OST 579
Sys Bio Cardiovascular
Semester 5 - 2015
(updated 10/5/15, dv)

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Section 1 – Course Information

Course Description
OST 579 is a 9 credit hour course that provides students with a multidisciplinary study of the cardiovascular system in health and disease.

Course Goals
1. to provide a comprehensive presentation of normal and abnormal cardiovascular structure and function
2. to give the student a basic understanding of the diagnosis and clinical management of the major cardiovascular disorders

Class time will be used for lectures, workshops, and review sessions as indicated on the attached schedule.

In order to prepare the student for a lifetime of self-study as a physician, OST 579 is employing active learning with increased student participation in the learning process. This is being accomplished via:

- assigned readings to complement formal lectures for which the student will be held responsible in the evaluation process.
- computer assisted interactive learning through programs available in the Kobiljak Center, listed later in Supplemental Materials.

Please note that specific instructional objectives are provided within each lecture or other learning activity of this course.

Course Coordinator
(Note - Preferred method of contact is shown in italics)

Name: David Strobl, D.O.
Phone: 517-353-4734
Email: Dia.Yang@hc.msu.edu
Address: A331 E. Fee Hall, East Lansing, MI 48824

**Dr. Strobl prefers that general questions regarding the course be posted on D2L discussion boards, so that all students may benefit from the answers. He requests that contacting him via e-mail be reserved for personal matters only.**

Course Faculty

Name: Gerald Aben, M.D. | Nikolai Butki, D.O. | Todd Hickox, D.O.
<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patrick Flaherty, D.O.</td>
<td>586-493-8101</td>
<td><a href="mailto:patflaherty@hotmail.com">patflaherty@hotmail.com</a></td>
<td>MUC</td>
</tr>
<tr>
<td>Mary Hughes, D.O.</td>
<td>517-353-3211</td>
<td><a href="mailto:hughesm@msu.edu">hughesm@msu.edu</a></td>
<td>EL</td>
</tr>
<tr>
<td>Michael Markey, M.D.</td>
<td>517-364-2561</td>
<td><a href="mailto:Michael.Markey@Sparrow.org">Michael.Markey@Sparrow.org</a></td>
<td>EL</td>
</tr>
<tr>
<td>Melissa Rosenberg, M.D.</td>
<td>517-353-3100</td>
<td><a href="mailto:rosen119@msu.edu">rosen119@msu.edu</a></td>
<td>EL</td>
</tr>
<tr>
<td>Robert Stephenson, Ph.D</td>
<td>517-884-5057</td>
<td><a href="mailto:stephen9@msu.edu">stephen9@msu.edu</a></td>
<td>EL</td>
</tr>
<tr>
<td>Deborah Young, PharmD</td>
<td>586-263-6757</td>
<td><a href="mailto:dyoung@msu.edu">dyoung@msu.edu</a></td>
<td>MUC</td>
</tr>
<tr>
<td>Name</td>
<td>Phone</td>
<td>Email</td>
<td>Site</td>
</tr>
<tr>
<td>Patrick Flaherty, D.O.</td>
<td>517-355-0120</td>
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</tr>
<tr>
<td>Peter Gulick, D.O.</td>
<td>517-353-3211</td>
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<td>EL</td>
</tr>
<tr>
<td>Mary Hughes, D.O.</td>
<td>517-353-3211</td>
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<td><a href="mailto:dyoung@msu.edu">dyoung@msu.edu</a></td>
<td>MUC</td>
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</table>

