THE UNIVERSITY OF TENNESSEE
HEALTH SCIENCE CENTER

COLLEGE OF MEDICINE

Clerkship Grading and Feedback 2023-2024

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Objectives

Differentiate	Differentiate between formative feedback and summative assessments in the clinical years.
Describe	Describe the individual components that comprise grades in clerkships, as well as correction factors.
Explain	Explain how summative evaluations assess expected EPA progression through the M3 curriculum.

Feedback

What is Formative Feedback?

Practice tests or questions

TBL groups with feedback

Standardized patients/OSCEs
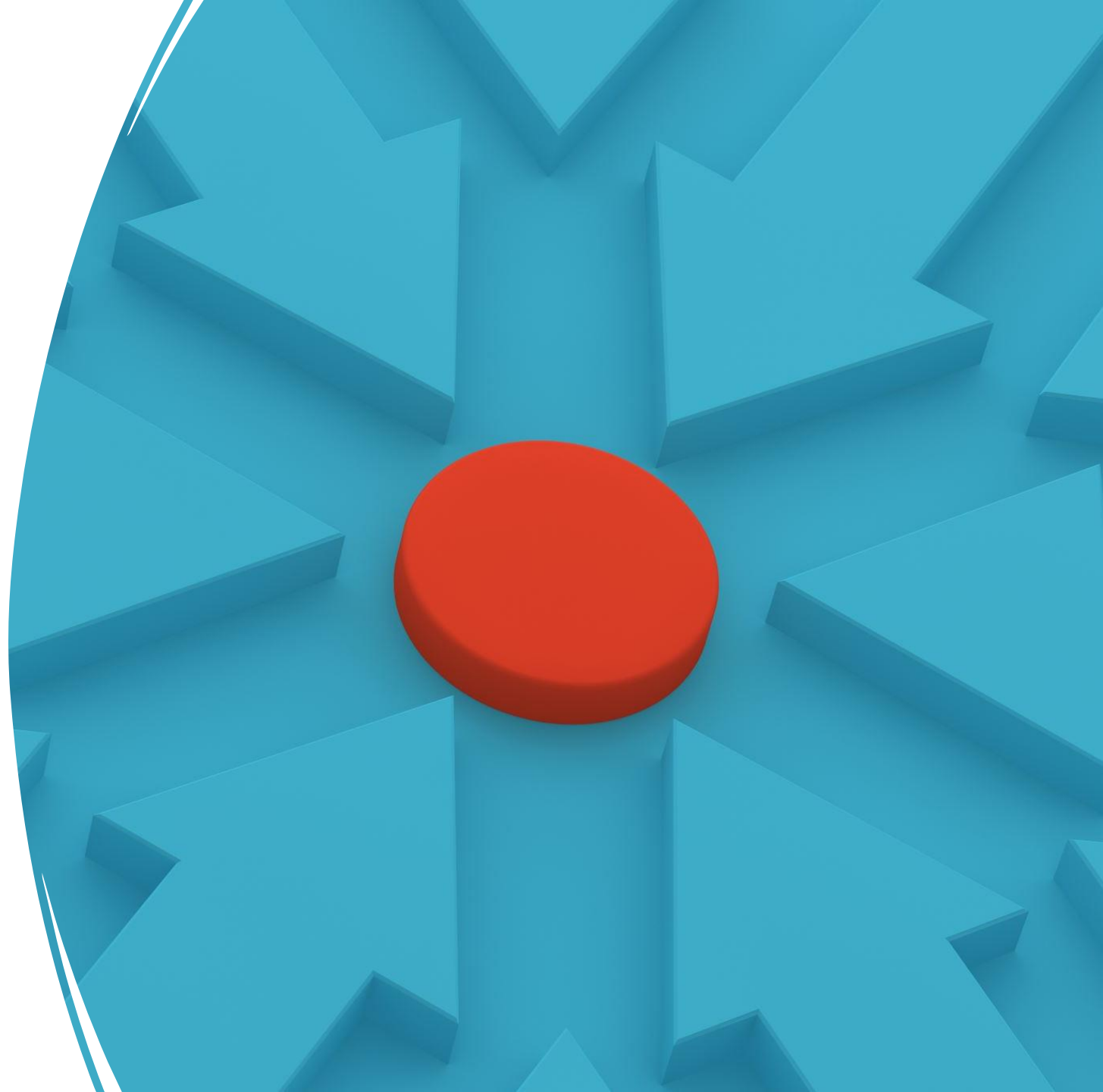
Feedback on notes or presentations

