

## 2023 Akita University Faculty of Medicine Syllabus

<b>Category</b>	: 臨床医学 II
<b>Course Title</b>	: Obstetrics
<b>Eligible Students</b>	: grade 3 Related Course
<b>Code</b>	: 71633017
<b>Schedule</b>	: week 29 ~ week 35
<b>Credits</b>	: 1

### 1. Lead Instructor

Yukihiro Terada ( 寺 田 幸 弘 ) (Professor, Department of Obstetrics and Gynecology, 6160)

### 2. Instructors

Yukihiro Terada ( 寺 田 幸 弘 ) (Professor, Department of Obstetrics and Gynecology, 6160)

Yukiyo Kumazawa ( 熊澤由紀代 ) (Associate Professor, Department of Obstetrics and Gynecology, 6163)

Hiroshi Miura ( 三 浦 広 志 ) (Lecturer, Department of Obstetrics and Gynecology, 6163)

Yohei Onodera ( 小 野 寺 洋 平 ) (Assistant Professor, Department of Obstetrics and Gynecology, 6163)

Akiko Fujishima ( 藤 嶋 明 子 ) (Assistant Professor, Department of Obstetrics and Gynecology, 6163)

Kazuhiro Kawamura ( 河 村 和 弘 ) (Part-time Lecturer, Juntendo University, Department of Obstetrics and Gynecology)

Takashi Takeda ( 武 田 卓 ) (Part-time Lecturer, Kindai University Research Institute of Traditional Asian Medicine)

Hirokazu Arai ( 新 井 浩 和 ) (Part-time Lecturer, Akita Red Cross Hospital, Department of Obstetrics)

Tadashi Watanabe ( 渡 辺 正 ) (Part-time Lecturer, Tohoku Medical and Pharmaceutical University, Department of Obstetrics and Gynecology)

Akira Sato ( 佐 藤 朗 ) (Part-time Lecturer, Akita Red Cross Hospital, Department of Neonatology)

### 3. Course Description Outline(Course Objectives)

We will explain the physiology and pathophysiology of perinatal medicine, develop the ability to fully respond to National Examination for Doctors.

( 1-1 ~ 1-2、 2-1 ~ 2-5、 3-1 ~ 3-4、 3-7、 4-3 ~ 4-4、 4-6、 4-8、 5-1 ~ 5-4、 6-2 )

### 4. Textbook/Reference Books

NEW エッセンシャル産科学・婦人科学 第3版

Williams Obstetrics 第25版

基本がわかる漢方医学講義

女性診療で使えるヌーベル漢方処方ノート

### 5. Assessment

出席率 60 % に達しない場合はレポート提出を課す。

Attendance status .

If the attendance rate does not reach 60% of the total, you will need to submit a report.

### 6. Out of Class Study/Message

Learning by writing important points of the lesson on the slide will be useful for review after the lecture.

It may be changed slightly depending on the schedule of the instructor.

Topics and Contents of class, Course Objectives						
	Class Date	Period	Class Format	Topics and Contents of class, Course Objectives	Instructors	Class Room
1	11 / 27 (Mon)	1-2	Lecture	<p>Theme: 妊娠の生理 1- 妊娠の成立と維持 Physiology of Pregnancy 1 - Establishment and Maintenance of Pregnancy</p> <p>1) 胎児の発達過程での機能・形態的变化を説明できる</p> <p>2) 正常妊娠の経過を説明できる</p> <p>1) Explain the functional and morphological changes in the development process of the fetus</p> <p>2) Explain the course of normal pregnancy</p>	Yukihiro Terada (寺田 幸弘)	医学系研究棟 4 階総 6 講義室
2	11 / 27 (Mon)	3-4	Lecture	<p>Theme: 妊娠の生理 2- 胎児の発育・胎児付属物、胎児胎盤系の生理、母体の変化 Physiology of Pregnancy 2 - Fetal development, fetal appendages, fetal and placental physiology, maternal changes</p> <p>1) 妊娠に伴う身体的変化を概説できる</p> <p>2) 妊娠での母体の解剖学的と生理学的変化を説明できる</p> <p>3) 胎盤系の発達過程での機能・形態的变化を説明できる</p> <p>4) 証明書（死産証書、死胎検案書）を説明できる</p> <p>1) Explain the physical changes that accompany pregnancy</p> <p>2) Explain maternal anatomical and physiological changes in pregnancy</p> <p>3) Explain the functional and morphological changes in the developmental process of the placental system</p> <p>4) Explain the certificate (stillbirth certificate, etc.)</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室
3	11 / 30 (Thu)	1-2	Lecture	<p>Theme: 分娩の生理 1- 分娩の概念・陣痛発来機序・分娩の 3 要素 Physiology of delivery 1 - The concept of childbirth, the mechanism of labor pain, and the three elements of childbirth</p> <p>1) 医学・医療の歴史的な流れとその意味を概説できる</p> <p>2) 母子保健の意義を医学的に説明できる</p> <p>1) Explain the historical flow of medicine and medical care and its meaning</p> <p>2) Explain the significance of maternal and child health</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室
4	11 / 30 (Thu)	3-4	Lecture	<p>Theme: 分娩の生理 2- 分娩機転 Physiology of delivery 2-Delivery mechanism</p> <p>1) 妊娠での母体の解剖学的と生理学的変化を説明できる</p> <p>2) 胎児の形態的变化を説明できる</p> <p>1) Explain maternal anatomical and physiological changes in pregnancy</p> <p>2) Explain the morphological changes of the fetus</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室

