IM 651
Cardiology Clerkship

CLERKSHIP ELECTIVE ROTATION SYLLABUS

OSTEOPATHIC MEDICAL SPECIALTIES
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EFFECTIVE AUGUST 1, 2022 TO JULY 31, 2023

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At Michigan State University College of Osteopathic Medicine (MSUCOM), we are constantly working to improve our curriculum and to meet new AOA accreditation guidelines. We need to meet the challenges of modern medicine that force us to innovate. While changes will generally be instituted at the beginning of the school year, changes may also be implemented semester to semester.

Please be mindful of the need to read your syllabi before beginning your rotations.
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INTRODUCTION AND OVERVIEW
This course is designed to provide the student with an opportunity to actively engage in patient-based learning experiences under the guidance of a faculty member (preceptor) in collaboration, as appropriate, with residents and/or fellows.

Rotations are typically four weeks, 6 credit hours in duration. Timeframes for each rotation are decided at least 30 days prior to the beginning of the rotation.

Rotation schedules are not to be submitted until the last Friday-Sunday of the rotation. You must document your actual schedule worked. You are required to document any time off for illness, boards, etc. that caused a deviation from the schedule you were provided. All rotation days must be accounted for.

The overall performance of course participants will be evaluated through customary assessment instruments normally employed by the department for core rotations, at the discretion of the instructor of record.

ELECTIVE COURSE SCHEDULING
Preapproval
- Approvals from the facility where the rotation will occur and Clerkship Team (COM.Clerkship@msu.edu) is required for every selective/elective rotation
  - Confirmation of approval from the IOR is to be sent to COM.Clerkship@msu.edu for final clerkship approval and scheduling.

Course Confirmation and Enrollment
- The student must be an active student at Michigan State University College of Osteopathic Medicine (MSUCOM).
- Student must complete five core rotations prior to any elective rotation.
- The student must receive MSUCOM confirmation and enrollment prior to beginning any elective rotation.
  - Once the student receives rotation acceptance from the host site, students must provide the elective application and host site approval to COM.Clerkship@msu.edu for MSUCOM confirmation and scheduling.
  - MSUCOM confirmation and enrollment is complete when the rotation is visible on the student's schedule.
  - MSUCOM confirmation must occur at least 30 days in advance of the rotation.

ROTATION FORMAT
The cardiology rotation is intended to provide the student with hands on experience in the evaluation and treatment of various conditions related to cardiology.

GOALS AND OBJECTIVES
GOALS
1. Develop an appreciation of the practice of cardiology as related to the specialty of the preceptor.
2. Assimilate what they learn and demonstrate their understanding of patientcare through ongoing interaction and dialogue with, as well as formative feedback from, the preceptor.
3. Demonstrate an understanding of the (seven) osteopathic core competencies (as applicable).
4. The clinical experience will emphasize the diagnosis and management of acute and chronic cardiac diseases.
5. The clinical experience will emphasize evaluation of risk factors, and management of risk factors to prevent disease advancement if possible.
6. The clinical experience will include learning to perform a complete and accurate patient history and physical exam.
7. The clinical experience will include identification and indications for appropriate diagnostic studies.
8. The clinical experience will help the student identify the first line therapy for common cardiac disorders.

OBJECTIVES

**Medical Knowledge:** The student is expected to be able to describe the clinical presentation, pathophysiology, and management of the following cardiac conditions:

**Coronary Artery Disease**
1. Risk Factors
2. Preventative Strategies
3. Medication management

**Heart failure**
1. Systolic
2. Diastolic
3. Chronic vs. Acute
4. Cardio-pulmonary Syndrome
5. Cardio-renal Syndromes
6. Medication management
7. Causes: Ischemic, Valvular, HTN, other.