Tips/pointers while performing a procedure

Mid-rotation feedback

End of rotation feedback

How often should you receive feedback?

- Often!
- Mid-rotation
- End of rotation

Who should provide feedback?

- Attendings
- Fellows
- Residents
- Interns
- Nurses and other staff
- Clerkship leadership
- Patients!!

How to make the most of feedback

✔ Be proactive

◎ Identify your own goals and learning objectives

❓ Ask for feedback!

🧠 Feedback is part of the learning process

🏃 Incorporate changes into your practice

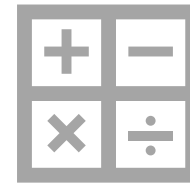# Clerkship Grading, Assessment, and Summative feedback

Grading in the pre-clinical years

Primarily based on Multiple-Choice Question Exams

Score probably reflects what a student would do on a similar test on any given day.

Caveat - complicated by the additional uneven skill of MCQT Test Taking ability.

Three components of clerkship grading

Medical knowledge (expertise)

Clinical skills and performance

Professionalism

Grading in the clinical years is more complex

Clinical skills and performance are assessed by faculty members and residents.

Evaluations should be fair, just, and objective; however, subjectivity and perception may influence feedback.

While this may seem unfair, this is exactly how patients and peers judge physicians in the real world.

Medical Knowledge (Expertise)

Equally important is knowledge and reasoning ability → expertise.

Patients come to physicians for compassion and ethical treatment, but they expect *expertise* as well.

Expertise is more easily quantified through MCQT, which allows for national comparisons.

It's vital that all three aspects contribute to the summative clerkship grade

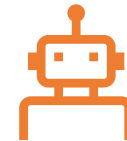Students often excel in one aspect or the other.

Good physicians must be competent in all three areas.

Grading therefore must fairly evaluate all three domains.

Allows students to identify strengths and weaknesses.

It informs residencies which students would best fit their discipline.

It satisfies the public that medical schools are producing competent physicians.

How to achieve this goal?

Clinical evaluations → assess clinical skills, performance, and professionalism

Exams (NBME Subject exams, Oral exam) → assess medical knowledge and expertise
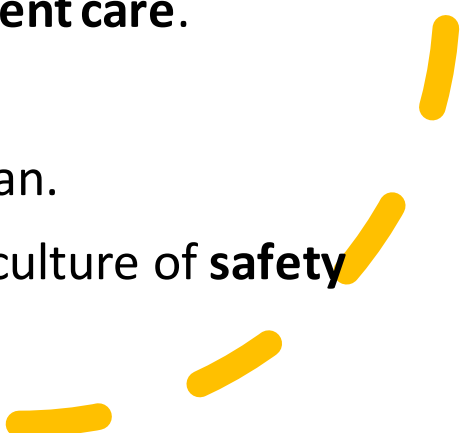
Clinical Evaluations

Moved to evaluations based on Entrustable Professional Activities (EPAs) in 2019.

EPAs are a set of 13 core skills or tasks that students should be able to do by the end of medical school.

Each clerkship evaluates a sampling of EPAs.

Numeric adjustment is applied to each clinical evaluation based on student's level of experience (i.e. what number clerkship they are on)

Entrustable Professional Activities (EPAs)

1. Gather a **history** and perform a **physical exam**.

2. Develop a prioritized **differential diagnosis**.

3. **Recommend and interpret** common diagnostic and screening **tests**.