**Curriculum Assistants**

<table>
<thead>
<tr>
<th>Name</th>
<th>Phone</th>
<th>Email</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dia Vue, Lead</td>
<td>517-353-4734</td>
<td><a href="mailto:Dia.Yang@hc.msu.edu">Dia.Yang@hc.msu.edu</a></td>
<td>EL</td>
</tr>
<tr>
<td>Rose Shubeck</td>
<td>517-884-9667</td>
<td><a href="mailto:shubeckr@msu.edu">shubeckr@msu.edu</a></td>
<td>MUC</td>
</tr>
<tr>
<td>Charity Troutt</td>
<td>586-226-4788</td>
<td><a href="mailto:charity.troutt@hc.msu.edu">charity.troutt@hc.msu.edu</a></td>
<td>MUC</td>
</tr>
</tbody>
</table>

**Lines of Communication**

- For administrative aspects of the Course: contact the Lead CA, who will contact the course coordinator if needed.
- For content questions relating to a specific lecture or topic, your local course liaison and the discussion boards in D2L will provide a bridge to the faculty presenter. Dr. Strobl will be monitoring the discussion boards regarding content.
- For absences/missed exams (see excused absence information below).

**Course Liaisons**

The following students have volunteered to serve as OST 579 Course Liaisons:

East Lansing: Stephen Manning, mannin96@msu.edu
John Morris, morri354@msu.edu
The Course Liaisons will be the students’ bridge to the faculty. One of the goals of the course is to have students assist each other in learning the material and help answer questions that may arise regarding course content. D2L discussion boards will be formed for each of the course lectures and review sessions. Students are encouraged to post questions and/or answers. The Course Liaisons will be responsible for monitoring the discussion boards and guaranteeing accuracy of the material. In the rare case that a question cannot be resolved, the liaison may contact the Course Coordinator for clarification.

Office Hours
Questions of a personal nature may be discussed individually by making an appointment with Dr. David Strobl, Osteopathic Medical Specialties, via e-mail. There are no set office hours.

Course Web Site
The URL for the Course web site is http://d2l.msu.edu

The course D2L site has these MAIN sections:

- **Announcements** – Course-related communication to the class will be made here. You should check for announcements on a daily basis.
- **Syllabus** - Information about textbooks, exam dates, grading system, rules and regulations, etc. as well as information on the instructional team.
- **Course Content** – Lecture recordings, tutorials (TT), self-study modules (SSM), and all other scientific material will be deposited here.
- **Discussion Board** – List of “asked” questions. It is highly recommended that you check the discussion board prior to sending a question to faculty as it is very likely that you are not the only student with a given question and it may already have been answered.

Textbooks and Reference Materials

<table>
<thead>
<tr>
<th>Required</th>
<th>Recommended</th>
<th>Optional</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sadler.  Langman’s Medical Embryology, 12th ed., 2012, Lippincott, Williams &amp; Wilkins</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strobl, OST 579 Course Pack</td>
<td></td>
<td></td>
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</tbody>
</table>
i>Clicker Use in Course

i>Clickers will be used in this class. An i>Clicker is required for this class. The mobile application, i>Clicker GO, will not be allowed.

In this course, i>Clicker input may be used in the following ways: to provide practice with concepts and principles, to stimulate discussion and/or give mini-quizzes. Questions may be posed at any time during the class hour. No make-up experiences will be provided should you forget your i>Clicker. The i>Clicker will be the only mechanism to record attendance during large group lectures.

- If the i>Clicker is used to take attendance, you will be expected to arrive in class on time and to stay for the duration of the assigned activity.
- If you bring your i>Clicker and it fails during the lecture, please see the course representative immediately after the lecture to inform us of the problem. NO points for attendance will be given unless you notify us at the time of the lecture.

Please refer to additional i>Clicker policy information provided in Section 2 of this syllabus.

Course-based Academic Support

The value you derive from this course (and those that follow it) will depend on many factors, but most importantly the amount of time and effort you put into it. In undergraduate courses, students often concentrate on just getting through the next exam or individual courses. But medical education is different because it is cumulative. Study for understanding, not just short term memorization. This will allow you to understand concepts and carry them forward with you to the next step in your medical education.

You are strongly urged to:

- Actively participate in the course Discussion Boards on the D2L web site for announcements, various study aides, and to answer frequently asked questions.