**Arrhythmias**
1. Brady/Tachy
2. Heart Blocks
3. Ventricular Rhythms
4. Atrial Rhythms
5. Medication management

**Endocarditis**
1. Acute vs. Chronic
2. Diagnosis Modalities
3. Treatment protocols
4. Surgical options
5. New prevention guidelines

**Hyperlipidemia**
1. ATP III management standards

**Atrial Fibrillation**
1. CHAD2 VASc Score
2. Anticoagulation/Medication Management

Cardiogenic syncope
1. Work-up for syncope

Acute Coronary Syndrome
1. STEMI
2. NSTEMI
3. Unstable Angina
4. TIMI scoring
5. Thrombolytics vs Primary Cardiac Intervention

Clinical Skills:
1. The student should complete a thorough medical history including details of current symptoms, previous cardiology issues and management efforts, and risk factors that could impact on the diagnosis or management of their current problem.
2. Perform a complete physical exam with appropriate emphasis on the cardiovascular exam. This should include an in-depth knowledge of systolic and diastolic heart murmurs.
3. Interpret common diagnostic tests including EKGs and chest x-rays. Exposure to cardiac catheterizations, stress tests, and echocardiograms.
4. Interpret laboratory test including electrolytes, blood counts, and cardiac enzymes.

Socioeconomic: the student will:
1. Appreciate the psychosocial issues that potentially impact the patient’s cardiac problems (professionalism and sensitivity to disability issues).
2. Appreciate the importance of functional assessment and physical rehabilitation as well as the role of physical and occupational therapists, nutritionists, and rehabilitation/skill nursing care facility in elderly patients (professionalism and sensitivity to disability issues).

COMPETENCIES
1. Patient Care: The student will be able to complete an accurate history and physical exam and accurately document the findings, write daily notes to accurately and concisely project the status of the patient’s condition, and recognize unstable patients in need of urgent evaluation and management.
2. Medical Knowledge: The student can demonstrate knowledge of the criteria for diagnosis of common clinical problems, know the first line therapies for common clinical problems, and demonstrate a knowledge of the interpretation of diagnostic tests.
3. Communication Skills: The student can effectively present the clinical evaluation of a new patient and/or the clinical progress of a continuing patient, and communicate effectively with patients, clinical support staff, and supervising residents and attending physicians.
4. Professionalism: The student will demonstrate respect for patients, families, co-workers, and work effectively with nurse coordinators, social services, and ancillary staff.
5. Practice Based Learning: The student will be able to identify and discuss appropriate, evidence-based approaches to assist in the diagnosis and management of clinical problems encountered in their patients.

6. Systems Based Practice: The student will be able to incorporate a team approach in the management of complicated patients.

7. Osteopathic Principles and Practices: The student should be able to integrate osteopathic principles and treatments in the management of the hematologic patient.

8. The student is expected to function as a viable member of the supervising physician health care team. Assigned student responsibilities can include: supervised first patient contact in the office or clinic, the completion of admission history and physicals, the completion of pre-rounding progress notes on assigned patients, participation in conducting and the interpretation of diagnostic testing and clinical management.

9. The student is expected to participate in clinical conferences and educational programs appropriate for the clerkship course including those generally associated with residency educational programs.

10. The student is encouraged to solicit feedback related to his/her clinical performance on a daily basis. The student should receive formative performance evaluations at the mid-point and end of the rotation that outlines faculty perceived strengths and weaknesses related to the student’s performance that includes recommendations for strengthening his/her performance as warranted.

COLLEGE PROGRAM OBJECTIVES
In addition to the above course-specific goals and learning objectives, this clerkship rotation also facilitates student progress in attaining the College Program Objectives. Please refer to the complete list provided on the MSUCOM website (https://com.msu.edu/) and in the Student Handbook.

REFERENCES
REQUIRED STUDY RESOURCES

Desire 2 Learn (D2L)

Please find online content for this course in D2L (https://d2l.msu.edu/). Once logged in, your specific course section may appear on the D2L landing page. Or you may find and pin the course to your homepage by typing the following text into Search for a course: Cardiology Clerkship.

