GENM0201
Human Origins, Human Problems

Course Authority: Prof. Ken Ashwell
Dept of Anatomy, School of Medical Sciences

Summer Session, 2011/2012

Monday 5th December 2011 to Friday January 6th 2012
Lectures will be held in **Biomed Theatre D**. Practical Classes will be held in 101 (Dissecting Room) in the **Wallace Wurth Building**. The venues for tutorials will be 109, 110, and 106/108 all in the **Wallace Wurth Building**.

**IMPORTANT NOTES:**

- **Students must wear enclosed shoes (i.e. no thongs or sandals)** in the Dissecting Room.
- **No eating, drinking or smoking** in the Dissecting Room.
- **Mobile phones must be switched off during lectures and classes.**

**Official Communication By Email**

All students in GENM0201 are advised that email is the official means by which the School of Medical Sciences at UNSW will communicate with you. All email messages will be sent to your official UNSW email address and, if you do not wish to use the University email system, you MUST arrange for your official mail to be forwarded to your chosen address. The University recommends that you check your email at least every other day. Facilities for checking email are available in the School of Medical Sciences and in the University Library.

**Plagiarism**

The School of Medical Sciences will not tolerate plagiarism in submitted written work. The University regards this as academic misconduct (please see the following website where this policy is displayed: [http://www.student.unsw.edu.au/academiclife/assessment/academic_misconduct.shtml](http://www.student.unsw.edu.au/academiclife/assessment/academic_misconduct.shtml)) and imposes severe penalties. Evidence of plagiarism in submitted assignments, etc. will be thoroughly investigated and may be penalized by the award of a score of zero for the assessable work. Flagrant plagiarism will be directly referred to the Division of the Registrar for disciplinary action under UNSW rules.

The attention of students is drawn to the following extract from the above website:

"The basic principles are that you should not attempt to pass off the work of another person as your own, and it should be possible for a reader to check the information and ideas that you have used by going to the original source material. Acknowledgment should be sufficiently accurate to enable the source to be located speedily."

**The following are some examples of breaches of these principles:**

- a) Quotation without the use of quotation marks. It is a serious breach of these rules to quote another's work without using quotation marks, even if one then refers to the quoted source. The fact that it is quoted must be acknowledged in your work.

- b) Significant paraphrasing, e.g., several sentences, or one very important sentence, which in wording are very similar to the source. This applies even if the source is mentioned, unless there is also due acknowledgment of the fact that the source has been paraphrased.

- c) Unacknowledged use of information or ideas, unless such information or ideas are commonplace.

- d) Citing sources (e.g., texts) which you have not read, without acknowledging the 'secondary' source from which knowledge of them has been obtained.

Appropriate citation of sources therefore includes surrounding any directly quoted text with quotation marks, with block indentation for larger segments of directly-quoted text. The preferred format for citation of references is an author-date format with an alphabetically arranged bibliography at the end of the assignment. Note that merely citing textbooks or website URLs is unlikely to yield a bibliography of satisfactory standard. The internet should be avoided as a primary source of information. Inclusion of appropriate journal articles, both primary research publications and reviews, is usually expected.
OH & S – Safety Guidelines
Generic safety rules for the School of Medical Sciences can be found at the URL below.

Applications for Consideration
Students who miss an assessment through illness or misadventure must submit an application for consideration within three working days to New South Q. Full details for the application (e.g., Medical Certificate, etc.) are available at http://www.student.unsw.edu.au/atoz/atoz-Special.shtml

Problems With The Course
If you have any problems or grievances with the course you should, in the first instance, consult the Course Authority. If you are unable to resolve the difficulty, you can consult the Department of Anatomy’s nominated Grievance Resolution Officer, who is currently Dr Priti Pandey, p.pandey@unsw.edu.au.

Course aims
The aims of this course are to:
1. Provide the student with an understanding of the major biological (physical, ecological and evolutionary) attributes of non-human primates and humans.
2. To assist the student to develop a deeper appreciation of the place of humans in the natural world and their relationship to other primates.
3. To provide the student with some knowledge and skills from the field of biological anthropology.
4. Help the student to appreciate the importance and relevance of the study of human origins to problems faced by people in the modern world.

Student learning outcomes
Students should complete the course knowing (among other things):
1. Some basics of primate and human anatomy, especially of the skeleton, muscles and brain.
2. Anatomical features of the order primates and of major groups of primates.
3. The elements of evolutionary biology and the evidence for human evolution.
4. The broad patterns of evolution for the primates and humans, including major evolutionary trends.
5. The basis for human physical variation across the world.
6. Modern human health problems related to compromises during our evolution.

The University of NSW has developed a list of attributes that its graduates should possess upon graduation (the ‘graduate attributes’). The curriculum and assessment of this course have been designed to help students to develop these capabilities/attributes. Students satisfactorily completing the course will have gained knowledge and skills that contribute directly to them acquiring these attributes during their study at UNSW. One way this has occurred is through curriculum mapping of this course (see below: Assessment).

