

School for New Learning De Paul University

SW 227 HUMAN GROWTH AND AGING

FALL 2009 HYBRID CLASS

Faculty: Anne B. Donnersberger, Ed.D.
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Office Hours: Before or after class or by appointment

Hours: **Thursday evenings**

Location **NAPERVILLE** 6:30 P.M. - 9:30 P.M. **Start** Sept.10

HYBRID Classes at Naperville **Campus** 9/10, 9/17, 10/8, 10/15 and 11/12 (Final class) Course does **not** meet every week on campus.

Location **Saturday mornings**

OAK FOREST 9:00AM – Noon **Start** Sept.12

HYBRID Classes at Oak Forest **Campus** 9/12, 9/19, 10/10 10/17 and 11/14 (Final class) Course does **not** meet every week on campus.

Text Required: **NONE** **Museum Studies Required**

Credit Quarter Hours 4

As a hybrid course the student will be expected to gain knowledge via a number of methods beyond the campus classroom. Some of those methods will be museum studies, research, internet projects, labs and guideline completions.

Competencies Offered: S, S-2-A/S, S-2-C, S-3-A, S4

- S-2-A / S** Can describe, differentiate and explain form, function, and variation within biological systems.
- S-2-C** Can describe, categorize, and explain development for change within physical or biological systems.
- S-3-A** Can understand different perspective on relationships between technology and society and describe the scientific principles underlying technological innovations.
Can learn collaboratively and examine the skills, knowledge and values that contribute to such learning.
- S4** Can describe and explain connections among diverse aspects of nature

Course Description:

Aging begins at conception and terminates at death. As we progress through life and its four major states: 1. conception and birth, 2. puberty and adolescence, 3. adulthood and 4. senescence, we realize and experience the fact that the human body is biologically changing. It is growing, changing and aging. By 2000 AD it was projected that over 18% of the population would be 65 years old or older and by 2030 AD (32%) of the population will be beyond 65 years of age. Every week 200 individuals become 100 years old in the U.S.

This course provides a study of the basic structure and functions of the human body, its anatomy and physiology. With this foundation age-related characteristics and some dysfunctions associated with the aging process are studied. Students will apply learned theoretical principles in laboratory experiments to examine and assess body functions and age related changes.

Course Instructor:

Anne B. Donnersberger, Ed.D. has her doctorate in higher education with emphasis on medical/science education. She held a full-time position as Professor in the Education and Biological Science Departments at Moraine Valley College where she was Chair of Biological Sciences, Coordinator of Education and an Anatomy and Physiology Professor. She has been at

SNL for over 15 years. . Anne has authored over 10 textbook-manuals in Anatomy and Physiology, which are used all over the U.S. and Canada. Anne has a keen interest in the environment, topics in human anatomy, health and physiology. She travels to gather current knowledge on these topics in addition to her interest in medicine in medicine, science, and teaching.

Expected Outcomes:

Upon successful completion of this course, a student will be able to:

1. Identify and describe general theories of aging.
2. Define relevant terms: homeostasis, aging, growth, senescence, gerontology, longevity and demography.
3. Understand basic cytological and histological principles of the human organism.
4. Describe the basic anatomy and physiology of selected organ systems as those systems relate to the aging process.
5. Identify the age-related changes and dysfunctions of selected organ systems in each of the four, major life stages.
6. Explain the anatomical and physiological causes of the age-related changes and dysfunctions of selected organ systems.
7. Apply the principles of growth and aging to the biological changes characteristic of each of the four major life stages.

Learning Strategies:

Students will be actively involved in the learning process. Class will include:

1. Lectures
2. Demonstrations/Simulations
3. Laboratory examination of preserved organ and organism specimens
4. Anatomical and physiological assessments of one's own body
5. Videos and selected topics
6. Student presentations and group projects

There is NO REQUIRED textbook. Printed and electronic resources are required for the course. The Instructor will distribute a listing of suggested resources. Guidelines, specific directives for learning of each Unit, will be distributed by the instructor. Studies at the Chicago Museum of Science and Industry are required. Instructor provided study packets, Guidelines, will be provided. Parking at the Museum is free outside on the EAST side of the Museum. For inside parking the charge is approximately \$16.00. There is a fee for entrance to the Museum and various special exhibits. Attendance with other class members is suggested as a collaborative learning experience. See Museum information at www.msichicago.org/ to verify costs, hours and location.

Attendance and participation are essential. In the event of an absence it is imperative that you notify the Instructor ahead of time. It is also wise to notify a previously identified class member to serve as a personal resource for missed learning activities. It is the student's responsibility to know all aspects of the SYLLABUS. Note, an absence for whatever reason is a failed opportunity to participate in this hybrid course and, therefore, will result in a loss of 4% of the total grade.

Competence Criteria:

- S-2-C**
- A. Articulations and exemplification of at least one biologic concept, theory or model of conception, growth and aging.
 - B. Application of the one identified biologic growth and aging model as it relates to the four major life stages.
- S-2-A**
- A. Articulation of the characteristics of normal anatomy and physiology of each of the four life stages with emphasis on selected systems.
 - B. Exemplification of the major physiological processes of selected body systems.
 - C. Articulation of deviations from normal anatomy and physiology.
 - D. Description of approaches utilized to maintain or promote health based upon an understanding of normal body function and structure.