If you encounter any issues accessing this D2L course, please email the CA (on the title page of this syllabus).
**IM 651 Cardiology Clerkship**

## ROTATION REQUIREMENTS

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>SUBMISSION METHOD</th>
<th>DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Types and Procedure Log</td>
<td>See page at the end of syllabus and upload into D2L Drop Box for the course</td>
<td>11:59 pm Last Sunday of Rotation</td>
</tr>
<tr>
<td>Clinical Shift Schedule</td>
<td>Online D2L Drop Box</td>
<td>Not to be submitted until the last Friday-Sunday of the rotation, and must be the schedule you worked, not what you were scheduled to work</td>
</tr>
<tr>
<td>50 Question Harrison’s Quiz (for 2-week rotation)</td>
<td>Online D2L Drop Box (70% required to pass)</td>
<td>11:59 pm Last Sunday of the Rotation</td>
</tr>
<tr>
<td>100 Question Harrison’s Quiz (for 4-week rotation)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attending Evaluation of Clerkship Student (Class of 2023)</td>
<td>Can be accessed via the “Attending Evaluation” link in Kobiljak online schedule. Email completed evaluation to <a href="mailto:COM.Clerkship@msu.edu">COM.Clerkship@msu.edu</a></td>
<td>Last Day of Rotation</td>
</tr>
<tr>
<td>Attending Evaluation of Clerkship Student (Class of 2024)</td>
<td>A student must verify that his/her attending physician is accurately reflected on his/her rotation schedule in Medtrics. At the rotation midpoint, students’ attendings will receive an automated email link connecting them to their assigned Attending Evaluation within Medtrics, where they may electronically access and submit the forms on behalf of their students</td>
<td>Last Day of Rotation</td>
</tr>
<tr>
<td>Student Evaluation of Clerkship Rotation (Class of 2023)</td>
<td>Can be accessed and submitted via the “Student Evaluation” link in Kobiljak online schedule</td>
<td>Last Day of Rotation</td>
</tr>
<tr>
<td>Student Evaluation of Clerkship Rotation (Class of 2024)</td>
<td>Students will submit their rotation evaluations electronically at the conclusion of every rotation by accessing the Medtrics system: <a href="https://msucom.medtricslab.com/users/login/">https://msucom.medtricslab.com/users/login/</a>. By the last week of each rotation, students will receive an automated email link connecting them to their assigned evaluation. Students can also access pending evaluations on the ‘Home’ or ‘Evaluations’ tabs within their Medtrics accounts.</td>
<td>Last Day of Rotation</td>
</tr>
</tbody>
</table>

*The student who fails to turn in required paperwork, who has a verifiable reason why they failed to do so, will be allowed a 2-week grace period, or more depending on the circumstances. Failure to meet this two-week deadline will result in an N grade.*
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QUIZZES
For a 2-week rotation: Create a 50 Question Quiz from Harrison’s Principles of Internal Medicine Self-Assessment and Board Review in the Cardiology section.

You must achieve a score of (70%) correct to receive a passing score. You can retake as often as needed to achieve the score.

Available through AccessMedicine


For a 4-week rotation: Create a 100 Question Quiz from Harrison’s Principles of Internal Medicine Self-Assessment and Board Review in the Cardiology section.

You must achieve a score of (70%) correct to receive a passing score. You can retake as often as needed to achieve the score.

Available through AccessMedicine


ROTATION EVALUATIONS

Attending Evaluation of Student

Class of 2023: Students are responsible for assuring that his/her clinical supervisor receives the appropriate evaluation form. Forms can be accessed via the “Attending Evaluation” link in the student’s Kobiljak online Clerkship schedule.

Class of 2024: Students are responsible for verifying that a clinical supervisor has been correctly identified on their rotation schedules within Medtrics so that an email can be generated and delivered to their attending physician’s preferred email address at the midpoint of their rotation. Attendings will access the electronic form within Medtrics by selecting the email link on a smart device. No login (username/password) will be required for attendings to access their pending evaluation(s) assigned to them. After the electronic form has been submitted by their attending, students can access Attending Evaluations that were completed on their behalf by visiting the ‘Evaluations‘ module (in the ‘About Me’ tab) of their Medtrics profiles.

Class of 2023 & Class of 2024:
Students should actively seek feedback on his/her performance throughout the course of the clinical rotation. Students should also sit down and discuss the formal evaluation with the clinical supervisor.

Any evidence of tampering or modification while in the possession of the student will be considered “unprofessional behavior” and will be referred to the MSUCOM Spartan Committee Clearinghouse for resolution, per MSUCOM’s Common Ground Framework for Professional Conduct or to the Committee on Student Evaluation (COSE).