For a science based general education course, the UNSW graduate attributes are as follows:
1. Research, inquiry and analytical thinking abilities. Technical competence and discipline specific knowledge. Ability to construct new concepts or create new understanding through the process of enquiry, critical analysis, problem solving, research and inquiry.
2. Capability and motivation for intellectual development. Capacity for creativity, critical evaluation and entrepreneurship. Ability to take responsibility for and demonstrate commitment to their own learning, motivated by curiosity and an appreciation of the value of learning.
3. Ethical, Social and Professional Understanding. Ability to critically reflect upon broad ethical principles and codes of conduct in order to behave consistently with a personal respect and commitment to ethical practice and social responsibility. Understanding of responsibility to contribute to the community. Respect and value social, multicultural, cultural and personal diversity.
4. Communication. Effective and appropriate communication in both professional (intra and inter disciplinary) and social (local and international) contexts.
5. Teamwork, collaborative and management skills. Ability to recognize opportunities and contribute positively to collaborative scientific research, and to perceive the potential value of ideas towards practical applications. Demonstrate a capacity for self-management, teamwork, leadership and decision
making based on open-mindedness, objectivity and reasoned analysis in order to achieve common goals and further the learning of themselves and others.

6. **Information literacy.** Ability to make appropriate and effective use of information and information technology relevant to their discipline.

This course and the required assessments will assist you to develop skills in all of these areas.

**Assessment: 2 quizzes, one group assignment and one individual assignment**

- Quizzes 1 and 2 are each worth 25% of the final mark and consist of 30 multiple-choice questions (1 in 5 choice). No marks are deducted for incorrect choices so you are advised to attempt all questions. All questions are drawn from material taught in lectures and practical classes. Knowledge of precise factual information (e.g. important dates) may be assessed in these quizzes. Practice questions are available in the tutorial classes.

- The group poster/oral presentation is worth 20% of the final mark and will be assessed by your tutor. Note that you will be assessed both on the poster itself and the oral presentation made by your group. Each of these components will have equal weighting in determining the final mark for the paired tasks. The mark given by your tutor will apply to all students in the group.

- The individual assignment is worth 30% of the final mark and will be assessed by the course authority. The assignment must include appropriately cited sources including original research articles and professional reviews. Excessive use of websites will not result in a good mark.

**Lecture and Practical/Tutorial Schedule**

**WEEK 1**

**Day 1  Monday 5th December  5 hours**

10-11 Lecture 1  Introduction to Primate Biology (KA)
11-12 Lecture 2  Elements of Genetics (CL)
12-1 Lecture 3  Diversity and Evolution (CL)
2-3 Lecture 4  Ethics of Human Remains and Forensic Anthropology (EL)
3-4 Film  Ape and Human Behaviour

**Day 2  Tuesday 6th December  5 hours**

10-11 Lecture 5  Principles of Paleoanthropological Techniques (KA)
11-1 Practical 1  Primate Musculoskeletal Anatomy
2-3 Lecture 6  The Origin and Early Evolution of Primates (KA)
3-4 Tutorial 1  Group Orientation and Choosing of Poster Topics

**Day 3  Wednesday 7th December  5 hours**

10-11 Lecture 7  Early Hominins (KA)
11-12 Lecture 8  *Homo ergaster* and *Homo erectus* (KA)
12-1 Films  Portrayals of Human Ancestors
2-3 Lecture 9  Archaic *Homo sapiens* (KA)
3-4 Tutorial 2  Review of Lectures and Film Portrayals of Human Ancestors
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<th>Day</th>
<th>Date</th>
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<tr>
<td>4</td>
<td>Thursday 8th Dec</td>
<td>5</td>
<td>Lecture 10: Modern <em>Homo sapiens</em> (KA)</td>
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<td>Practical 2: Cranial Anatomy of Australopithecines and Early Humans</td>
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<td>Lecture 11: Humans in Australia (EL)</td>
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<td>Tutorial 3: Review of Lectures; Modern Humans, their Behaviour and Future</td>
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<td>Friday 9th Dec</td>
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<td>WEEK 2</td>
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<td>Monday 12th Dec</td>
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<td>Quiz 1: Covers all material from days 1 to 4 inclusive (i.e. up to Lect 11)</td>
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<td>Lecture 12: Evolution of Human Behaviour (KA)</td>
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<td>Lecture 13: Origin and Mechanics of Bipedalism (CL)</td>
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<td>Practical 3: The Human Lower Limb and Bipedal Locomotion</td>
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<td>Lecture 14: Human Sexuality and the Problems of Human Childbirth (CL)</td>
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<td>Tuesday 13th Dec</td>
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<td>Practical 4: Human Childbirth</td>
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<td>Lecture 15: The Comparative Anatomy and Function of the Hand (CL)</td>
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<td>Practical 5: The Human Hand and Tool Use</td>
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<td>Wednesday 14th Dec</td>
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<td>Lecture 16: The Hominin Brain (KA)</td>
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<td>Practical 6: The Human Brain</td>
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<td>Lecture 17: Language, Speech and the Human Face (lecture/film)(KA)</td>
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<td>Practical 7: The Human Face and the Functional Anatomy of Language</td>
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<td>Thursday 15th Dec</td>
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<td>WEEK 3</td>
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<td>Wednesday 4th Jan</td>
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<td>Lecture 18: Variation and Adaptation of Modern Humans (CL)</td>
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<td>Lecture 19: Changing Patterns of Disease During Human History (KA)</td>
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<td>Food and Diet (CL)</td>
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<td>Lecture 20: Syphilis, Tuberculosis and HIV/AIDS (KA)</td>
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<td>Lecture 21: Malaria and Human Variation (CL)</td>
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Day 12  Thursday 5th January  No classes

Day 13  Friday 6th January  5 hours
10 to 11  Quiz 2  Covers days 5 to 11 inclusive
11-1  Tutorial 5  Presentation of Group Posters
2-4  Tutorial 6  Presentation of Group Posters (continued)

KA – Prof Ken Ashwell
CL – Dr Carol Lazer
EL – Dr Estelle Lazer