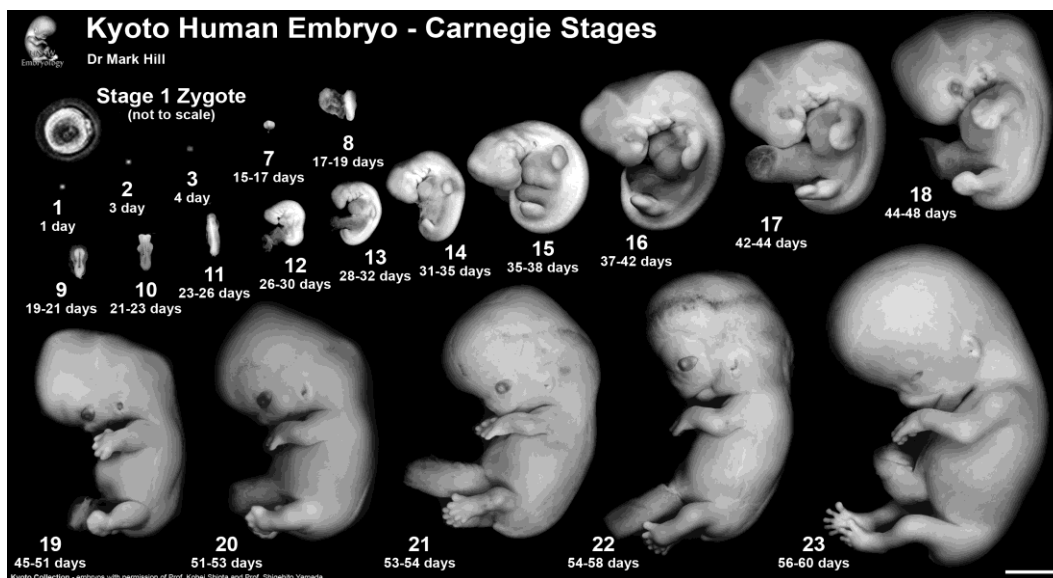




DEPARTMENT OF ANATOMY

ANAT 2341

Embryology Early and Systematic Development



The first 8 weeks of human embryological development.

COURSE OUTLINE

SEMESTER 2, 2016

CRICOS Provider Code 00098G

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[**ONLINE TIMETABLE**](#)

ANAT2341 Course Information

OBJECTIVES OF THE COURSE

This course will introduce embryological development as a major topic within medical sciences. Students completing this course will have a broad understanding of: human development, some animal models of development and current related research topics. Experts and researchers from within the field contribute to the current course.

This course will enable students to explore and gain further understanding of embryology both early and systematic through the investigation of development in both humans and animal models. The course includes new applications and techniques to study development and the emerging research and reproductive technologies. This course will enable students to broadly understand abnormalities in development and current applications to medical research. Within the Anatomy program it introduces the developmental origin of organs and tissues as a cornerstone for later study of topics such as Visceral or Functional Anatomy, Neuroanatomy, Cell Biology, Microscopy in Research.

COURSE CO-ORDINATOR and LECTURERS

Course Coordinator:

Dr Mark Hill

Rm 221 Wallace Wurth Building West ph: 9385 2477

Students wishing to see the course coordinator should make an appointment *via* email as my office is not readily accessible. I will organize to meet you in a convenient location elsewhere in the building.

Lecturers in this course:

Dr Mark Hill

m.hill@unsw.edu.au

Dr Robert Gilchrist

r.gilchrist@unsw.edu.au

Dr Annemiek Beverdam

A.Beverdam@unsw.edu.au

Dr Ken Ashwell

k.ashwell@unsw.edu.au

Please read this manual/outline in conjunction with the following pages on the [School of Medical Sciences website](#):

- [Advice for Students](#)
- [Learning Resources](#)

(or see "STUDENTS" tab at medicallsciences.med.unsw.edu.au)

COURSE STRUCTURE and TEACHING STRATEGIES

Learning activities occur on the following days and times:

- Lectures: Monday 1 - 2 pm and Tuesday 3 - 4 pm
- Practical: Friday 1 - 3 pm

Students are expected to attend all scheduled activities for their full duration (2 hours of lectures per week and 2 hours of practical and 2 hours of project learning per week).

Students are reminded that UNSW recommends that a 6 units-of-credit course should involve about 150 hours of study and learning activities. The formal learning activities are approximately 60 hours throughout the semester and students are expected (and strongly recommended) to do at least the same number of hours of additional study.

Lectures will provide you with the concepts and theory essential for an understanding of embryology. To assist in the development of research and analytical skills practical classes and collaborative learning sessions will be held. These classes allow students to engage in a more interactive form of learning than is possible in the lectures. The skills you will learn in practical classes are relevant to your development as professional scientists.

APPROACH TO LEARNING AND TEACHING

The learning and teaching philosophy underpinning this course is centred on student learning and aims to create an environment which interests and challenges students. The teaching is designed to be engaging and relevant in order to prepare students for future careers.