4. Enter and discuss **orders and prescriptions**.

5. Provide **documentation** of a clinical encounter.

6. Provide an **oral presentation**.

7. Form **clinical questions** and retrieve evidence.

8. Give or receive **patient handover**.

9. Participate as a member of an **inter-professional team**.

10. **Recognize** a patient requiring **urgent/emergent care**.

11. Obtain **informed consent**.

12. Perform the **general procedures** of a physician.

13. Identify **system failures** and contribute to a culture of **safety and improvement**.

Leave the following blank if you are the evaluator.

I am submitting this evaluation on behalf of:

[   ]

It is appropriate for me to evaluate this student (i.e. no familial, personal, doctor-patient relationship).

○ Yes   ○ No

Please choose **the option that best describes this student.** Please note that scores will be adjusted according to the individual student's level within the academic year (or 3rd year).

Complete Evaluation for Rubric "2023-24 EPA 01: History & Physical"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Obtain a complete and accurate history in an organized fashion. (1 point)	○ Gathers insufficient or overly exhaustive information	○	○ Gathers some information or occasionally too much information	○	○ Obtains an acceptable history in a mostly organized fashion.	○	○ Obtains a complete and accurate history in an organized fashion.
Identify, describe, and document normal and abnormal physical exam or mental status exam findings. (1 point)	○ Misses key findings.	○	○ Identifies, describes, and documents normal findings.	○	○ Identifies, describes, and documents normal and abnormal physical exam or mental status exam findings.	○	○ Routinely identifies, describes, and documents normal and abnormal findings and uses the exam to help prioritize the working differential diagnoses.

Complete Evaluation for Rubric "2023-24 EPA 02: Differential Diagnosis"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Organizing a Differential Diagnosis (1 point)	○ Unable to formulate a Differential Diagnosis despite coaching	○	○ Can construct a basic differential diagnosis with coaching	○	○ Constructs a basic differential diagnosis for common presentations independently	○	○ Independently constructs and prioritizes differential diagnosis for common presentations
Clinical Reasoning (1 point)	○ Unable to articulate a clinical impression	○	○ Inconsistently able to articulate a clinical impression	○	○ Consistently able to articulate a reasonable clinical impression but has difficulty integrating new information as it emerges.	○	○ Consistently able to articulate a reasonable clinical impression and update accordingly as new information emerges.

Complete Evaluation for Rubric "2023-24 EPA 03: Recommend & interpret tests"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Provide rationale for decision to order tests, taking into account available evidence-based practices and patient preference (1 point)	○ Unable to justify or recognize use of testing	○	○ Inappropriately recommends tests	○	○ Recommends mostly appropriate and patient-centered testing	○	○ Recommends consistent evidence-based and patient-centered testing
Interpret results of basic studies (1 point)	○ Cannot explain clinical importance of results	○	○ Fails to recognize or react to abnormal results	○	○ Interprets and reports clinically relevant results	○	○ Distinguishes common, insignificant abnormalities from clinically important ones

Complete Evaluation for Rubric "2023-24 EPA 04: Orders & prescriptions"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Demonstrate an understanding of common orders and prescriptions (1 point)	○ Lacks basic knowledge needed to propose orders or prescriptions	○	○ Unable to articulate rationale behind orders and prescriptions	○	○ Articulates rationale behind orders or prescriptions	○	○ Articulates how an order or prescription will change management

Complete Evaluation for Rubric "2023-24 EPA 05: Document clinical encounter"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Prioritize and synthesize information (1 point)	○ Significant deficit(s) in content or organization	○	○ Misses some key information or contains multiple errors OR disorganized content	○	○ Contains key information in an organized fashion but includes unnecessary details or redundancies	○	○ Provides organized, accurate narrative that illustrates clinical reasoning
Professional expectations for documentation (1 point)	○ Excessive and inappropriate use of copy/paste function OR copies information directly from resident/attending notes OR unable to complete notes in a reasonable time.	○	○ Includes copy/paste without revision and/or has difficulty meeting expectations for note turnaround times	○	○ Notes are accurate, timely, and updated with appropriate use of templates	○	○ Notes are accurate, timely, and appropriately updated; goes beyond basic template by incorporating multidisciplinary perspectives in notes