- Complete the preparatory work assigned for each lab and lecture session; this includes working through the online modules, problem sets or any other advance study activities.

- Attend every lecture and lab session. Plan to stay to the end of each lab session, in order to take full advantage of the opportunities to work collaboratively with your classmates, to interact with faculty, and to participate in the question reviews at the conclusion of lab.

- Actively annotate your Course Pack as you prepare for each class session, as each class session progresses, and also during your follow-up study.

- Attend the course review sessions & workshops, which are scheduled prior to the course exams.

- Study groups - Many students find it beneficial to study with one or more partners, and we strongly encourage this activity. Studying together can be efficient (what one student doesn't understand, another one will), stimulating (personal interaction can help keep you focused and alert), and motivating (commitment to a partner supplements self-discipline). We encourage you to study with suitable partners. We caution you, however, to avoid study groups that turn into "gab fests" or where one or two students do all the talking. Remember, you may THINK you understand a concept when you hear someone else explain it, but you'll KNOW you understand the concept only when YOU can explain it to someone else. So, make sure you get to talk in your study group!
Caution: Scribe note services are not sanctioned by MSUCOM and are not endorsed by the course faculty. Course faculty assume no responsibility whatsoever for errors in the "scribe notes". It is unwise to expect the "scribes" to substitute for your own attendance in lecture or lab, your own note taking, or your own studying.

Additional academic support resources can be accessed at:

Stay current with lectures, webcasts & labs in order to best prepare for examinations.

Courses begin and end dates
OST 579 begins on October 6, 2015 and ends on December 11, 2015. See addendum for detailed daily course schedule.

Exams/Assessments
There will be a total of 4 exams given in OST 579 this year. Your best 2 of 3 scores from Exams 1, 2 and 3 plus your final exam score will determine your exam score in the course (see below). Exams 1, 2 and 3 will each be worth 50 points. The final exam will be worth 100 points. In addition to your exam scores, you can potentially earn up to 2 true bonus points, 1 (one) for the Anatomy Lab and 1 (one) for the Histology Lab. These points will be in a separate category, and will count toward your passing score. The examination/assessment schedule is as follows:

<table>
<thead>
<tr>
<th>Examination</th>
<th>Projected Points</th>
<th>Material to be Covered</th>
</tr>
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<tbody>
<tr>
<td>Examination #1</td>
<td>50</td>
<td>Dubin text Lectures 10/5/15 – 10/16/15 Histology and Physiology material</td>
</tr>
<tr>
<td>Examination #2</td>
<td>50</td>
<td>Lectures 10/5/15 – 10/30/15</td>
</tr>
<tr>
<td>Examination #3</td>
<td>50</td>
<td>Lectures 10/5/15 – 11/13/15</td>
</tr>
<tr>
<td>Comprehensive Final</td>
<td>100</td>
<td>Lectures 10/5/15 – 12/9/15 Workshops</td>
</tr>
<tr>
<td>Histology IRQ Quiz</td>
<td>1 bonus point max.</td>
<td></td>
</tr>
<tr>
<td>Anatomy Lab</td>
<td>1 bonus point max.</td>
<td></td>
</tr>
</tbody>
</table>

Unit Exam Answer Keys
Unofficial unit exam answer keys will be posted on D2L following the written unit lecture exams so that students who completed their “tear off” sheet during the allotted exam time can receive feedback on their scores on their exam day. The Course Coordinator will allow challenges or inquiries to exam questions which can be submitted to your respective site liaisons as soon as possible after the exam on Mondays. The challenges will be reviewed and researched by Dr. Strobl and course liaisons that same evening and may result in re-grades of specific questions. Dr. Strobl will also review the statistical reports for each question and determine if further adjustments to scoring are warranted. The grades will then be set and the OFFICIAL answer key will replace the unofficial key on D2L and student scores will be finalized. The exams will be posted for student viewing during the exam review display session (see Google calendar).
Course Grades
A student’s course grade is determined by composite of your best 2 scores on exams 1, 2 and 3 (potential 100 points) plus the final (potential 100 points) plus any true bonus points (potential of 2 total points) will determine your course score. At least 140 points are required for you to pass the course.