Although the primary source of information for this course is the lecture material, effective learning can be enhanced through self-directed use of other resources such as textbooks and Web based sources. Your practical classes will be directly related to the lectures and it is essential to prepare for practical classes before attendance. It is up to you to ensure you perform well in each part of the course; preparing for classes; completing assignments; studying for exams and seeking assistance to clarify your understanding.

TEXTBOOKS AND OTHER RESOURCES

These resources will take the form of textbooks, journal articles or web-based resources.

Links to resources will be provided in the online Wiki and Moodle. There are two embryology textbooks, to access these online textbooks you will be required to login through the UNSW Library using your ZID. See also lecture and practical outlines.

- Moore, K.L., Persaud, T.V.N. & Torchia, M.G. (2015). [*The developing human: clinically oriented embryology*](#) (10th ed.). Philadelphia: Saunders.
- Schoenwolf, G.C., Bleyl, S.B., Brauer, P.R., Francis-West, P.H. & Philippa H. (2015). Larsen's [*human embryology*](#) (5th ed.). New York; Edinburgh: Churchill Livingstone.

UNSW Embryology is the main support resource used for this course with online lectures, support movies, student pages, and where the group project will be posted. Some short (1 minute) introductory/preparatory videos available that should be viewed before the lecture.

More details are available from the links below.

- [UNSW Embryology online textbooks](#)
- [UNSW Embryology](#)
- [Embryology Movies](#) – [UNSW theBox](#) – [One Minute Embryo](#)
- [Science group projects](#)
- [Working online](#)
- [Course Moodle page](#)

STUDENT LEARNING OUTCOMES

ANAT2341 will develop those attributes that the Faculty of Science has identified as important for a Science Graduate to attain. These include; skills, qualities, understanding and attitudes that promote lifelong learning that students should acquire during their university experience.

Graduate Attributes

- A. Research, inquiry and analytical thinking abilities
- B. The capability and motivation for intellectual development
- C. Ethical, social and professional understanding
- D. Effective communication
- E. Teamwork, collaborative and management skills
- F. Information Literacy – the skills to locate, evaluate and use relevant information.

ASSESSMENT PROCEDURES

- Individual assessment (ongoing through semester) **20%**
- Group project assessment (through semester) **20%**
- End of session examination (2 hours duration) **60%**

A penalty will apply for late submissions of assessment tasks (10% per day).

COURSE EVALUATION AND DEVELOPMENT

Each year feedback is sought from students about the course and continual improvements are made based on this feedback. The Course and Teaching Evaluation and Improvement (CATEI) Process of UNSW is the way in which student feedback is evaluated and significant changes to the course will be communicated to subsequent cohorts of students.

Based on the feedback received; Course content, and structure assessment has been continuously updated and revised. Specialised researchers have been introduced to provide current topics in this field.

LECTURE and PRACTICAL OUTLINES

The course timetable is available online and shows references to the relevant textbook chapters for each lecture. Both textbooks are available online through the UNSW Library or as hardcopies.

Practical classes are linked from the online timetable and relate to either the weekly lecture content, specialised research topics or student assessment work.

- [ANAT2341 Online Timetable](#)
- [Lecture Textbook links](#)
- Moore, K.L., Persaud, T.V.N. & Torchia, M.G. (2015). *The developing human: clinically oriented embryology* (10th ed.). Philadelphia: Saunders.
- Schoenwolf, G.C., Bleyl, S.B., Brauer, P.R., Francis-West, P.H. & Philippa H. (2015). *Larsen's human embryology* (5th ed.). New York; Edinburgh: Churchill Livingstone.

GENERAL INFORMATION

The Department of Anatomy is part of the School of Medical Sciences and is within the Faculty of Medicine. It is located in the Wallace Wurth building. General inquiries can be made at the BABS.SOMS.BEES (B.S.B.) Student Office, located on the Ground Floor Room G27, of the Biosciences Building. Office hours are 9.00 am - 5:00pm.

Professor Edna Hardeman is Head of Department and appointments to meet with her may be made via email (e.hardeman@unsw.edu.au).

Departmental Vacation Scholarships: The School of Medical Sciences supports several summer vacation scholarships each year to enable good students to undertake short research projects within the school. For further details contact the Administrative Officer.

There is an honours program conducted by the School. The Honours program is coordinated by Dr Thomas Fath (t.fath@unsw.edu.au), Ph: 9385 8495. Any students considering an Honours year should discuss the requirements with the coordinator.

Honours Administrator: Vicky Sawatt (v.sawatt@unsw.edu.au) Ph:9385 8195.

