OST 624

Essentials of Diabetes

CLERKSHIP ELECTIVE ROTATION
(Nonclinical Rotation)

INSTRUCTOR OF RECORD

Kim Pfotenhauer, D.O.
pfotenha@msu.edu

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For questions about content or administrative aspects of this course, please contact:

COURSE ASSISTANT (CA)
Michelle Hardy
Hardymi1@msu.edu

At 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 syllabus provides an overview of rotation goals and objectives designed to help you gain an understanding of the breadth and scope of diabetes care. As you progress through this virtual rotation, you will gain knowledge to treat patients with diabetes across the spectrum—from children to the elderly. Please make sure to review this syllabus in its entirety to ensure understanding of the rotation format, syllabus content, and MSUCOM expectations.

ELECTIVE COURSE SCHEDULING

Preapproval
- This course does not require preapproval from the IOR. The student must contact their Clerkship Resource Specialist (CRS) at com.clerkship@msu.edu with the following details of the rotation:
  - Proposed dates of rotation
  - Number of virtual electives already taken
- The CRS will confirm eligibility and contact the IOR and CA with approval and scheduled rotation dates.

Required Prerequisites
- This course does not require any prerequisite courses.

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.
  - 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

This rotation has been designed to cover primary topics in diabetes. Each week will focus on several didactic topic of importance. This is a virtual rotation 2-week elective for 3 credits. All coursework will be completed on D2L. This course may be taken for a maximum of 2 weeks.

This course will fulfill elective requirements but does not count towards either medicine or surgery requirements.

GOALS AND OBJECTIVES

GOALS
The goal of this course is to increase the knowledge of the care of patients with all types of diabetes.

OBJECTIVES
1. Review the pathophysiology of type 1 and type 2 diabetes
2. Discuss medications for patients with diabetes
3. Differentiate treatment options and goals for diverse populations with diabetes
4. Review and appraise landmark trials in diabetes care.
5. Discuss clinical guidelines and apply that knowledge to patient cases
6. Describe unique considerations to special patient populations with diabetes
7. Recognize emergent situations and support clinical decision making.
8. Create a presentation designing a new drug for diabetes treatment

COMPETENCIES

1. Osteopathic Principles and Practice
   - Apply knowledge of the biomedical sciences, such as functional anatomy, physiology, biochemistry, histology, pathology, and pharmacology, to support the appropriate application of osteopathic principles and OMT
2. Medical Knowledge
   - Use scientific concepts to evaluate, diagnose, and manage clinical patient presentations and population health
3. Patient Care
   - Formulate a management plan based on evaluation of the best evidence from the medical literature and other resources related to the findings obtained during the subsequent to the patient encounter
4. Practice-Based Learning and Improvement
   - Describe and apply evidence-based medical principles and practices. Interpret features and meanings of different types of data, quantitative and qualitative, and different types of variables, including nominal, dichotomous, ordinal, continuous, ratio, and proportion.
   - Critically evaluate medical information and its sources and apply such information appropriately to decisions relating to patient care.

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):
All Modules will be available on D2L

American Diabetes Association Standards of Medical Care in Diabetes 2021
Available at professional.diabetes.org
SUGGESTED STUDY RESOURCES

Recommended Texts
Harrison’s Principles of Internal Medicine

Available at AccessMedicine through MSU Library:
https://accessmedicine-mhmedical-com.proxy2.cl.msu.edu/

Recommended Websites
Diabetes Pro: professional.diabetes.org

ROTATION REQUIREMENTS

<table>
<thead>
<tr>
<th>REQUIREMENT</th>
<th>SUBMISSION METHOD</th>
<th>DUE DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Quizzes</td>
<td>D2L</td>
<td>Weekly by Sunday at 11:59pm</td>
</tr>
<tr>
<td>Final presentation</td>
<td>D2L</td>
<td>Last day of rotation at 11:59pm</td>
</tr>
<tr>
<td>Student Evaluation of Clerkship Rotation</td>
<td>Kobiljak</td>
<td>Last Day of Rotation</td>
</tr>
</tbody>
</table>

WEEKLY READINGS/OBJECTIVES/ASSIGNMENTS

Weekly Modules:
Each week will contain 2 Modules on D2L focusing on the following topics:
- Pathophysiology of Diabetes
- Treatment of Diabetes: Medications
- Treatment of Diabetes: Insulin
- Clinical Guidelines
- Landmark Studies
- Considerations in Special Populations
Final Presentation
Each student will complete a 15-minute presentation that will focus on designing a medication for diabetes. The presentation will be recorded and uploaded to D2L.

QUIZZES
Weekly quizzes will be assigned on D2L to assess the material from each module.

ONLINE MODULES OR CONFERENCES
Weekly self-paced webinars will be assigned from the American Diabetes Association

ROTATION EVALUATIONS

Attending Evaluation of Student
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.

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.