- S-3-A**
- A. Articulation of a definition of scientific technology.
 - B. Articulation of criteria by which technological advancements and biomedical science can positively impact individual or group health standards.
 - C. Description of applications of biomedical technological advancements upon the health care delivery system.

- S-4**
- A. Describes one or more natural systems
 - B. Explains how the parts of the system are interconnected
 - C. Demonstrates how connections are found elsewhere in nature

Evidence the Student will submit:

For All Competencies: 1) Completion and understanding of materials covered in guidelines and 2) successful evaluation of the concepts covered as measured by two written unit tests, 3) museum study and completion of learning packets.

S-2-A: Visitation to 2 clinical sites in order to observe and evaluate a health care issue. A one page written summary including the following must be submitted for each: site visitation, date, presenter, topic, length of visit, client/audience, nature of visit, and your evaluation of the presentation.

S-2-C: Design a hypothetical model typifying one of the four life-stages in which at least one organ system is identified, described and related by either its normalcy, pathology or dysfunction to that organ system in the life stage. Diagrams, illustrations, etc. must be included. Printed matter must be included in no more than two pages; illustration in one.

S-3-A: Identification of, description and explanation of use or application of at least one modern clinical or technological method, instrument or procedure used in the assessment, evaluation or treatment of an age-related characteristic, dysfunction or pathology. Relationship to normal anatomy and/or physiology must be included. Printed matter must not exceed two pages; illustrations, diagrams, if included, should be minimized to no more than two pages.

S-4: Summarize in no more than 2 pages the connectiveness between distinct aspects of the aging process and the anatomy and/or physiology, behavior or environmental conditions related to the aging process.

Please see the DePaul Student Handbook Statement on Plagiarism. It is strictly interpreted and followed in this course.

Evidence submitted by the student will reflect the University's academic integrity policy as published in the Student Handbook.

Criteria for Assessment:

Evaluation is designed to assess learning for all concepts covered in the course as well as specifics relative to particular competencies.

1. Two written unit tests: 40%.
Tests assess learning of Units I and II, and Units III and IV. Each Test is 20% of the total 40%. Tests will be administered at the beginning of the class following the completion of the Units. Some units will include a laboratory component.
2. Class participation in discussions, projects, labs, guidelines and other learning activities: 20%. (4% per session) Missed classes will result in a loss of participation percentage.
3. Successful completion and submission of field study, i.e. Museum: 20% Learning packets for study will be provided.
4. S-2-A: Clinical site visits and reports: one required, 20% each.
5. S-2-C: Design life stage model: 20%.
6. S-3-A: Technological study: 20%.
7. S-4 Successful completion of a 2 page study of the connectiveness between the aging process and anatomy and/or physiology, behavior of the human body 20%

Assignments may be submitted via email using Microsoft Word or by submission of a hard copy, both in a timely manner. If a student wants his/her papers returned, a self-addressed, stamped envelope must be submitted at the last meeting. Competencies and some assignments are negotiable. All written materials must be submitted by 11/20/2009.

It should be noted that Assessment Criteria are based on the following guidelines.

- 1. Evidence of college level grammar and writing skills**
- 2. Timeliness of submitted work**
- 3. Grade letter designation as follows: A-work of high quality, reflective of a thorough comprehensive understanding of the topics covered; B-work of good quality which reflects a high degree of comprehension of the majority of the topics covered; C-**

work which minimally meets requirements set forth; D-work which does not meet minimal standards of course.

Class/ Course Schedule

Unit I ON CAMPUS 9/10 (N), 9/12 (OF)

- A. Introduction to Human Aging
- B. Course Requirement
- C. Terminology
- D. Major Life Stages
- E. Theories of Aging

ON CAMPUS 9/17 (N), 9/19 (OF)

- F. Cytological Foundations
- G. Histological Foundations
- H. Embryology

OFF CAMPUS 9/24 and 10/1 (N) and 9/26 and 10/3 (OF)

Guideline /Web studies Completion:

**Cytology, Histology, Embryology and Integumentary
Suggested websites will be provided by Instructor**

UNIT II ON CAMPUS 10/8 (N), 10/10 (OF)

- A. Human Integumentary System
 - A1. Anatomy and Age-Related Characteristics
 - A2. Physiology and Age-Related Characteristics
 - B. Skeletal System Introduction and Lab exercises
- QUIZ 1

Unit III ON CAMPUS 10/15 (N), 10/17 (OF)

- A. Skeletal Anatomy and lab exercises
- B. Age-related characteristics

Unit IV

- A. Introduction to Cardiovascular System
- B. Anatomy and Physiology of system

- C. Age-Related Characteristics
- E. Laboratory Exercises

Off CAMPUS 10/22, 10,29, 11/5 (N); and 10/24, 10/31, 11/7(OF)