There will be no make-ups for the first three exams. Your score will simply be zero for a missed exam and your exam score will be the cumulative point total of the other exams taken plus the final exam score and plus any true bonus points (potential of 2 total points) for Anatomy and Histology Lab i-clicker quiz. Your final course grade will be reflected in D2L. You must take at least one of the first three exams and the final to be eligible to either pass the course (at least 140 points) or to be eligible to take remediation course OST 590 (less than 140 points). If the student is ineligible for (or fails) OST 590, the student will need to enroll in OST 579 when offered in 2016.

If an emergency prevents your attendance at the Final Examination, you MUST receive an excused absence from the coordinator, David Strobl, D.O. It is your responsibility to notify the Curriculum Assistant, Dia Vue at (517) 353-4734 as soon as possible. If there is no answer, leave a message and Dr. Strobl or the Curriculum Assistant will call you back. If an illness or an injury causes you to miss the final examination, we will also need a note from your physician.

If a make-up final exam is needed, it will be given on date to be determined. The format of the make-up exam will be at the discretion of the course coordinator.

If a student is eligible for a make-up final exam, please make every attempt to sit for the make-up exam. If a true emergency arises, contact Mrs. Nancy Thoma at 517-719-8120 at least 30 minutes prior to the scheduled start time of this exam. Mrs. Thoma will then contact the Course Coordinator for preliminary determination if another excused absence is warranted. Please be advised that Course Coordinator alone will make this determination and that another excused absence is not guaranteed.

You will not be eligible to take a remediation exam if you do not take the final exam. Any unexcused absence will result in a final exam score of “0” and the student will need to enroll in OST 579 when offered again in 2016.

- **P-Pass** – means that credit is granted and that the student achieved a level of performance judged to be satisfactory by the instructor. To obtain a “P” grade for this course, a student must obtain:
  - the composite of your best 2 scores on exams 1, 2 and 3 (potential 100 points) plus the final (potential 100 points) plus any true bonus points (potential of 2 total points) will determine your course score. At least 140 points are required for you to pass the course.

- **N-No Grade** – means that no credit is granted and that the student did not achieve a level of performance judged to be satisfactory by the instructor. A student who accumulates less than 140 points or accumulated score below 70% will receive an “N” grade.
  - A student who receives an N grade on the basis of the examination cumulative score but was able to pass (>70%) at least one of the examinations taken will be eligible to apply for remediation (OST 590) after an appropriate period of directed self-study.

All remediation for Semester 5 courses are scheduled for Wednesday, January 6th and Thursday, January 7, 2016.

Remediation - Since all of the courses in the MSUCOM curriculum are required, any student receiving an “N” grade must remediate the course. Students receiving an “N” grade in the OST
The remediation format and dates are at the discretion of the course coordinators. Please refer to the remediation policy information provided in Section 2 of this syllabus for information on College requirements and eligibility determination.

**Class Ranking**
For purposes of class ranking only, the Grader system (student portal) will add the points earned for all exams taken and will **not** be able to drop the lowest score. Therefore, students are encouraged to take all exams if possible. This composite score is for class ranking only, and will not be used to determine passing grades in OST 579.

**Student Evaluation of the Course**
We want your feedback on how to make this course better for yourself and also for the students who come after you.

- **Informal Feedback**: The course liaisons will be available to obtain informal feedback as well as written comments or e-mails that can be presented to Dr. Strobl and the faculty. Student surveys may also be used during the course to obtain feedback on key issues. The use of D2L Discussion Boards (under General Course Comments) is also encouraged and will be monitored by the Course Coordinator.