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5	12 / 4 (Mon)	1-2	Lecture	<p>Theme: 妊娠の管理-妊娠に関する用語、妊婦健診、ハイリスク妊娠、妊娠徴候と診断 Pregnancy Management-Pregnancy Terms, Pregnancy Checkups, High Risk Pregnancy, Pregnancy Signs and Diagnosis</p> <p>1) 妊娠の診断法を説明できる 2) 胎児・胎盤検査法(超音波検査による)の意義を説明できる 3) 産褥の過程を説明できる 4) 育児に伴う母体の構造的・生理的な変化、精神問題を説明できる</p> <p>1) Explain how to diagnose pregnancy 2) Explain the significance of the fetal / placenta examination method (by ultrasonography) 3) Explain the process of puerperium 4) Explain the structural and physiological changes of the mother and mental problems associated with childcare</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室
6	12 / 4 (Mon)	3-4	Lecture	<p>Theme: 医医学の発展における研究の重要性について Importance of research for the development of medicine</p> <p>1) 医学研究のうち、基礎研究、橋渡し研究、臨床研究の違いとそれぞれの関連性について説明できるようになる。 2) 医学の発展のための基礎研究の重要性を理解する。 3) 医学の発展のための橋渡し研究の重要性を理解する。 4) 生殖医療と基礎研究の歴史について学び、現在の生殖医療の課題について説明できるようになる。</p> <p>1) You will be able to explain the differences between basic, translational and clinical studies among medical research and their relevance. 2) Understand the importance of basic study for the development of medicine. 3) Understand the importance of translational study for the development of medicine. 4) Learn about the history of reproductive medicine and related-basic research, and be able to explain current issues in reproductive medicine.</p>	Kazuhiro Kawamura (河村和弘)	医学系研究棟 4 階総 6 講義室
7	12 / 7 (Thu)	1-2	Lecture	<p>Theme: 異常妊娠 1- 妊娠悪阻・流産 Abnormal Pregnancy 1-Hyperemesis gravidarum / miscarriage</p> <p>1) 主な異常妊娠(流産、切迫流産)の病態を説明できる</p> <p>1) Explain the pathophysiology of major abnormal pregnancies (miscarriage, imminent miscarriage)</p>	Akiko Fujishima (藤嶋明子)	医学系研究棟 4 階総 6 講義室

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8	12 / 7 (Thu)	3-4	Lecture	<p>Theme: 異常妊娠 2-多胎妊娠、過期妊娠、羊水の異常、血液型不適合妊娠 異常妊娠 3 早産・切迫早産 Abnormal Pregnancy 2-Multiple Pregnancy, Late Pregnancy, Amniotic Fluid Abnormality, Blood Type Incompatible Pregnancy. Abnormal Pregnancy 3 - Preterm Birth / Threatened of Preterm Birth</p> <p>1) 主な異常妊娠（多胎妊娠）主な異常分娩（切迫早産）主な合併症妊娠（血液型不適合妊娠）の病態を説明できる</p> <p>1) Explain the pathophysiology of major abnormal pregnancies (multiple pregnancies), major abnormal deliveries (threatened of preterm birth), and major complications (blood group incompatible pregnancies).</p>	Akiko Fujishima (藤嶋明子)	医学系研究棟 4 階総 6 講義室
9	1 / 4 (Thu)	1-2	Lecture	<p>Theme: 分娩の管理 1- 正常分娩の経過 Delivery management 1-Progress of normal delivery 正常分娩の経過を説明できる</p> <p>Explain the course of normal delivery</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室
10	1 / 4 (Thu)	3-4	Lecture	<p>Theme: 異所性妊娠の診断と治療 Diagnosis and treatment of ectopic pregnancy 1) 主な異常妊娠（異所性妊娠）の病態を説明できる</p> <p>1) Explain the pathophysiology of major abnormal pregnancies (ectopic pregnancies)</p>	Tadashi Watanabe (渡辺正)	医学系研究棟 4 階総 6 講義室
11	1 / 11 (Thu)	1-2	Lecture	<p>Theme: 分娩の管理 2- 分娩監視 Delivery management 2-delivery monitoring 胎児検査法（分娩監視装置による）の意義を説明できる</p> <p>Explain the significance of the fetal examination method (using the cardiotocogram)</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室
12	1 / 11 (Thu)	3-4	Lecture	<p>Theme: 異常妊娠 4- 子宮内発育遅延、妊娠高血圧症候群 Abnormal pregnancy 4- Hypertensive Disorders of Pregnancy, fetal growth restriction 主な異常妊娠（妊娠高血圧症候群、胎児発育不全）の病態を説明できる</p> <p>Explain the pathophysiology of major abnormal pregnancies (Hypertensive Disorders of Pregnancy, fetal growth restriction)</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室
13	1 / 15 (Mon)	1-2	Lecture	<p>Theme: 産科処置 1- 産科麻酔と無痛分娩、分娩誘発、産科手術 Obstetric procedure 1-Obstetric anesthesia and labor analgesia, labor induction, obstetric surgery 1) 急速遂娩術（吸引分娩、帝王切開術など）の適応を説明できる 2) 分娩誘発・促進法について説明できる</p> <p>1) Explain the indications for rapid delivery (vacuum extraction, cesarean section, etc.) 2) Explain how to induce of labor</p>	Yohei Onodera (小野寺洋平)	医学系研究棟 4 階総 6 講義室