Complete Evaluation for Rubric "2023-24 EPA 06: Oral presentation of clinical encounter"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Data organization and presentation skills (1 point)	○	○	○	○	○	○	○
	Presentation is disorganized, or is often not prepared to present.		Presentation is somewhat organized, but key elements are incompletely or exhaustively addressed.		Presentation is organized and succinct but the assessment and/or plan are underdeveloped.		Presentations are consistently organized, succinct, and prioritized with a well-reasoned assessment and plan
Ability to adjust the oral presentation to the situation or the audience (1 point)	○	○	○	○	○	○	○
	Does not make appropriate adjustments.		Makes some appropriate adjustments, but key elements are mishandled.		Makes appropriate adjustments to length or complexity with prompting.		Consistently makes appropriate adjustments to the length and complexity depending on the clinical situation and audience.

Complete Evaluation for Rubric "2023-24 EPA 07: Evidence-based medicine"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Develop well-formed, pertinent clinical questions (1 point)	○ Unaware of medical knowledge gaps Not actively engaged in asking questions or seeking new information	○	○ Occasionally asks relevant questions with prompting	○	○ Begins to independently form clinical questions	○	○ Develops well-formed, pertinent clinical questions and demonstrates active engagement in learning by asking questions or seeking new resources
Utilize appropriate evidence-based resources to answer clinical questions (1 point)	○ Unaware of available resources Declines to use new information technologies due to unfamiliarity or unwillingness	○	○ Uses vague or inappropriate search strategies Unable to cite primary source where information was gleaned	○	○ Routinely refers to peer reviewed resources to acquire relevant information	○	○ Interprets, articulates, and applies acquired information to clinical situation

Complete Evaluation for Rubric "2023-24 EPA 08: Handovers"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Document and update a paper or electronic handover tool (1 point)	○ Provides information that includes multiple errors or is missing important data	○	○ Provides patient information that is disorganized or too detailed	○	○ Provides relevant information with occasional "holes"	○	○ Provides relevant information that is prioritized, complete and succinct

Complete Evaluation for Rubric "2023-24 EPA 09: Interprofessionalism"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Multidisciplinary team communication and respect (1 point)	○ Dismisses input from nonphysician members of team	○	○ Exhibits limited participation with or does not consistently incorporate input from other team members	○	○ Engages actively with other members of the team and incorporates their input	○	○ Discusses recommendations and collaborates with interprofessional team members when appropriate

Complete Evaluation for Rubric "2023-24 EPA 10: Recognize & initiate urgent care"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Recognize severity of a patient's illness and indications for escalating care (1 point)	○ Unable to recognize medical emergencies Fails to seek help when a patient requires urgent or emergent care	○	○ Recognizes abnormal vitals and decompensating patients	○	○ Recognizes decompensating patient and initiates appropriate emergent intervention (e.g. BLS)	○	○ Responds appropriately to clinical deterioration and seeks timely help

Complete Evaluation for Rubric "2023-24 EPA 11: Informed consent"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Describe the key elements of informed consent: indications, contraindications, risks, benefits, alternatives and potential complications of the intervention (1 point)	○ Unable to articulate any of the elements of informed consent	○	○ Misses multiple key elements of informed consent due to limited understanding	○	○ Describes the key elements of informed consent, but may require some prompting	○	○ Able to articulate the key elements of informed consent accurately and completely

Complete Evaluation for Rubric "2023-24 EPA 12: Perform general procedures"

	Not meeting expectations for third-year clerkships (5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	Exceeding expectations for third-year clerkships (10)
Demonstrates technical skills required for the procedure (1 point)	○ Unable to perform the procedure secondary to lack of preparation or understanding.	○	○ Unable to complete procedure alone due to having only basic technical skills / understanding	○	○ Performs important aspects of the procedure with close supervision	○	○ Consistently performs procedure correctly
Understands the anatomy, physiology, indications, contraindications, risks, benefits, alternatives, and potential complications of the procedure (1 point)	○ Displays obvious knowledge gaps or unprepared for procedure	○	○ Verbalizes key procedural elements with prompting	○	○ Verbalizes key procedural elements without prompting	○	○ Verbalizes key procedural elements, anticipates complications, and considers alternatives for the procedure

