

# University of Detroit Mercy School of Dentistry

Department of Biomedical Sciences

Course Syllabus

## Gross Anatomy DBS 811

### Course Information

Web Address: <http://knowledge.udmercy.edu>

### **Course Director:**

William C. Forbes, D.D.S. Office: 238 Manning Hall Office Hours 10-12:00 noon M, T, W or by appointment Phone: 313-494-6635 Email: <a href="mailto:forbeswc@udmercy.edu">forbeswc@udmercy.edu</a>
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### **Fall Term, 2007**

DS1 Students (Class of 2011)

St. Clair Room

Anatomy Laboratory, Health Sciences Building

Monday afternoons:

Lecture 1:00 - 2:30 P.M.

Anatomy Laboratory, 2:30 - 5:00 P.M.

**Credit Hours:** 2

**Prerequisites:** None

### Lecturers/Support Faculty

#### **Lecturers:**

William C. Forbes, D.D.S.

#### **Laboratory Instructors:**

Ronald Morris, D.D.S., M.S.

Paul Calligaro, D.D.S., M.S.

Maria Cserhalmi, D.D.S.

Susan Cabadas, D.D.S.

### Academic Policies:

All policies in the School of Dentistry Academic Policies Handbook including but not limited to academic integrity, mandatory attendance, professional decorum & dress code, identification (ID) badges, preclinical and classroom decorum, use of cell phone and electronic devices, examination policies and exam/quiz absences apply.

### **Accommodations:**

If you would like to request a classroom, testing, preclinical, clinical, or other accommodation because of a legally protected disability, or if you might require any special assistance in the event of an emergency or evacuation, please contact the University of Detroit Mercy's Office of University Academic Services (UAC) at 313-578-0310 or email your request for information to [gallegem@udmercy.edu](mailto:gallegem@udmercy.edu)

### **Student Evaluation of Instruction**

Student feedback is valued by the faculty and the administration. All students are required to complete the School of Dentistry's on-line course evaluation by a specified date. Failure to comply by posted deadline dates will result in the receipt of an F (Failing) grade of record for the Evaluation Responsibility Course. Only constructive, professional recommendations will be reported and considered.

### **Course Description**

#### **Purpose of the course:**

The purpose of the course is to provide the foundation knowledge in the anatomy of the human body that will form the foundations of the dental curriculum, and of the practice of dentistry.

#### **Course Goals:**

This course will introduce the student to anatomical structures of the human body, and will provide hands-on experience with manipulation of human tissue. The course will introduce and study:

- Anatomical nomenclature, including body planes
- Normal movements of body parts.
- Anatomical relationships, as well as anatomical variation, and how they apply to structures of the human body.
- Clinical applications of the study of human anatomy by dental professionals.
- Anatomical considerations for patient examination and dental radiology of the human body.
- Locating and identifying the regions and associated surface landmarks of the body on a diagram and on a patient, and integrating the knowledge of those landmarks into the physical examination and clinical practice.
- Locating and identifying the deep structures of the human body, particularly those pertaining to the practice of dentistry.

### **Course Objectives:**

At the conclusion of the course, the dental student will be able to:

- Locate and identify the bones of the body and their landmarks on a diagram, a skull and a patient.
- Locate and identify position of the many of the muscles of the body on a diagram, a skull, and a patient. State the innervation, and in some cases the blood supply, origin and insertion, of those muscles.
- Discuss the various systems of the body, and their major components.
- Trace the routes of the blood vessels of the human body on a diagram, a skull and a patient. Integrate this knowledge into clinical practice, especially involving the spread of infections and those factors relevant to dentistry.
- Locate and identify the various glandular tissue and associated structures in the human body.
- Identify and trace the route of the spinal nerves, and some cranial nerves, on a diagram, a skull or a patient. Describe in detail the autonomic nervous system. Integrate this knowledge into clinical situations in dentistry as much as possible.
- Identify general patterns of lymph drainage in the body.
- Discuss fascia and the major fascial structures in the human body.
- Integrate the knowledge of the structures of the human body into the clinical practice of patient examination and treatment.

### **Instructional Methods:**

Instructional methods utilized in the course include lecture format with powerpoint presentations, videotapes, and plenty of give and take with students. Students will be encouraged to bring questions and their own previous experiences to bear on these discussions. The laboratory component will include dissections, along with the use of projections, plastic models and charts, and skeletons. Videotapes of required dissections, and laboratory written instructions will be available on Blackboard each week before the dissections are to be performed.

### **School of Dentistry Competencies**

**Competency-based Education:** Assumes that learning to become an entry-level professional is a progression through stages from novice to competent.

