,3,4,5,6-1,2)

2. 学習目標

1) バイタルサインや身体徴候から緊急性の高い状態にある患者を認識できる。

2) ショックの患者の初期対応と原因に応じた治療について理解する

3) 心停止患者の一次救命処置を実施できる。

4) 心停止患者の二次救命処置を理解する

5) 心停止の原因と病態及び診断の要点について理解する

6) 集中治療及び集中治療室の概要を理解する

7) 人工呼吸管理・体外式膜型肺・補助循環・急性血液浄化法が必要な病態とその意義を理解する

8) 集中治療後症候群について概念を理解する

9) 症例発表において適切にプレゼンテーションできる

10) プライマリケアの基本的概念を理解する

本科目は実務経験のある教員による授業科目です。

1. Outline and objectives of the course

The students will attend a conference every morning and listen to case presentations of patients with a variety of conditions, from mild to severe, and from various social backgrounds, to learn problem solving tailored to the condition and a comprehensive view of the patient and his/her life. Each student will be assigned a patient to treat with a medical advisor, and on the last day of the course, the student will present his or her findings, treatment, or clinical questions to the medical advisor. The purpose of this is to obtain up-to-date knowledge and present cases using information and scientific technology, as well as to share knowledge with each other through peer learning. In addition, small group discussions will be held to learn about the family physician's practice and how to look at patients and their families comprehensively. Simulation in the simulation center to learn the measurement and evaluation of vital signs, primary and secondary life-saving procedures.

- 1) Participation in case conferences (1-1,2, 3-1,2,3,4,5,4-1,2,3,4,5,6,7,8, 5-1,2,3,4,5,6-1,2)
- 2) Medical care in emergency room (2-1,2,3,4,5,6,7,8, 3-1,2,3,4,5, 4-1,2,3,4,5,6,7)
- 3) Medical care in intensive care unit (2-1,2,3,4,5,6,7,8,3-1,2,3,4,5,4-1,2,3,4,5,6,7)
- 4) In-patient care (2-1,2,3,4,5,6,7,8, 3-1,2,3,4,5, 4-1,2,3,4,5,6,7)
- 5) Learn about emergency physicians, intensivists, general practitioners, and family physicians. (1-1,2, 2-1,2,3,4,5,6,7, 3-3,4,5,6,7)
- 6) Learn to measure vital signs, evaluate them, and respond to shocks through simulation. (4-1,2,3,4,5,6,7)
- 7) Learn primary and secondary life-saving procedures through simulations. (2-3,4,5,6,7, 3-2,3, 4-2,3,4,5,6,7)
- 8) Case presentation (peer learning)

2. Learning goal

- 1) Recognize patients with emergent conditions based on vital signs and physical signs.
- 2) Understand the initial response and cause-specific treatment of patients with shock.
- 3) Perform primary life-saving procedures on patients with cardiac arrest.
- 4) Understand Secondary Life Support for Cardiac Arrest Patients.
- 5) Understand the causes and pathophysiology of cardiac arrest and the essentials of diagnosis.
- 6) Understand intensive care and intensive care units.
- 7) Understand the conditions that require ventilatory management, extracorporeal membrane lung, assisted circulation, and acute blood purification procedures and their significance.
- 8) Understand the concept of post-intensive care syndrome.
- 9) Present appropriately in case presentations.
- 10) Understand basic concepts of primary care.

This course is taught by faculty members with practical experience.

4. Textbook/Reference Books

1. 改訂 第6版 救急診療指針
2. 外傷初期診療 guideline ATEC
3. ハリソン内科学
4. Common Disease の診療ガイドライン
5. ICU ブック

5. Assessment

出席、症例発表、症例レポート、シミュレーションの実技評価

Students are to be evaluated by attendance, case presentation, care report, and practical performance in a simulation.

6. Out of Class Study/Message

- 1) 初日は毎朝 8 時 30 分 ICU カンファランス室集合
* 月曜日が祝日の場合は翌日午前 8 時 30 分 ICU カンファランス集合
- 2) WebCLass で事前学習、予習すること
- 3) 紙媒体での資料配布はありません。各自 WebCLass から用意し履修すること
- 4) 半袖の白衣を着用すること。ICU では感染制御の観点から長袖の白衣の着用を禁止しています。

問い合わせ：医局（6185）

- 1) Start at 8:30 a.m. in the ICU conference room
- 2) Study in advance with a WebCLass.
- 3) Paper-based handouts will not be provided. They are available to download from the WebCLass.
- 4) Wear a short-sleeved white coat (Long-sleeved one is prohibited from the view point of infection control)

Contact: Medical office (extension 6185)

救急・集中治療医学 臨床実習

Schedule		Contents of Class
1	Mon [8:30 ~ 17:00] Orientation Seminar in general infirmary Instructor Toshiharu Kitamura	1)Assess degree of urgency. 2)Learn core competencies of family medicine.
2	Tue [8:15 ~ 17:00] Assessment of degree of urgency Instructor Nobuhisa Hirasawa	1)Learn how to handle severe medical emergencies. 2)Learn how to handle severe patients in the ICU.
3	Wed [8:15 ~ 17:00] Clinical practice in ICU and hospital ward Instructor Koumei Kameyama	1)Learn how to handle severe medical emergencies. 2)Learn how to handle severe patients in the ICU.
4	Thu [8:15 ~ 17:00] Clinical practice in ICU and hospital ward Advanced life support Instructor Kasumi Satoh	Learn advanced life support.
5	Fri [8:15 ~ 17:00] Clinical practice in ICU and hospital ward Lecture of general physician Instructor Toshiharu Kitamura	1)Learn how to handle severe medical emergencies. 2)Learn how to handle severe patients in the ICU. 3)Lecture from a general physician (14:20-17:10 at multipurpose room)