Complete Evaluation for Rubric "2023-24 CC Professionalism"

	(5.5)	(6.75)	(7.55)	(7.85)	(8.45)	(8.95)	(10)
Identifies limitations and gaps in knowledge, skill and experience **Seeks and incorporates feedback to improve** (1 point)	○ May demonstrate overconfidence by not seeking help or lacks awareness of limitations May become defensive	○	○ Demonstrates limited help-seeking behavior to fill gaps in knowledge, skill, and experience	○	○ Open and accepting of feedback and makes an effort to improve	○	○ Initiates help-seeking behaviors and seeks feedback often; recognizes limitations and integrates input from others to improve
Professional attributes and responsibilities (1 point)	○ Frequently inappropriate behavior (unavailable, not reliable, inappropriate attire, erratic attendance, or socially aggressive)	○	○ Occasional lapses in professional behavior (poor confidentiality, poor choice of language, occasionally late, poor communication)	○	○ Meets expected standards for professionalism (punctual, demonstrates mutual respect with patients and team members)	○	○ Exceeds high professional standards (follows through on tasks, punctual, behaves ethically, maintains poise under pressure, admits mistakes and changes behavior).
Demonstrates duty and accountability to patients, the healthcare team, and the profession of medicine (1 point)	○ Does not fulfill obligations of seeing and reporting on assigned patients Insensitive, disrespectful, or arrogant	○	○ Fulfills basic requirements of seeing patients May have difficulty establishing rapport with patients, families, or team members	○	○ Is an active member of team going beyond basic requirements for patient care Relates well to most patients, families, and team members	○	○ Assumes true ownership of his/her patients and anticipates patient and team needs Easily establishes rapport with patients, families, and team members

Overall Narrative Feedback

Summative Narrative Comment (not automatically included on the MSPE/Dean's letter): Please include at least 4 sentences with specific examples when possible. Please include discussion of at least 1-2 strengths and 1-2 areas for improvement. Please include a comment for any EPA marked below average.

I have provided the student verbal and/or written feedback.

◯ Yes   ◯ No

Clinical Score Adjustment

- The purpose of this adjustment is to account for level of experience in evaluation.

- Typically, clinical performance substantially improves as students gain more experience in clerkships.

- Points are added to the final clinical evaluation scores based on the number of core clerkships previously completed.

- This will help ensure that evaluation scores on your first few clerkships will not be excessively low due to inexperience.

- Likewise, it will reassure evaluators that they can simply select the options that best describe the students' performance regardless of expectations, which can be widely subjective.

Clinical score adjustment

- Based on the past 3 years of data, average performance <mark>increased</mark> about *3 total percentage points* from the 1st clerkship to the 7th, therefore, for 2023-2024, the following adjustments will be applied:

# of Core Clerkships Completed	Percentage points added (2023-24)
0	3
1	2.5
2	2
3	1.5
4	1
5	0.5
6	0

Assessing Medical Expertise - Exams

What is a "shelf" exam?

- NBME Subject Exam

Why do we use this?

- National standards and validation
- USMLE-style questions to prepare you for Step 2 CK

How are the exams structured?

- 100-110 questions
- 2 hrs 40 minutes

Minimum Passing and Honors Scores

- The NBME reports scores as "raw scores" which are mean equated percent correct scores, like a percent correct.

Minimum passing score	5th percentile
Minimum score to be eligible for an "A" in the clerkship	50th percentile
Score that is equal to an "A" on the shelf exam.	75th percentile

What about students at the beginning vs. the end of clerkships?

- Students naturally improve their performance on the shelf exams throughout the year.

- These cutoff scores will be based on the "Quarter" of the year and based on how many clerkships a student has completed.

- NBME reports all of these scores!