#### **Stages of Progression to Competence:**

**F or Foundation Knowledge:** Basic knowledge, skills, and attitudes needed to begin the journey to competence.

**N or Novice Level:** Ability to articulate or describe the appropriate skills, knowledge, and professional attitudes. Novices need structure, clarity of goals, single and clearly explained approaches.

**B or Beginner Level:** Combines the appropriate skills, knowledge, and professional attitudes, all of which are performed with guidance and correction.

**C or Competent Level:** Combines the appropriate supporting skills, knowledge, and professional attitudes, all of which are performed reliably without assistance.

	<b>Competencies of the Graduating Dental Student</b>	<b>Addressed</b>	<b>Evaluated</b>	<b>Method</b>
<b>1.</b>	The graduating student obtains, records, updates and organizes accurate and completed medical/dental histories including pertinent psychological and socioeconomic information.	NO	NO	NA NA NA
<b>2.</b>	The graduating student performs, records and organizes a physical assessment appropriate for dental care.	YES	F	Written Evaluation Practical Examination
<b>3.</b>	The graduating student determines differential, provisional or definitive diagnoses by correlating and interpreting examination and assessment findings.	YES	F	Written Evaluation Practical Examination
<b>4.</b>	The graduating student develops alternative treatment plans which are sequenced to address the chief complaint, eliminate oral disease, restore function, and maintain health, and prevent oral disease consistent with assessment and diagnoses.	NO	NO	NA NA NA
<b>5.</b>	The graduating student establishes with the patient a mutually acceptable treatment plan.	NO	NO	NA NA NA
<b>6.</b>	The graduating student monitors and provides for patient comfort associated with dental care.	NO	NO	NA NA NA
<b>7.</b>	The graduating student delivers and/or manages the planned treatment in sequence and in accordance with accepted standards of care.	NO	NO	NA NA NA
<b>8.</b>	The graduating student promotes health maintenance and disease prevention.	YES	F	Written Examination Practical Examination
<b>9.</b>	The graduating student applies the principles of infection control and environmental safety.	NO	NO	NA NA NA
<b>10.</b>	The graduating student makes professional decisions affecting the practice of dentistry based on values that	NO	NO	NA

	satisfy legal and ethical principles and service to society.			NA NA
<b>11.</b>	The graduating student performs routine self evaluation.	YES	NO	NA NA NA
<b>12.</b>	The graduating student applies business and practice management skills.	NO	NO	NA NA NA
<b>13.</b>	The graduating student demonstrates interpersonal skills to function successfully in a multicultural work environment.	YES	NO	NA NA NA
<b>14.</b>	The graduate critically evaluates the validity of new information, new products, and/or techniques and their relevance to the practice of dentistry.	NO	NO	NA NA NA

## **Course Policies**

Attendance is required for all lectures and laboratory sessions. If a student misses a class for any reason, this course will follow the format described in the Academic Policies Handbook, pages 40 and 75. Every lecture session will begin with a quiz. A student may take the quiz if he or she arrives at class before the quiz is over. Quizzes will be in two categories: Lecture Material, or Netter's Atlas Material. The quiz with the lowest grade in each category will be dropped.

Examinations will be given promptly at the time announced, and will close at the time announced, with extra time not allowed, even if the student arrives late to take the examination.

The course Blackboard site will contain videotapes of the dissections and written instructions and structures lists posted one week in advance of the dissection. Specific policies regarding conduct in the Anatomy Laboratory are listed below:

## **Conduct in Gross Anatomy Laboratory**

1. Dissection of the human body shall be performed with dignity and respect.
2. Students assigned to a cadaver will be responsible for the proper conduct of the dissection according to the dissection guide and faculty instruction.
3. All identifying information about the cadaver is confidential.
4. Students may not dissect or alter cadavers assigned to other students.
5. Human tissues, including prosections, bones and skeletons, may not be removed from the laboratory area.
6. Neither the cadaver nor any part thereof may be photographed or videotaped.
7. Neither the cadaver nor any parts thereof are to be positioned or displayed in an inappropriate, comical or obscene manner.
8. Visitors are allowed only with the prior permission of the Course Director.
9. No eating, drinking or smoking in the laboratory. No radios during regular laboratory hours.

## **Dissection is Mandatory**

Dissection is a privilege and is mandatory. Every student is required to dissect. Attendance may be taken. Anyone not attending laboratory and dissecting will be called to account and required to explain how they think not dissecting advances their dental education and prepares them to take responsibility for the health and lives of their future patients.

## **The Cadavers**

The age and cause of death of your donor is posted in the laboratory. Always be cognizant of the fact that your cadaver is the body of someone's loved one; treat it as you would wish your own body, or that of a family member, to be treated. Virtually any procedure is appropriate if your motivation is the learn in order to be able to help others.