- **Formal Evaluation**: In addition to the above, we ask every student in the class to complete formal on-line course evaluation upon conclusion of the course. Student course evaluations are highly recommended. Student feedback provides Course Coordinators with valuable information regarding their performance, the performance of their colleagues, and the quality of the course. The information gained from these evaluations is used to continuously improve future offerings of this course. Students can access the evaluation system at: [http://kobiljak.msu.edu/Evaluation/UnitI_II.html](http://kobiljak.msu.edu/Evaluation/UnitI_II.html) and it will be available from **12/7/15 – 1/8/16**. Your assistance in this important process is greatly appreciated.

**Section 2 – Policies**

**Academic Honesty and Professionalism**
[http://com.msu.edu/Students/Professional_Development/Statement_on_Professionalism.htm](http://com.msu.edu/Students/Professional_Development/Statement_on_Professionalism.htm)
Each individual student is responsible for their behavior and is expected to maintain standards of academic honesty and professionalism. If any instance of academic dishonesty (cheating, plagiarism, etc.) is discovered by an instructor, it is his or her responsibility to take appropriate action. Such action may include giving a failing grade to the student in the course and/or referring the student for judicial review and possible disciplinary action, which may include disciplinary suspension or dismissal from the College.

**Attendance/Excused Absence**
In accordance with the MSU All-University Policy on Attendance, MSUCOM does not have a regulation requiring class attendance. However, the College understands and supports the need and the right of the faculty to expect student attendance and participation in many curricular components with consequences if the student is not attending. (NOTE: Attendance may be a component of determining course grade) In the spirit of professional behavior, MSUCOM students are expected to attend required class sessions (e.g., lectures, laboratories) and take all examinations during their originally scheduled times. If this is not possible, the student must obtain an excused absence. To obtain an excused absence, you need to make the following contact, as appropriate, prior to the scheduled administration of the examination(s).
**Personal Emergencies:**
(e.g., death in family, serious illness (acute), hospitalization, automobile difficulties).

- **EL -** Dr. Falls, Associate Dean for Student Services (517) 353-8799
- **DMC -** Dr. Willyerd, Associate Dean (313) 578-9600
- **MUC -** Dr. Hortos, Associate Dean (586) 263-6731

**Where there is advance notice of absence:**
To obtain an excused absence, you need to make one of the following contacts as appropriate:

- **EL -** Dr. Falls, Associate Dean for Student Services (517) 353-8799
- **DMC -** Dr. Willyerd, Associate Dean (313) 578-9600
- **MUC -** Dr. Hortos, Associate Dean (586) 263-6731

For advance notice absences, a student must submit his/her excused absence request at least one week in advance of the scheduled mandatory class session(s) or examination(s). Wedding, family celebrations, vacations, conferences, etc. are not considered acceptable excuses. If an examination or other required experience is missed due to medical reasons, an attending physician’s written confirmation will be required in order for the absence to be excused.

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**i>Clicker Policy**
(Delete section if not using in this course)

http://www.com.msu.edu/Students/Policies_and_Programs/iCLICKER_Policy.htm

You are expected to have your i>Clicker registered prior to the beginning of this class. You are responsible for bringing your i>Clicker to every class with you. Class will proceed as planned, even if you have forgotten to bring your i>Clicker with you. Paper completion of i>Clicker activities will not be accepted as a substitute for the i>Clicker response. Please make sure that your i>Clicker is always in working order.

As a matter of professionalism, please note that under no circumstances should you loan your i>Clicker to another student. Nor should you ever be in the possession of an i>Clicker other than your own. **Answering questions or checking in for attendance on behalf of another student by using his or her i>Clicker is considered to be an act of dishonesty and may result in dismissal from the college.**

**Remediation Policy**
http://www.com.msu.edu/Students/Registrar/Policies.htm

Remediation of an “N” grade will be governed by the MSUCOM Policy for Retention, Promotion and Graduation (relevant content found under Remediation section), (http://www.com.msu.edu/Students/Policies_and_Programs/Remediation_Policy.htm) and by the remediation section of each course syllabus.