Grades are held until all rotation requirements, including evaluation forms, are received. Students are required to ensure their rotation requirements are completed correctly.
STUDENT RESPONSIBILITIES AND EXPECTATIONS
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Course participants will meet the preceptor on the first day of the rotation at a predetermined location to be oriented to rotation hours, location(s), and expected duties and responsibilities while on-service.

o The student will meet the following clinical responsibilities during this rotation:
  - Students are expected to function collaboratively on health care teams that include health professionals from other disciplines in the provision of quality, patient-centered care.

o The student will meet the following academic responsibilities during this rotation:
  - Students are expected to identify, access, interpret and apply medical evidence contained in the scientific literature related to patients’ health problems.
  - Students are expected to: assess their personal learning needs specific to this clinical rotation, engage in deliberate, independent learning activities to address their gaps in knowledge, skills, or attitudes; and solicit feedback and use it on a daily basis to continuously improve their clinical practice.
  - Create 100 questions Harrison’s exam: https://accessmedicine-mhmedical-com.proxy2.cl.msu.edu/book.aspx?bookID=2129 Select Hospital Corner/Board Review/ Harrisons. Select 100 of the 167 questions in the cardiology section. If only completing a 2-week rotation make a 50-item cardiology quiz. You must achieve a 70% on the quiz for a passing score.
  - It is the student’s responsibility to notify the Clerkship Office (com.clerkship@msu.edu) immediately if they are placed on quarantine or contract COVID.

MSU COLLEGE OF OSTEOPATHIC MEDICINE STANDARD POLICIES
The following are standard MSUCOM policies across all Clerkship rotations.

CLERKSHIP ATTENDANCE POLICY
MSUCOM requires student participation in clerkship rotations and clinical activities with consistent attendance to acquire the skills and knowledge that are necessary for successful program completion. Students are expected to take minimal time off outside of vacation periods built into student schedules and should only request additional time off in the rare events and circumstances outlined below.

Specific courses may have additional absence requirements from this general clerkship policy, and it is the student’s responsibility to adhere to those requirements according to the respective course syllabus.

Excused Absences
Students must obtain documented approval for any full- or partial-day absence on a rotation. Excused absences require the completion of the Clerkship Program Excused Absence Request Form by taking the following steps:

- Obtain appropriate signatures on the Clerkship Program Excused Absence Request Form at least 30 days prior to the date of the absence. An absence due to a sudden emergency is the exception to the 30-day advanced notice rule.
- Class of 2023: Once appropriate approval signatures are obtained on the Clerkship Program Excused Absence Request Form, the signed document should be maintained for your records in the event they are later requested or required.
- Class of 2024: Upload the completed Clerkship Program Excused Absence Request Form to the ‘Excused Absences’ folder (within the ‘My Personal Documents’ section) of a student’s Medtrics profile.
Unexcused absences are full- or partial-day absences taken without the proper completion of the Clerkship Program Excused Absence Request Form, or any absences not covered in the Clerkship Attendance Policy. Unexcused absences are considered unprofessional and will result in a report to the Spartan Community Clearing House and/or the MSUCOM Committee on Student Evaluation (COSE). Unexcused absences may also have a negative impact on a student’s rotation grade or evaluation.

Students are not allowed to be absent from the first day of any rotation.

- Due to the onboarding plans at most rotation sites, students must attend the first day of every rotation. Students must plan accordingly for personal days, interview days, COMLEX, etc.

### Maximum time off any rotation*

<table>
<thead>
<tr>
<th>Length of Rotation</th>
<th>Maximum Number of Days Off</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 weeks</td>
<td>2 days</td>
</tr>
<tr>
<td>2 weeks</td>
<td>0 days</td>
</tr>
</tbody>
</table>

Should an absence exceed these limits, the student is responsible for requesting additional days off from the Assistant Dean for Clerkship Education via email (COM.Clerkship@msu.edu) prior to the absence.