The privilege of dissection is made possible by the generosity of donors and their families. It is their intent that you make full use of the opportunity to learn from their gift. Fulfill their expectations and honor their wishes by dissecting with purpose and respect.

## **THE LABORATORY INSTRUCTORS**

We are fortunate indeed in having an outstanding group of experts assisting us in the Anatomy Laboratory.

**Dr. Ronald Morris** received his undergraduate education at Wayne State University and his dental degree from the University of Detroit Mercy. He completed his residency in Oral and Maxillofacial Surgery at Henry Ford Hospital in Detroit. Dr. Morris is currently in private practice and has been actively involved with implantology for the past 18 years. He has instructed in the dental anatomy classes at UDM since his graduation from dental school.

**Dr. Susan Cabadas** graduated from Wayne State University and attended University of Detroit Mercy School of Dentistry, completing her D.D.S. in 1997. While at Wayne State, she pursued her lifelong interest in the Anatomy by taking several courses in the subject, as she completed her degree in Biology. Dr. Cabadas recently opened her own general dentistry practice in Allen Park, Michigan.

**Dr. Paul Calligaro** graduated from the University of Detroit Mercy School of Dentistry in 1969. He completed his Oral and Maxillofacial Surgery residency at the Allen Park V.A. Hospital in 1976, and practiced Oral Surgery in Wyandotte, Michigan from 1976 to 2001.

**Dr. Maria Cserhalmi** graduated from Marquette University and taught Spanish for ten years. She obtained an MS in Biology in 1985, and completed her D.D.S. at University of Detroit Mercy in 1990. She presently practices general dentistry part-time in Harper Woods, Michigan.

**Dr. William Forbes** practiced general dentistry in Dover-Foxcroft, Maine for 27 years prior to joining the faculty at UDM in 1998. Dr. Forbes is Course Director for all the Anatomy courses here at the dental school, including courses for dental students, dental hygiene students, and residents in Endodontics, Periodontics, and AEGD. He also is adjunct professor at Wayne State University School of Medicine. He is very active in conducting Continuing Education courses here at UDM and elsewhere. He recently signed a big book deal with Lippincott Williams and Wilkins; now his problem is getting Lippincott Williams and Wilkins to sign.

## **Textbook and Resource Materials**

**REQUIRED TEXTBOOKS:** These textbooks are for next semester's course in Head & Neck Anatomy, as well as this semester. These textbooks will be used extensively in the course. A student who does not have access to these books will place him/herself at a substantial disadvantage.

*Atlas of Human Anatomy*, Netters, Frank, M.D., CIBA-GEIGY Corp. Third Edition.

*Essential Clinical Anatomy*, Moore, Keith L., and Agur, Anne M. Lippincott Williams & Wilkins, Third Edition

**RECOMMENDED TEXTBOOK:** *Color Atlas of Anatomy, 5<sup>th</sup> Ed.* Rohen, Yokochi, and Lutjen-Drecoll, Lippincott, Williams & Wilkins

**USEFUL WEBSITES:** It is recommended that students consult the Blackboard website at <http://knowledge.udmercy.edu> during each week prior to our laboratory sessions, for videotapes of the upcoming dissections, and written directions for the lab.

Students may find it helpful to go to [www.studentconsult.com](http://www.studentconsult.com) for useful information linked to *Gray's Anatomy for Students*.

Interesting exercises suitable for review of almost any anatomical area are available on [www.wiley.com/college/apcentral/anatomydrill/](http://www.wiley.com/college/apcentral/anatomydrill/)

**OTHER RESOURCES:** Students should be aware that models of anatomical structures, skulls, disarticulated bones, and atlases are on reserve in the library, available for students' use during regular library hours.

## **Evaluation and Grading**

**GRADING SCALE:** There are 700 possible points in this course.

<u>If the student receives:</u>	<u>the grade will be:</u>
more than 650 points:	A
630-649 points	A-
610-629 points	B+
580-609 points	B
560-579 points	B-
539-559 points	C+
512-538 points	C
490-511 points	C-
420-489 points	D
less than 420 points	E

Students will be evaluated on the basis of the following:

Students will be evaluated on the basis of the following:	
One midterm lecture examination worth 100 points:	100
One midterm laboratory examination worth 100 points:	100
One final lecture examination worth 100 points:	100
One final laboratory examination worth 100 points:	100
5 Netter's quizzes worth 20 points each	100
5 Lecture quizzes worth 30 points each	150
Lab Participation Points	50

There will be six Netter's quizzes and six lecture quizzes given. The student's lowest quiz grade in each of those two categories will be dropped. If a quiz is missed, that will be considered the lowest quiz grade. Subsequent missed quizzes will be scored as a zero. Lab participation points may include grades on unannounced quizzes (10 points each, no dropped quiz in this category).