Students should keep a copy of the evaluation and leave the original with the Medical Education Office at the clinical training site where that office will review, sign, and forward the completed form to the COM Clerkship Team. 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. Be sure you are using the correct form.

Student Evaluation of Clerkship Rotation
Students will submit their rotation evaluations electronically at the conclusion of every rotation by accessing their online evaluation system at:

http://hit-filemakerwb.hc.msu.edu/Clerkship/login_student.html

Unsatisfactory Clinical Performance
The Instructor of Record and/or the Assistant Dean for Clerkship Education will review/investigate a student’s performance on a rotation when a concern is raised by the supervisor(s), and when the Attending Evaluation of Clerkship Student contains any below expectation marks within the professionalism area, any unsatisfactory written comments, or a total of two or more below average marks on the evaluation.
Professionalism concerns, as well as accolades, will also be referred to the MSUCOM Spartan Committee Clearinghouse for resolution, per MSUCOM’s Common Ground Framework for Professional Conduct.

CORRECTIVE ACTION PROCESS
If a student does not successfully complete the rotation requirements of the course, the student will receive an ET grade and be permitted to go through a ‘Corrective Action’ process.

The following assignments are eligible for corrective action and will be due no later than 14 days after the last day of the rotation at 11:59pm:

- Quizzes
- Final presentation

The student is responsible for contacting the Course Assistant (on the first page of this syllabus) if they believe missing assignments were reported in error or are unclear about the Corrective Action process.

Please note that while it is the responsibility of the student to ensure the Attending Evaluation of the Clerkship Student is completed, this requirement may extend beyond the corrective action date. Additionally, in the event of a COMAT failure on first attempt, the corrective action for the repeat COMAT may extend beyond 14 days.

As determined by the Instructor of Record, the student will receive an N grade for the course if all assignments and the Corrective Action process are not completed successfully within 14 days after the last day of rotation at 11:59pm (with the exception of the Attending Evaluation). Additionally, a letter of unprofessional behavior for late submission of assignments will be sent to the MSUCOM Spartan Community Clearinghouse.

If a student successfully completes the Corrective Action process, as determined by the Instructor of Record, the student will receive credit for the deficient academic grading requirement(s) and be eligible for a rotation grade change from ET to Pass (pending the Attending Evaluation of the Clerkship Student and COMAT score).

BASE HOSPITAL REQUIREMENTS
Students are responsible for completing all additional requirements set by the hospital/clinical site in which the student is completing the rotation. Students are not responsible for reporting results of requirements outside the ones listed above to the college.

STUDENT RESPONSIBILITIES AND EXPECTATIONS
This is a virtual rotation. Students are responsible for self-paced learning and timely completion of assignments within the rotation.

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

OVERVIEW
Michigan State University College of Osteopathic Medicine (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 vacations already appearing in schedules and should only request 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 these requirements according to the respective course syllabus.

GENERAL POLICY

• All absences from rotations must be **excused absences** obtained by completing the *Clerkship Program Excused Absence Request Form*.
  - Appropriate signatures must be obtained from both the attending physician and the student coordinator at the rotation site.
  - MSUCOM Assistant Dean for Clerkship Education must approve absences for prolonged illnesses, bereavement, research presentations/conferences, or absences exceeding the maximum time off any one rotation.
  - Once appropriate approval signatures are obtained, forms should be maintained for your records in the event they are requested or required at a later date.

• **Unexcused absences** are absences taken without the proper completion of the *Clerkship Program Excused Absence Request Form*, or absences outside of those listed 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).

<table>
<thead>
<tr>
<th>Length of rotation</th>
<th>Maximum number of days off</th>
<th>Should an absence exceed these limits, the student is responsible for requesting additional days from the Assistant Dean for Clerkship Education via email (<a href="mailto:com.clerkship@msu.edu">com.clerkship@msu.edu</a>) prior to the absence.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 weeks</td>
<td>2 days</td>
<td></td>
</tr>
<tr>
<td>2 weeks</td>
<td>0 days</td>
<td></td>
</tr>
</tbody>
</table>