*Exception: A fourth-year student may be absent a total of 4 days on any 4-week rotation or 2 days on any 2-week rotation during the months of October-January for interview purposes only. If interview absences exceed these totals, the student must submit a Clerkship Program Excused Absence Request Form (with appropriate signatures obtained from the rotation attending and rotation site) to the Assistant Dean for Clerkship Education via email (COM.Clerkship@msu.edu) prior to the absence.
### IM 651 Cardiology Clerkship

<table>
<thead>
<tr>
<th>Absence Type</th>
<th>Qualifications</th>
<th>Maximum Number of Days Off</th>
<th>Details</th>
<th>Required Approval from Assistant Dean for Clerkship Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal Day</td>
<td>May be used at the discretion of the student (example: illness, physician appt., conference time, etc.). <strong>Total days off any one rotation (including personal days off) cannot exceed 2 on any one 4-week rotation.</strong></td>
<td>5 total days per academic year (July-June)</td>
<td>While personal days may be used at the discretion of the student, the total days off any one rotation (including personal days off) cannot exceed 2 on any one 4-week rotation, i.e., students cannot use all 5 days on one rotation.</td>
<td>No</td>
</tr>
<tr>
<td>Jury Duty</td>
<td>Court documentation must accompany the Clerkship Program Absence Request Form</td>
<td>N/A</td>
<td>Jury duty, when obligated, is not considered a personal day absence.</td>
<td>Yes</td>
</tr>
<tr>
<td>Hospital-organized community events</td>
<td>Example: Special Olympic Physicals</td>
<td>N/A</td>
<td>These events would be considered part of the rotation and not a personal day absence.</td>
<td>No</td>
</tr>
<tr>
<td>Examination</td>
<td>COMLEX USA Level 2, CE/USMLE Step 2, CK/Canadian MCCEE</td>
<td>1 day</td>
<td>Students have the time off to take the examination only. Students should be reporting to rotation before/after examination.</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>COMAT/NBME shelf examinations</td>
<td></td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>Prolonged Illness, Bereavement, Maternity Leave</td>
<td>Medical related absence or bereavement</td>
<td>Determined on a case-by-case basis</td>
<td>Students must contact the Assistant Dean for Clerkship Education directly (<a href="mailto:enright4@msu.edu">enright4@msu.edu</a>) to discuss time off rotations.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Clerkship Program Excused Absence Request Forms:** **Class of 2024:** Once appropriate approval signatures are obtained, forms must be uploaded to the ‘Excused Absences’ folder within each student’s Medtrics profile. Students should maintain a copy for their records. **Class of 2023:** Once appropriate approval signatures are obtained, forms should be maintained for your records in the event they are later requested or required.
Supervisors of the Medical Students in the Clinical Setting
The MSUCOM curriculum includes required clinical experiences in a variety of clinical learning environments. The role of the student is to participate in patient care in ways that are appropriate for the student’s level of training and experience and to the clinical situation. The student’s clinical activities will be under the supervision of licensed physicians. This supervising physician may delegate the supervision of the medical student to a resident, fellow, or other qualified healthcare provider; however, the supervising physician retains full responsibility for the supervision of the medical students assigned to the clinical rotation and must ensure his/her designee(s) are prepared for their roles for supervision of medical students.

The physician supervisor and his/her designee(s) must be members in good standing in their facilities. They must have a license appropriate to his/her specialty of practice and be supervising the medical student within that scope of practice as delineated by the credentialing body of the facility.

Level of Supervision/Responsibilities
Clinical supervision is designed to foster progressive responsibility as a student progresses through the curriculum, with the supervising physicians providing the medical student opportunity to demonstrate progressive involvement in patient care. MSUCOM students will be expected to follow clinical policies of the facility regarding medical records and clinical care. Medical student participation in patient history/physical exam, critical data analysis, management, and procedures will include, but are not limited to, factors such as:

- The student’s demonstrated ability
- The student's level of education and experience
- The learning objectives of the clinical experience

First- and second-year medical students will be directly supervised at all times (supervising physician or designee present or immediately available). Third- and fourth-year medical students will be supervised at a level appropriate to the clinical situation and that student’s level of experience. For some tasks, indirect supervision may be appropriate for some students. Direct supervision would be appropriate for advanced procedures.