It is the responsibility of each student in the Michigan State University College of Osteopathic Medicine to verify his/her eligibility, with the Office of Student Services, prior to the administration of the remediation examination/experience.

Students deemed eligible for remediation by the registrar will be informed by the Course Coordinators. Information on remediation format, date and time will be provided then.
Requests for Special Accommodations

Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at http://www.rcpd.msu.edu/. Once your eligibility for an accommodation has been determined, you may be issued a Verified Individualized Services and Accommodation (VISA) form. Please present the VISA to Cheryl Luick, luick@msu.edu A331 D East Fee Hall at the start of the term and/or two weeks prior to the accommodation date (test, project, labs, etc.). Requests received after this date will be honored whenever possible.

It is the responsibility of the Student with Accommodations to contact the Course Coordinator and the Curriculum Assistant in your location, two weeks prior to the start of the term, or two weeks prior to the schedule assessment event. Requests received after this date will be honored whenever possible.

It is the responsibility of the student to submit or have submitted an updated version of their accommodations to Cheryl Luick each semester that a student plans to use their accommodations.
Addendum 1: Optional Enrichment Sessions – EKG and Rhythm Strip Interpretation

An important learning objective in OST 579 will be to develop proficiency in EKG and Rhythm Strip interpretation. The course was designed in a way to allow for multiple opportunities to develop your skills. A recommended text is Dubin’s *Rapid Interpretation of EKGs* which will provide basics to build your proficiency. In addition, there is a series of Webcasts (Strobl’s *EKGs with DJS*) as well as a series of optional lectures presented by Dr. Ralph Otten that are inserted into scheduled times in the Google Calendar. Please note that these are Optional Enrichment Sessions and although they appear in the schedule, they are non-mandatory and non-tested on any unique material presented in this format. For example, it is expected that the student can identify “left ventricular hypertrophy” or LVH if presented with an EKG example on the examination, but the student will not be responsible or tested on any specific criteria that is presented in Dubin, the *EKG with DJS* webcasts, or Dr. Otten’s presentations. There may be some unique criteria or explanations in these Optional Enrichment Sessions, but they are only offered to help the student gain proficiency and skill in interpretation. You may find that one, two, or all three of these sessions are helpful in helping you master the art of interpretation. It is highly recommended that you attempt to build understanding with these optional sessions before you attend the EKG Bootcamp (10/22/15) and Rhythm Strip Bootcamp (10/28/15). The “Bootcamps” are live interactive lectures that will test and reinforce your understanding. Regardless of your path, the only requirement when tested on the examinations is that you can correctly identify the EKG or rhythm strip finding.
# Addendum 2: Dr. R. Otten Optional Enrichment Sessions (Lectures)

<table>
<thead>
<tr>
<th>Lecture</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>1. Intro to Electrocardiography</td>
<td>October 8, 2015</td>
</tr>
<tr>
<td>2. Electrophysiology and ECG</td>
<td>October 8, 2015</td>
</tr>
<tr>
<td>3. Mean Electrical Axis</td>
<td>October 14, 2015</td>
</tr>
<tr>
<td>6. Atrial Abnormalities</td>
<td>October 15, 2015</td>
</tr>
<tr>
<td>7. Left and Right Ventricular Hypertrophy</td>
<td>October 19, 2015</td>
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<tr>
<td>8. Right and Left Bundle Branch Block and Hemi Blocks</td>
<td>October 19, 2015</td>
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<tr>
<td>9. Myocardial Ischemia</td>
<td>October 20, 2015</td>
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<tr>
<td>10. Pericarditis</td>
<td>October 20, 2015</td>
</tr>
<tr>
<td>11. Myocardial Infarction 1 &amp; 2</td>
<td>October 21, 2015</td>
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<tr>
<td>12. Ventricular Preexcitation</td>
<td>October 26, 2015</td>
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<td>13. Heart Block</td>
<td>October 26, 2015</td>
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</tbody>
</table>
Addendum 1: EKG with DJS