### **Course Evaluation Methods**

#### **Quizzes**

A quiz will be given at the start of every lecture session. A student may take the quiz if he or she arrives before the quiz is over.

#### **Midterm Examination**

The midterm examination will be multiple-choice format, and will cover lecture material from sessions 1-7.

#### **Practical Examinations**

Practical examinations will consist of 33 stations, with 80 seconds at each station. Laboratory Examination Unit I will cover dissections from laboratory sessions 1-7. Laboratory Examination Unit II will cover dissections from laboratory sessions 9-13.

#### **Final Examination**

Final examination will be cumulative over the entire semester, multiple-choice format.

**COURSE SCHEDULE**

**DBS 811: Gross Anatomy I  
LECTURES, LABORATORIES, QUIZZES AND EXAMINATIONS  
Fall 2007**

<b>DATE</b>	<b>TOPIC OF DISCUSSION</b>	<b>LABORATORY EXERCISE</b> <i>Grant's Dissector pages in Italics</i>	<b>NETTER QUIZ: 4th Ed.</b>	<b>NETTER QUIZ: 3rd Ed.</b>
<b>Session # 1: Monday, August 20</b>	<b>Introduction Osteology Lower Extremity</b>	No Dissection Skeleton Work, articulated and disarticulated See Laboratory Handout: Skeleton		
<b>Session # 2: August 27</b>	<b>Pectoral Region</b>  *** lecture quiz: Session 1	Dissect lower extremity Use lab session handout: lower extremity	17, 492 (left drawing only) 494, 495 (left drawing only)	15, 474 (left drawing only) 476, 477 (left drawing only)
<b>Session # 3: September 10</b>	<b>Thoracic cavity Heart Lymphatics</b>  *** lecture quiz: Session 2	Dissect thoracic wall Pectoral region anterior thoracic wall intercostal nerves & arteries <i>pages 1-11</i>	33 (bottom drawing only) 182, 184, 188, 189, 192, 418 (top)	29 (bottom drawing only) 175, 177, 182, 183, 187, 401 (top)
<b>Session # 4: September 17</b>	<b>Thoracic cavity (cont'd) Heart Lymphatics</b>	Dissect chest pleural cavities, lungs mediastina, heart <i>pages 11-34</i>	198, 214, 216, 220, 221, 224, 225, 229	194, 210, 212, 216, 217, 220, 221, 225
<b>Session # 5: September 24</b>	<b>Anterior Abdominal Wall</b>  *** lecture quiz: Sessions 3&4	Dissect chest (cont'd) pleural cavities, lungs mediastina, heart <i>pages 11-34</i>		
<b>Session # 6: October 1</b>	<b>Peritoneal cavity</b>	Dissect abdominal wall scrotum anterior abdominal wall abdomen <i>pages 45-51</i>	251, 269, 275 (top only), 284, 294, 300	243, 261, 267 (top only) 276, 285, 290
<b>Session # 7: October 8</b>	<b>Peritoneal cavity (cont'd)</b>  ***lecture quiz: sessions 5&6	Dissect peritoneal cavity portal system gallbladder <i>pages 45-51, 55-77</i>		
<b>Session # 8 October 15</b>	<b>MIDTERM EXAMINATION</b>	<b>LABORATORY EXAMINATION UNIT I</b>		
<b>Session # 9: October 22</b>	<b>The Back</b>	Dissect back muscles suboccipital triangle spinal cord		
<b>Session # 10: October 29</b>	<b>Spinal cord &amp; coverings Introduction to Nervous System</b>	Dissect back muscles suboccipital triangle spinal cord (cont'd)	169, 170, 174, 175, 178	162, 163, 167, 168, 171

<b>Session # 11: November 5</b>	<b>Axilla &amp; Arm</b>  ***lecture quiz: sessions <b>9&amp;10</b>	Dissect spinal cord  <i>pages 139-143</i>		
<b>Session # 12: November 12</b>	<b>Axilla &amp; Arm (cont'd)</b>	Dissect upper limb & shoulder brachial plexus axilla, cubital fossa <i>pages 185-202</i>	158, 429, 430, 432	151, 412, 413, 415
<b>Session # 13: November 19</b>	<b>Review</b>  ***lecture quiz: sessions <b>11&amp;12</b>	Dissect axilla brachial plexus cubital fossa <i>pages 185-202</i>		
<b>Session # 14: November 26</b>		<b>LABORATORY EXAMINATION UNIT 2</b>		

**The Final Examination will be given during the Final Exam Period and the date will be announced.**