Supervising physicians will provide medical students with timely and specific feedback on performance. The supervising physician will complete a mid-rotation evaluative discussion with the medical student. Supervising physicians will complete a summative evaluation and are encouraged to contact the course/clerkship director with any gaps in student performance.
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Medical students with any concern regarding clinical, administrative, and educational or safety issues during his/her rotation will be encouraged to contact the supervising physician or clerkship/course director.

MSUCOM STUDENT HANDBOOK

The Student Handbook is published electronically by MSUCOM for students in the Doctor of Osteopathic Medicine program. This handbook does not supersede other Michigan State University or College of Osteopathic Medicine policies, regulations, agreements, or guidelines. The Handbook is updated annually during the summer semester, with changes effective when posted. Any subsequent changes are effective as of the date of issuance.

Students shall adhere to Michigan State University and College of Osteopathic Medicine policies, procedures, agreements, and guidelines. Violations of any regulation are subject to disciplinary action, up to and including program dismissal.

COMMON GROUND FRAMEWORK FOR PROFESSIONAL CONDUCT

The Common Ground Framework provides the MSUCOM community with a reminder of the unity of mind, body, and spirit that underlines the field of osteopathic medicine. The framework is a set of guiding, foundational principles that underpin professional conduct and integrity and applies to all professionals at work within the shared college community, independent of their specific roles or responsibilities.

This framework is built around the acronym CORE, representing Collaboration, Opportunity, Responsibility, and Expertise. Each domain encompasses values and examples of how they are demonstrated.

- **Collaboration**: Working together with others
  - Interactive: Interact effectively and respectfully with people you encounter; demonstrate honesty, genuineness, humility, and compassion
  - Dynamics and Communication: Demonstrate respect, civility, and courtesy in communication; communicate effectively with diverse individuals and groups for a variety of purposes using available technologies; employ active listening
  - Use of Feedback: Identify sources of feedback; deliver and receive effective feedback for initiatives, evaluations and assessments, quality improvements, conflict resolution, and peer review

- **Opportunity**: Encouraging an environment of mutual support
  - Shared Leadership: Exhibit advocacy for self and others; accept situational leadership as needed; establish mutual support and respect; participate as a support for others regardless of title or position
  - Problem-solving: Recognize and define problems; analyze data; implement solutions; evaluate outcomes; include the perspectives of others
  - Decision-making: Fulfill commitments; be accountable for actions and outcomes; discuss and contribute your perspective in group settings; listen to multiple viewpoints prior to making a decision
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- **Responsibility:** Supporting a shared culture of accountability
  - Effective Use of Time and Resources: Invest time, energy, and material resources efficiently in order to provide effective services; demonstrate integrity and stewardship of resources
  - Critical Thinking Skills: Recognize and differentiate facts, illusions, and assumptions; question logically; identify gaps in information and knowledge
  - Mindfulness and Self-Care: Actively engage in surrounding circumstances and activities; self-assess, self-correct, and self-direct; identify sources of stress and develop effective coping behaviors

- **Expertise:** Having relevant skills or knowledge
  - Core of Knowledge: Develop core professional knowledge; apply the knowledge in clinical, academic, and administrative settings
  - Technical Skills: Show competency and proficiency in performing tasks that are integral to the scope and practice of your profession; identify needs and resources for learning; continually see new knowledge and understanding in your profession

**MEDICAL STUDENT RIGHTS AND RESPONSIBILITIES**
The rights and responsibilities of students enrolled in MSUCOM are defined by the medical colleges of Michigan State University, including the College of Osteopathic Medicine, the College of Human Medicine, and the College of Veterinary Medicine. Students enrolled in the professional curricula of these colleges are identified as “medical students”. These colleges collectively define “Medical Student Rights and Responsibilities” (MSRR). This document addresses academic rights and responsibilities, governance, procedures for complaints, due process, and other topics. The current version is available on the MSU Spartan Life website at the address below: [http://splife.studentlife.msu.edu/medical-student-rights-and-responsibilities-mssr](http://splife.studentlife.msu.edu/medical-student-rights-and-responsibilities-mssr)

**MSU EMAIL**
To facilitate communication from faculty and staff to students, students are required to have a functioning MSU email address. Students are responsible for checking their MSU email accounts daily and maintaining their MSU mailboxes so that messages can be received.