Optional Enrichment Webcasts

Session One
The Basics
Sinus Rhythm

Session Two
Determining Axis
Atrial Dysrhythmias

Session Three
Bundle Branch Blocks
Ectopic Beats

Session Four
Ischemia, Injury, and Infarction

Session Five
Heart Block

Session Six
Rhythm Potpourri
Addendum 2: Histology Lab

For the Histology Labs in this course, you must have a functional i>Clicker that is registered in accordance with MSUCOM instructions in order to submit your answers to the quizzes that will be given at the beginning of each histology laboratory.

Histology Information
Histology Lab Leaders
Frances Kennedy, DVM, MS
Histology Lab Director and East Lansing Histology Lab Leader
517-432-0467
kennedyf@msu.edu

Janice Schwartz, PhD
DMC Histology Lab Leader

Carrie Tatar, PhD
MUC Histology Lab Leader

IRQ points = 0 - 1.0 BONUS POINTS possible, using the following breakdown:
Students answering 3 or 4 i>Clicker questions correctly = 1 point
Students answering 2 i>Clicker questions correctly = 0.5 point
Students answering 0 or 1 i>Clicker question correctly = 0 point

Required Textbook

Specific Procedures for the Histology Laboratory
Access
Locations of histology teaching laboratories
EL – Room E200 Fee Hall
DMC – Room G031
MUC – Room 211 of the UC-4 Building

At all campus sites, the lab is computer-based; it uses virtual slides (digitized microscope slides) as well as images from other designated web sites. Students will team up (in groups of 2-3) to share the laboratory workstations. At each lab session, you will need your Histology Lab Manual (included in the course pack), your required histology text (Ross and Pawlina) and your i>Clicker.

Assigned lab times
For this course, you have been assigned to a specific 2-hour histology lab session (lab section assignments will be posted on the course D2L website). Space and instructional support are limited in the histology lab, so it is essential that you attend only the 2-hour lab session to which you have been assigned. Answers that you submit during lab i>Clicker quizzes will earn course credit only if you are attending the lab session to which you are assigned.

Pre-lab preparation
To make your time in the histology lab productive, it is essential that you prepare beforehand. Your Histology Lab Manual includes detailed, step-by-step instructions, objectives, and study questions. To prepare for a lab session, carefully read the “Introduction” to the session in your Histology Lab Manual. Pay particular attention to the instructions that are entitled “Be sure to review and understand the following.” You should also skim through the detailed directions for the lab session (Lab Objectives) in order to get an idea of what you will be expected to accomplish during the lab session.

Resources to bring to each laboratory session
• **i>clicker** – In order to receive Individual Readiness Quiz (IRQ) credit, you must personally attend the lab session to which you are assigned, and you must submit answers using your personal i>clicker, which you have web-registered in accordance with directions provided by MSUCOM. IRQ answers submitted in another way (e.g. written on paper) will not be accepted. Having your personal i>clicker registered in your name and in good working order (with fresh batteries) is your responsibility.

• **Histology Lab Manual** – This is an essential guide to the structural features you will be looking for during lab and to their significance.

• **Histology textbook** – The Histology Lab Manual will refer frequently to pertinent figures in the required histology textbook (Ross and Pawlina); so bring your histology textbook with you to lab.