Guideline/web studies Completion: Skeletal and cardiovascular Systems; Skeletal lab identifications, Museum studies: Embryology and Cardiology Exhibits

Unit V ON CAMPUS 11/12 (N), 11/14 (OF) Final

- A. Museum Studies
 - B. Museum study report
 - C. Assessment
 - D. Competency reports –oral and written
- QUIZ 2

Addenda

DePaul University Academic Integrity Policy:

The DePaul Student Handbook defines plagiarism as follows: “Plagiarism includes but is not limited to the following: (a) The direct copying of any source, such as written and verbal material, computer files, audio disks, video programs or musical scores, whether published or unpublished, in whole or in part, without proper acknowledgement that it is someone else’s. (b) Copying of any source in whole or in part with only minor changes in wording or syntax even with acknowledgement. (c) Submitting as one’s own work a report, examination paper, computer file, lab report or other assignment which has been prepared by someone else. This includes research papers purchased from any other person or agency. (d) The paraphrasing of another’s work or ideas without proper acknowledgment.” Plagiarism will result in a failure of the assignment or possibly of the course. If you are unsure of how to cite a source, ask!

DePaul University is a learning community that fosters the pursuit of knowledge and the transmission of ideas within a context that emphasizes a sense of responsibility for oneself, for others and for society at large. Violations of academic integrity, in any of their forms, are, therefore, detrimental to the values of DePaul, to the students’ own development as responsible members of society, and to the pursuit of knowledge and the transmission of ideas. Violations include but are not limited to the following categories: cheating; plagiarism; fabrication; falsification or sabotage of research data; destruction or misuse of the university’s academic resources; alteration or falsification of academic records; and academic misconduct. Conduct that

is punishable under the Academic Integrity Policy could result in additional disciplinary actions by other university officials and possible civil or criminal prosecution. Please refer to your Student Handbook or visit <http://studentaffairs.depaul.edu/homehandbook.html> for further details.

DePaul University Incomplete Policy

Undergraduate and graduate students have two quarters to complete an incomplete. At the end of the second quarter (excluding summer) following the term in which the incomplete grade was assigned, remaining incompletes will automatically convert to "F" grades. In the case of the Law School incompletes must be completed by the end of the semester following the one in which the incomplete was assigned. Ordinarily no incomplete grade may be completed after the grace period has expired. Instructors may not change incomplete grades after the end of the grace period without the permission of a college-based Exceptions Committee. This policy applies to undergraduate, graduate and professional programs. NOTE: In the case of a student who has applied for graduation and who has been approved for an Incomplete in his or her final term, the incomplete must be resolved within the four week grace period before final degree certification.

n.b. The SNL student who wishes to receive the grade of IN must formally request in writing that the instructor issue this grade. This request must be made before the end of the quarter in which the student is enrolled in a course.

Protection of Human Research Participants

[For courses with a student research component only.] This course may involve research activities intended solely for classroom learning outcomes. Collecting data from human beings for such activities do not require institutional review if there is no intent to generalize, publish, or otherwise disseminate the findings. However, students must still abide by federally-mandated guidelines for the protection of human beings who may be the sources of such data. These include, but are not limited to, keeping persons' identifiable characteristics confidential and taking care to minimize or entirely remove the possibility of mental, social, financial, or physical harm. If findings from your research activities may be disseminated beyond classroom discussion, your activities carry risk of harm to the participants, or the identities of the participants are ascertainable, students must obtain approval from the SNL Local Review Board and DePaul Institutional Review Board. Please consult with the course instructor and visit the website of the Office of Research Protections at DePaul University (<http://research.depaul.edu>) for additional information and guidance.

For Students Who Need Accommodations Based on the Impact of a Disability

Students who feel they may need an accommodation based on the impact of a disability should contact the instructor privately to discuss their specific needs. All discussions will remain confidential.

To ensure that you receive the most appropriate accommodation based on your needs, contact the instructor as early as possible in the quarter, preferably within the first week of class, and make sure you have contacted:

- PLS Program (for LD, AD/HD) at 773-325-4239 in the Schmidt Academic Center, room 220 or;
- The Office for Students with Disabilities (for all other disabilities) at 773-325-7290, DePaul University Student Center, room 307.

Chronic Illness Initiative

The Chronic Illness Initiative (CII) provides access to higher education for students disabled by chronic illnesses that unpredictably increase and decrease in severity such as chronic fatigue syndrome, rheumatoid arthritis, lupus or illnesses requiring frequent hospitalizations. At SNL, staff and faculty are compassionate and committed to helping CII students achieve their educational goals. Contact CII at CII@depaul.edu.

Writing Help

For help with organizing your ideas, grammar, citing sources, avoiding plagiarism, sample SNL assignments and much more, see the [Writing Guide for SNL Students](http://snl.depaul.edu/writing/index.html) at <http://snl.depaul.edu/writing/index.html>. For on-campus and online tutoring, see the [DePaul University Writing Centers](http://condor.depaul.edu/~writing/) at <http://condor.depaul.edu/~writing/>.