**Exception for residency interviews from October to January in Year 4 only**

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 during Year 4 for interview purposes only. If interview absences exceed these totals, the student must request additional days off from the MSUCOM Instructor of Record (IOR) for the course/rotation by submitting a *Clerkship Program Excused Absence Request Form* to the Course Assistant (CA). Contact information for the IOR and CA are found on the first page of the respective MSUCOM course syllabus.
<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>Illness Medical/Dental appointments Wedding, family graduations (additional reasons must be discussed with the Asst Dean for Clerkship Education prior to request)</td>
<td>5 total days per year (individual events must comply with the max of 2 days off any 4-week rotation)</td>
<td>Vacations must be planned during allotted vacation time in schedule. Vacations are not acceptable personal day absences.</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 MCEE</td>
<td>1 day</td>
<td>Students should be reporting to rotation before/after examination</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>COMAT/NBME shelf examinations</td>
<td>Time required to complete exam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conference/Research Presentation</td>
<td>Research presentation on core rotation</td>
<td>Travel and presentation time only</td>
<td>While on required/core rotations, no excused absences for any professional meeting will be allowed unless the student is presenting research in which they have participated. Required for request to Asst Dean for Clerkship Education: conference agenda, location, date of presentation, invitation, or confirmation of presentation by conference staff, proposed dates of absence.</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Conference or research presentation while on an elective rotation</td>
<td>3 days on a 4-week elective rotation</td>
<td>Student must submit Clerkship Program Excused Absence Request Form and copy of conference agenda to the Assistant Dean for Clerkship Education to attend one (1) professional meeting on a 4-week rotation. Students cannot miss rotation days for a conference during a 2-week elective rotation.</td>
<td>Yes</td>
</tr>
<tr>
<td>Prolonged Illness, Bereavement,</td>
<td>Medical related absence or bereavement</td>
<td>TBD</td>
<td>Students-contact the Assistant Dean for Clerkship Education to discuss time off rotations</td>
<td>Yes</td>
</tr>
<tr>
<td>Maternity Leave</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Clerkship Program Excused Absence Request Forms* - Once appropriate approval signatures are obtained; forms should be maintained for your records in the event they are requested or required at a later date.
POLICY FOR MEDICAL STUDENT SUPERVISION

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 and 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 the 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 factors, but not limited to:

- 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 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.

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.
STATEMENT OF PROFESSIONALISM
Principles of professionalism are not rules that specify behaviors but guidelines that provide direction in identifying appropriate conduct. These principles include the safety and welfare of patients, competence in knowledge and skills, responsibility for consequences of actions, professional communication, confidentiality, and lifelong learning for maintenance of professional skills and judgments. Professionalism and professional ethics are terms that signify certain scholastic, interpersonal and behavioral expectations. Among the characteristics included in this context is the knowledge, competence, demeanor, attitude, appearance, mannerisms, integrity, and morals displayed by the student to faculty, peers, patients, and colleagues in other health care professions.

Students are expected to conduct themselves at all times in a professional manner and to exhibit characteristics of a professional student.

STUDENT RIGHTS AND RESPONSIBILITIES
Each individual student is responsible for their behavior and is expected to maintain standards of academic honesty. Students share the responsibility with faculty for creating an environment that supports academic honesty and principles of professionalism. Proper relationship between faculty and student are fundamental to the college’s function and this should be built on mutual respect and understanding together with shared dedication to the education process. It is a fundamental belief that each student is worthy of trust and that each student has the right to live in an academic environment that is free of injustice caused by dishonesty. While students have an obligation to assist their fellow students in meeting the common goals of their education, students have an equal obligation to maintain the highest standards of personal integrity.

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.

FACULTY RESPONSIBILITIES
It is the responsibility of the college faculty to specify the limits of authorized aid (including but not limited to exams, study aids, internet resources and materials from senior students) in their syllabi, and it is the responsibility of students to honor and adhere to those limits. Course instructors shall inform students at the beginning of the semester of any special criteria of academic honesty pertinent to the class or course.
It is the responsibility of the clinical faculty to provide students with ongoing feedback during rotation upon request. Clinical faculty are generally recommended (though not required) to limit student assigned duty hours from 40 to 60 hours weekly (and not exceeding 60 hours). Both faculty and students are to be treated fairly and professionally to maintain a proper working relationship between trainer and trainee.

**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.

**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 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, if exposure incident occurs: enright4@msu.edu.

**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 has been determined, the student may be issued a **Verified Individualized Services and Accommodations** (VISA) form. Students must present this VISA form to the Clerkship Team ([COM.Clerkship@msu.edu](mailto:COM.Clerkship@msu.edu)), A-332 East Fee Hall, at the start of the semester in which they intend to use their
accommodations (for tests, projects, labs, etc.). Accommodation requests received after this date will be honored whenever possible.

If updates or modifications to an existing VISA form are made after the semester begins, it is the responsibility of the student to submit an updated version to the Clerkship Team if he or she intends to use the new accommodation going forward.
<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>Weekly Quizzes</td>
<td>D2L</td>
<td>Completed weekly by Sunday at 11:59pm with an 80% score per quiz</td>
<td>Will be conditional until all requirements are met.</td>
<td>Failure to complete and/or corrective action.</td>
</tr>
<tr>
<td>Final Presentation</td>
<td>D2L</td>
<td>Completed and uploaded to D2L by 11:59 on the last day of rotation</td>
<td>Will be conditional until all requirements are met.</td>
<td>Failure to complete and/or corrective action.</td>
</tr>
<tr>
<td>Student Evaluation of the Rotation</td>
<td>Kobiljak</td>
<td>Completed on the last day of the rotation</td>
<td>Will be conditional until all requirements are met.</td>
<td>Failure to complete within two weeks of the last day of rotation.</td>
</tr>
</tbody>
</table>