**Histology Lab Individual Readiness Quizzes (IRQs)**
As further reinforcement for advanced lab preparation, we will begin each histology lab session with a brief Individual Readiness Quiz (IRQ), to be administered via the i>Clicker2 system. (The i>Clicker system is described under the “Policies” section of this syllabus.) Course credit will be awarded for answering IRQ questions correctly (see Exams/Assessments section of this syllabus). The IRQ questions should not be difficult for students who have completed the pre-lab preparation, as described above. **No make-ups are offered for missed IRQs.**

**Making the most of your time in histology lab**
Being well prepared for each histology lab session (as directed above) and staying for the full lab time will allow you to take full advantage of the opportunity that each lab provides to work collaboratively with your classmates. Lab sessions provide students with excellent opportunities for face-to-face conversations with faculty about lab material, other course content, or ancillary matters of interest. Furthermore, participating in the interactive review of questions (carried out in the last half hour of each lab session) will provide valuable preparation for the integrative questions on course exams.

**Protecting the laboratory work stations**
- Do not consume food or drink while seated at a computer station.
- Do not touch the computer monitor screens with anything other than the pointers that are supplied.
- During histology lab sessions, do not use the lab computers for activities unrelated to lab work (i.e., no personal e-mail, downloads, or web surfing).

**Changes in lab assignment:**
Any change in your lab time assignment must be based on compelling need and negotiated in advance with MSUCOM Academic Programs. If you seek such a lab reassignment, contact the Curriculum Assistant for your campus (as listed earlier in this syllabus).

**Individual Readiness Quizzes (IRQs) in Histology Lab – Expected conduct**
The expectations regarding professional behavior and academic honesty that apply to examinations are to be applied during IRQs as well. An IRQ will be administered at the beginning of each lab session. It is your responsibility to be on time. You may be assigned to a specific seat for an IRQ, and you may be asked to change seats during an IRQ. All IRQs are “closed book.” You must not consult notes, books, electronic devices, or other reference material during an IRQ. During an IRQ, you must not communicate answers to IRQ questions to another student or attempt to copy answers from another student. Moreover, you are not to reveal the content of an IRQ to a student who is assigned to a subsequent lab section, and therefore has not yet taken the IRQ. Answering quiz questions on behalf of another student is considered to be an act of academic dishonesty, and may result in dismissal from MSUCOM.
Addendum 3: Anatomy Lab

Specific Procedures for the Gross Anatomy Laboratory
Welcome back to the gross lab! At all campus sites, the lab will be open October 9th for access to donors and bucket heart specimens. You will be assigned to a specific lab session (lab section assignments will be posted on the OST 579 D2L website). Space and instructional support are limited in the gross anatomy lab, so it is essential that you attend only the lab section to which you have been assigned.

Attendance during the faculty proctored anatomy labs is not required. However, we do highly suggest that you take advantage of the anatomy faculty while they are present so that you can have your questions answered. Also, the i>clicker post lab quiz will only count if you are attending the lab session to which you were assigned.

Pre-lab preparation
To make your time in gross lab productive, it is essential that you skim over the material beforehand. While many of these objectives may readily return from the deep recesses of your brain, some may not. Remember that objectives can be demonstrated on a donor, bucket specimen, cross section or radiograph. Have fun and enjoy your time again with the specimens.

i>clicker2
In order to receive post-lab quiz credit, you must personally attend the lab session to which you are assigned, and you must submit answers using your personal i>clicker2, which you have web-registered in accordance with directions provided by MSUCOM. Having your personal i>clicker registered in your name and in good working order (with fresh batteries) is your responsibility! If you miss this quiz (sickness, arriving late, previously schedule appointment, forgetting your i>Clicker2, your i>clicker2 breaking, batteries missing, religious observances) then the score for the quiz will be a zero. It is understood that you are adults and will make decisions on what is the best use of your time. If attending lab is not one of them, then you forfeit the opportunity to view and take the quiz.

Professional Dress in the Lab
In order to have access to the gross labs at EL, MUC and DMC, please come to lab wearing:
- Close toed shoes
- Long pants/scrub bottoms
- White coat (or scrub set)
- Name tag or ID