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14	1 / 15 (Mon)	3-4	Lecture	<p>Theme: 産褥・母子保健・法的背景等 Postpartum, maternal and child health, legal background.</p> <p>1) 母子保健の意義を医学的に説明できる</p> <p>2) 証明書（死産証書、死胎検案書）を説明できる</p> <p>3) 患者情報の守秘義務と患者等への情報提供の重要性を理解し、適切な取扱いができる</p> <p>1) Explain the significance of maternal and child health</p> <p>2) Explain the certificate (stillbirth certificate, etc.)</p> <p>3) Understand the duty of confidentiality of patient information and the importance of providing information to patients.</p>	Yohei Onodera (小野寺洋平)	医学系研究棟 4 階総 6 講義室
15	1 / 18 (Thu)	1-2	Lecture	<p>Theme: 異常妊娠 5- 常位胎盤早期剥離・前置胎盤 Abnormal Pregnancy 5-Placental abruption / placenta previa</p> <p>1) 主な異常分娩（前置胎盤、癒着胎盤、常位胎盤早期剥離）の病態を説明できる</p> <p>1) Explain the major abnormal deliveries (placenta previa, placenta accreta, placental abruption)</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室
16	1 / 18 (Thu)	3-4	Lecture	<p>Theme: 産婦人科疾患と漢方薬 Obstetrics and gynecology diseases and Chinese herbs</p> <p>1) 妊娠に関連する症候（悪心・嘔吐、腹痛、腹部膨満）を説明できる</p> <p>1) Explain Pregnancy-related symptoms (nausea vomiting, abdominal pain, abdominal distension)</p>	Takashi Takeda (武田卓)	医学系研究棟 4 階総 6 講義室
17	1 / 22 (Mon)	1-2	Lecture	<p>Theme: 合併症妊娠 1- 婦人科疾患・感染症、肝胆道、精神神経 Complications Pregnancy 1-Gynecological diseases / infectious diseases, hepatobiliary tract, psychiatric nerves</p> <p>主な合併症妊娠（子宮筋腫、卵巣腫瘍、精神疾患、TORCH 症候群など）の病態を説明できる</p> <p>Explain the pathophysiology of major complications Pregnancy (uterine fibroids, ovarian tumors, mental illness, TORCH syndrome, etc.)</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室
18	1 / 22 (Mon)	3-4	Lecture	<p>Theme: 合併症妊娠 2- 血液疾患、腎泌尿器、自己免疫、代謝内分泌 Complications Pregnancy 2-Blood disorders, renal urology, self-immunization, metabolic endocrinology</p> <p>主な合併症妊娠（血液疾患、膠原病、耐糖能異常、甲状腺疾患など）の病態を説明できる</p> <p>Explain the pathophysiology of pregnancy (blood disease, collagen disease, impaired glucose tolerance, thyroid disease, etc.)</p>	Yohei Onodera (小野寺洋平)	医学系研究棟 4 階総 6 講義室