Forwarding MSU email to another email account or failure to check email are not valid excuses for missing a deadline or other requirements of the clinical education program.

Further, students must use secure email when working in a hospital, clinic, or other health care setting if discussion of patient information is involved. MSUNet (msu.edu) email is secure; many web-based email systems including Hotmail, Gmail, and Yahoo are not.

**COURSE GRADES**
P/Pass – means that credit is granted, and that the student achieved a level of performance judged to be satisfactory by the department according to the student's didactic and clinical performance.
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**ET/Extended Grade** – means that a final grade (‘Pass’ or ‘No Grade’) cannot be determined due to one or more missing course requirements. The ET grade will be changed to a final grade once all the completed course requirements have been submitted to and processed by MSUCOM (either to the department or Clerkship Team). An ‘ET’ grade will NOT remain on a student’s transcript.

**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 department according to the student’s didactic and clinical performance.

**N Grade Policy**
Students who fail this rotation will have to repeat the entire rotation and fulfill all (clinical and academic) requirements.

**STUDENT EXPOSURE PROCEDURE**
A form has been developed by the University Physician to report incidents of exposure, e.g. needle sticks, mucous membrane exposure, tuberculosis exposure, etc., and it may be found on the Clerkship Medical Education page of the MSUCOM website [here](https://com.msu.edu/current-students/clerkship-medical-education). Contact Assistant Dean for Clerkship Education, Dr. Susan Enright (enright4@msu.edu), if exposure incident occurs.

**STUDENT VISA**
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 (RCPD) at 517-884-RCPD, or on the web at [www.rcpd.msu.edu](http://www.rcpd.msu.edu). Once a student’s eligibility for (clinical and/or testing) accommodation(s) are determined, the student may be issued a **Verified Individualized Services and Accommodations** (VISA) form.

Students must present their VISA forms to the Clerkship Team (COM.Clerkship@msu.edu) at the start of the semester in which they intend to use their accommodations (for tests, projects, labs, etc.). Accommodation requests received after the semester onset will be honored whenever possible.

If modifications, updates, or extensions to an existing VISA form are made after the semester begins, it is the responsibility of the student to submit the newest version to the Clerkship Team if he/she intends to utilize the accommodation going forward.
## PATIENT PROCEDURE LOG

Student Name: _________________________________ Student ID#: _________________

<table>
<thead>
<tr>
<th>Procedure</th>
<th>#Required</th>
<th>Date</th>
<th>Supervisor Initials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observe 2 Echocardiograms</td>
<td>1.</td>
<td>1.</td>
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<td></td>
<td>2.</td>
<td>2.</td>
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<tr>
<td>Observe 2 cardiac caths unless not in a cath center hospital</td>
<td>1.</td>
<td>1.</td>
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<td></td>
<td>2.</td>
<td>2.</td>
<td></td>
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<tr>
<td>Interpret 10 EKGs for 2 week and 20 EKGs for 4 weeks</td>
<td>1.</td>
<td>1.</td>
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<td>10.</td>
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<tr>
<td>Evaluate 5 Geriatric Pt. (age &gt; 65) with cardiac complaints</td>
<td>1.</td>
<td>1.</td>
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<td></td>
<td>5.</td>
<td>5.</td>
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<tr>
<td>Participate in the evaluation of 10 patients with CHF – stable or unstable</td>
<td>1.</td>
<td>1.</td>
<td></td>
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<td></td>
<td>2.</td>
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<tr>
<td>Procedure</td>
<td>#Required</td>
<td>Date</td>
<td>Supervisor Initials</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>-----------</td>
<td>------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Interpret 10 Chest x-rays for 2-week rotation</td>
<td>1. 2. 3. 4. 5. 6. 7. 8. 9. 10.</td>
<td>1. 2.</td>
<td></td>
</tr>
<tr>
<td>Interpret 20 Chest x-rays for 4-week rotation</td>
<td>1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Observe the evaluation or insertion of a pacemaker</td>
<td>N/A</td>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>Evaluate 2 patients for Electrophysiologic complaints</td>
<td>N/A</td>
<td>1. 2.</td>
<td></td>
</tr>
<tr>
<td>Observe 5 stress tests (doesn’t matter the type)</td>
<td>1. 2. 3. 4. 5.</td>
<td>1. 2.</td>
<td></td>
</tr>
</tbody>
</table>
### SUMMARY OF GRADING REQUIREMENTS