Postgraduate degrees

The Department of Anatomy offers students the opportunity to enter into the following graduate programs:

Research Masters: In Anatomy. For more information contact the post-graduate co-ordinator Dr Pascal Carrive (p.carrive@unsw.edu.au)

Doctorate (Ph.D): In Anatomy. For more information contact the post-graduate co-ordinator Dr Pascal Carrive (p.carrive@unsw.edu.au)

Enrolment and administrative help

Ms Justine Maguire-Scarvelli is available to help with problems with enrolment and scheduling, and should be the first point of contact for administrative problems. She can be found in the BSB Student Office, Room G27, Ground floor of the BioSciences Building. ph:9385 2464. Email: SOMSenquiries@unsw.edu.au

Practical Classes

The practical class is an opportunity for students to develop graduate attribute C by behaving in an ethical, socially responsible and professional manner within the practical class.

Students must take due care with biological and hazardous material and make sure all equipment is left clean and functional. In the interests of safety, special attention should be paid to any precautionary measures recommended in the notes. If any accidents or incidents occur they should be reported immediately to the demonstrator in charge of the class who will record the incident and recommend what further action is required.

For more details see [Advice for Students-Practical Classes](#)

HEALTH & SAFETY GUIDELINES

Generic safety rules for UNSW can be found at: SAFETY.UNSW.EDU.AU and for the School of Medical Sciences at MEDICALSCIENCES.MED.UNSW.EDU.AU/STAFF/STAFF/HEALTH-SAFETY
Additional safety information will be provided for classes at other locations.

ScienceTeaching Laboratory

Student Risk Assessment



UNSW
THE UNIVERSITY OF NEW SOUTH WALES

ANAT2341

Wallace Wurth East G17
Semester 2, 2016.

Workstation set-up

Ergonomics

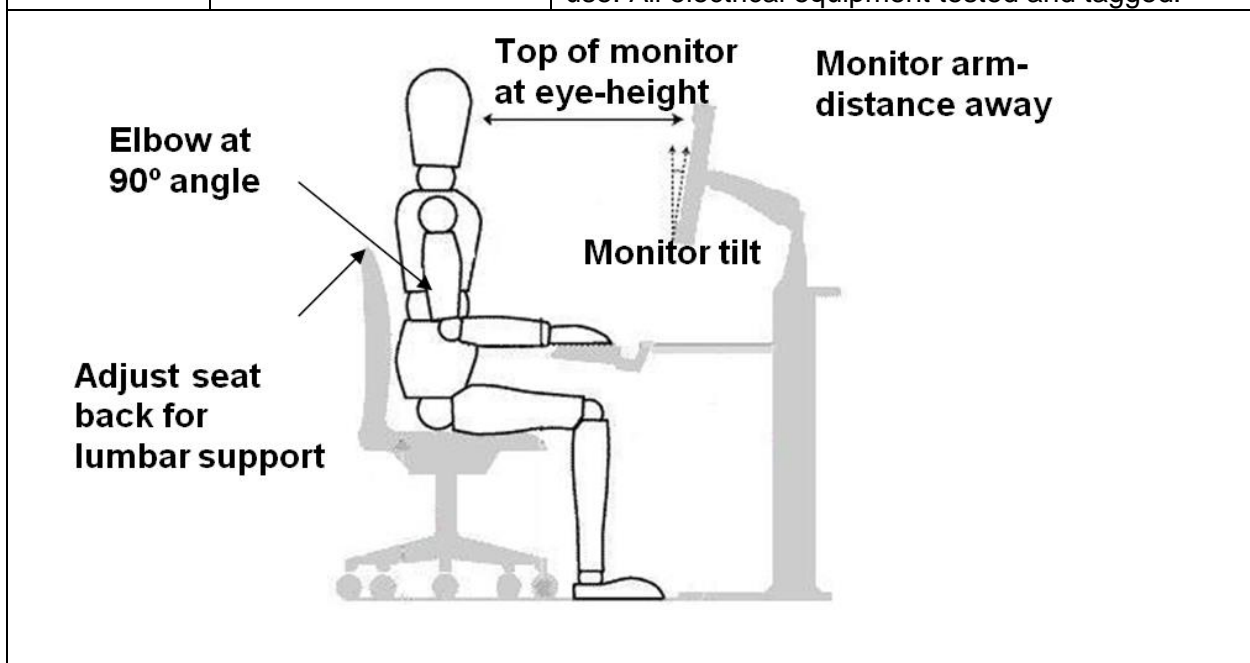
Musculoskeletal pain.

Correct workstation set-up.

Electrical

Shock/fire

Check electrical equipment in good condition before use. All electrical equipment tested and tagged.



Personal Protective Equipment

Not necessary in these practicals. (specimens are fully sealed)

Emergency Procedures

In the event of an alarm, follow the instructions of the demonstrator. The initial sound is advising you to prepare for evacuation and during this time start packing up your things. The second sound gives instruction to leave. The Wallace Wurth assembly point is the lawn in front of the Chancellery. In the event of an injury, inform the demonstrator. First aiders contact details and Kit locations are on display by the lifts.

Clean up and waste disposal

No apparatus or chemicals used in these practicals.

Declaration

I have read and understand the safety requirements for these practical classes and I will observe these requirements.

Student Number:..... Signature:..... Date:.....