Topics and Contents of class, Course Objectives						
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19	1 / 25 (Thu)	1-2	Lecture	<p>Theme: 胎児機能不全 Non Reassuring Fetal Status 胎児・胎盤検査法（超音波検査、分娩監視装置による）の意義を説明できる</p> <p>Explain the significance of the fetal / placental examination methods (ultrasound examination, delivery monitoring device)</p>	Akira Sato （佐藤朗）	医学系研究棟 4 階総 6 講義室
20	1 / 25 (Thu)	3-4	Lecture	<p>Theme: 母体損傷・出血と産科ショック labor trauma / bleeding and obstetric shock 分娩外傷、産科救急（産科出血、播種性血管内凝固）の病態と治療を説明できる</p> <p>Explain the pathophysiology and treatment of labor trauma and obstetric emergency (obstetric bleeding, disseminated intravascular coagulation)</p>	Akira Sato （佐藤朗）	医学系研究棟 4 階総 6 講義室
21	1 / 29 (Mon)	1-2	Lecture	<p>Theme: 異常分娩 1- 前期破水・陣痛産道の異常・児頭骨盤不均衡 異常分娩 2- 回旋・進入の異常、胎位の異常 Abnormal delivery 1-premature rupture of membrane, cephalopelvic disproportion. Abnormal delivery 2-abnormal rotation, abnormal fetal lie</p> <p>1) 主な異常分娩（前期破水 児頭骨盤不均衡）の病態を説明できる 2) 主な異常分娩（回旋異常、胎位異常）の病態を説明できる</p> <p>1) Explain the pathophysiology of major abnormal deliveries (premature rupture of membrane, cephalopelvic disproportion) 2) Explain the pathophysiology of major abnormal deliveries (abnormal rotation, abnormal fetal lie)</p>	Hiroshi Miura （三浦広志）	医学系研究棟 4 階総 6 講義室

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	Class Date	Period	Class Format	Topics and Contents of class, Course Objectives	Instructors	Class Room
22	1 / 29 (Mon)	3-4	Lecture	<p>Theme: 先天異常 1- 染色体異常・先天代謝異常・胎芽病と胎児病. 先天異常 2- 遺伝的相談と出生前診断 妊娠と薬剤 Congenital abnormalities 1-Chromosome abnormalities, inborn errors of metabolism, embryonic diseases and fetal diseases. Birth defects 2-Genetic consultation and prenatal diagnosis, Pregnancy and drugs</p> <p>1) 遺伝情報の特性（不変性、予見性、共有性）を説明できる  2) 遺伝カウンセリングの意義と方法を説明できる  3) 選択肢が多様な場合でも適切に説明を行い患者の価値観を理解して、患者の自己決定を支援する  4) 遺伝情報に基づく治療や予防をはじめとする適切な対処法を概説できる  5) 羊水検査法の意義と異常所見を説明できる  6) 妊娠時の薬物療法の注意点を説明できる</p> <p>1) Explain the characteristics of genetic information (invariance, predictability, sharing)  2) Explain the significance and method of genetic counseling  3) Even when there are various options, explain appropriately, understand the patient's values, and support the patient's self-determination.  4) Outline appropriate coping methods such as treatment and prevention based on genetic information  5) Explain the significance and abnormal findings of the amniocentesis method  6) Explain the precautions for drug therapy during pregnancy</p>	Hiroshi Miura (三浦広志)	医学系研究棟 4 階総 6 講義室
23	2 / 1 (Thu)	1-2	Lecture	<p>Theme: 新生児 1- 用語と分類・適応生理・管理と診察法・在胎期間の評価 Neonatal 1-Terms and Classification / Adaptation Physiology / Management and Examination / Gestational Age Evaluation</p> <p>1) 胎児の循環・呼吸の生理的特徴と出生時の変化を説明できる  2) 主な先天性疾患を列挙できる  3) 新生児の生理的特徴を説明できる</p> <p>1) Explain the physiological characteristics of fetal circulation and respiration and changes at birth  2) Can list major congenital diseases  3) Explain the physiological characteristics of newborns</p>	Hirokazu Arai (新井浩和)	医学系研究棟 4 階総 6 講義室

Topics and Contents of class, Course Objectives						
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24	2 / 1 (Thu)	3-4	Lecture	<p>Theme: 新生児 2- ハイリスク新生児・よく見られる徴候とその鑑別・主要疾患 Neonatal 2-High-risk neonates-Common signs and their differentiation-Major diseases</p> <p>1) 新生児黄疸の鑑別と治療を説明できる</p> <p>2) 新生児期の呼吸障害の病因を列挙できる</p> <p>3) 正常児・低出生体重児・病児の管理の基本を説明できる</p> <p>1) Explain the differentiation and treatment of neonatal jaundice</p> <p>2) List the causes of respiratory disorders in the neonatal period</p> <p>3) Explain the basics of management of normal children, low birth weight children, and sick children</p>	Hirokazu Arai (新井浩和)	医学系研究棟 4 階総 6 講義室