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Submission Method</th>
<th>Pass</th>
<th>Extended Grade</th>
<th>No Pass</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient Types and Procedure Log</strong></td>
<td>See page at the end of syllabus and upload into D2L Drop Box for the course</td>
<td>11:59 pm Last Sunday of Rotation</td>
<td>NA</td>
<td>Failure to complete any of the required tasks by the due date provided.</td>
</tr>
<tr>
<td><strong>Clinical Shift Schedule</strong></td>
<td>Online D2L Drop Box</td>
<td><strong>Not to be submitted until the last Friday-Sunday of the rotation, and must be the schedule you worked, not what you were scheduled to work</strong></td>
<td>NA</td>
<td>Failure to complete any of the required tasks by the due date provided.</td>
</tr>
<tr>
<td><strong>50 Question Harrison’s Quiz (for 2-week rotation)</strong></td>
<td>Online D2L Drop Box</td>
<td>11:59 pm Last Sunday of the Rotation</td>
<td>NA</td>
<td>Failure to complete any of the required tasks by the due date provided.</td>
</tr>
<tr>
<td><strong>100 Question Harrison’s Quiz (for 4-week rotation)</strong></td>
<td></td>
<td><strong>70% required to pass</strong></td>
<td>NA</td>
<td>Failure to complete any of the required tasks by the due date provided.</td>
</tr>
<tr>
<td><strong>Attending Evaluation of Clerkship Student (Class of 2023)</strong></td>
<td>Can be accessed via the “Attending Evaluation” link in Kobiljak online schedule. Email completed evaluation to <a href="mailto:COM.Clerkship@msu.edu">COM.Clerkship@msu.edu</a></td>
<td><strong>Student may receive “Below Expectations” in up to one (1) subcategory</strong></td>
<td>Will be the conditional grade until all requirements of this rotation are met</td>
<td>Receives two (2) or more “Below Expectations” within the subcategory sections.</td>
</tr>
<tr>
<td><strong>Attending Evaluation of Clerkship Student (Class of 2024)</strong></td>
<td>Attendings receive an automated email link connecting them to their assigned evaluation(s) within Medtrics, where they may access and submit the electronic form(s) directly</td>
<td><strong>Student may receive “Below Expectations” in up to one (1) subcategory</strong></td>
<td>Will be the conditional grade until all requirements of this rotation are met</td>
<td>Receives two (2) or more “Below Expectations” within the subcategory sections.</td>
</tr>
</tbody>
</table>

**Notes:**
- All required tasks must be completed by the due date provided.
- Failure to complete any of the required tasks by the due date provided.
- Receiving two (2) or more “Below Expectations” within the subcategory sections.
- Receiving comments that indicate below expectations of performance.
- See Unsatisfactory Clinical Performance above.
<table>
<thead>
<tr>
<th>Student Evaluation of Clerkship Rotation (Class of 2023)</th>
<th>Can be accessed and submitted via the “Student Evaluation” link in Kobiljak online schedule.</th>
<th>Completed 100% by 11:59 pm the last day of the rotation</th>
<th>Will be the conditional grade until all requirements of this rotation are met</th>
<th>Failure to complete and submit within 14 days from the end of the rotation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Evaluation of Clerkship Rotation (Class of 2024)</td>
<td>Can be accessed and submitted electronically by students within the dashboard of their Medtrics profiles</td>
<td>Completed 100% by 11:59 pm the last day of the rotation</td>
<td>Will be the conditional grade until all requirements of this rotation are met</td>
<td>Failure to complete and submit within 14 days from the end of the rotation</td>
</tr>
</tbody>
</table>