# of Clerkships Completed	Score used
0-1	Q1
2-3	Q2
4-5	Q3
6-7	Q4

Family Medicine Shelf Exam Cut-off Scores 2023-2024

Quarterly Conversions		Q1	Q2	Q3	Q4
Number of clerkships completed PRIOR to the START of THIS rotation		0-1	2-3	4-5	6
Raw shelf score = 89.5 (i.e. A on the shelf)	75th percentile	79	79.7	81	81
Raw shelf score to be eligible for an A in the clerkship	50th percentile	74	75	76	76
Minimum passing raw shelf score	5th percentile	61	63	63	63

Internal Medicine Shelf Exam Cut-off Scores 2023-2024

Quarterly Conversions		Q1	Q2	Q3	Q4
Number of clerkships completed PRIOR to the START of THIS rotation		0-1	2-3	4-5	6
Raw shelf score = 89.5 (i.e. A on the shelf)	75th percentile	79.5	81	81	81
Raw shelf score to be eligible for an A in the clerkship	50th percentile	73	75	75	75
Minimum passing raw shelf score	5th percentile	57	59	60	60

Neurology Shelf Exam Cut-off Scores 2023-2024

Quarterly Conversions		Q1	Q2	Q3	Q4
Number of clerkships completed PRIOR to the START of THIS rotation		0-1	2-3	4-5	6
Raw shelf score = 89.5 (i.e. A on the shelf)	75th percentile	85.5	86.2	86.2	86.2
Raw shelf score to be eligible for an A in the clerkship	50th percentile	80	81	82	82
Minimum passing raw shelf score	5th percentile	66	67	67	67

OB/GYN Shelf Exam Cut-off Scores 2023-2024

Quarterly Conversions		Q1	Q2	Q3	Q4
Number of clerkships completed PRIOR to the START of THIS rotation		0-1	2-3	4-5	6
Raw shelf score = 89.5 (i.e. A on the shelf)	75th percentile	82.4	83	83.2	83.2
Raw shelf score to be eligible for an A in the clerkship	50th percentile	77	78	78	78
Minimum passing raw shelf score	5th percentile	63	64	64	64

Pediatrics Shelf Exam Cut-off Scores 2023-2024

Quarterly Conversions		Q1	Q2	Q3	Q4
Number of clerkships completed PRIOR to the START of THIS rotation		0-1	2-3	4-5	6
Raw shelf score = 89.5 (i.e. A on the shelf)	75th percentile	83	83.6	84.3	84.3
Raw shelf score to be eligible for an A in the clerkship	50th percentile	77	78	79	79
Minimum passing raw shelf score	5th percentile	62	63	64	64

Psychiatry Shelf Exam Cut-off Scores 2023-2024

Quarterly Conversions		Q1	Q2	Q3	Q4
Number of clerkships completed PRIOR to the START of THIS rotation		0-1	2-3	4-5	6
Raw shelf score = 89.5 (i.e. A on the shelf)	75th percentile	87.5	87.7	88	88
Raw shelf score to be eligible for an A in the clerkship	50th percentile	83	84	84	84
Minimum passing raw shelf score	5th percentile	71	71	72	72

Surgery Shelf Exam Cut-off Scores 2023-2024

| Quarterly Conversions		Q1	Q2	Q3	Q4
Number of clerkships completed PRIOR to the START of THIS rotation		0-1	2-3	4-5	6
Raw shelf score = 89.5 (i.e. A on the shelf)	75th percentile	78.5	80	80.2	80.2
Raw shelf score to be eligible for an A in the clerkship	50th percentile	72	74	74	74
Minimum passing raw shelf score	5th percentile	57	59	59	59

Weighting clinical and exam scores

THE COMPETENT STUDENT EXCELS IN ALL THREE AREAS – PATIENT CARE, ETHICS/PROFESSIONALISM, AND EXPERTISE.

HOWEVER, IF ALL STUDENT CLINICAL EVALUATIONS ARE GLOWING, THEN THE SHELF EXAM, BY DEFAULT, BECOMES THE DISCRIMINATING FACTOR.
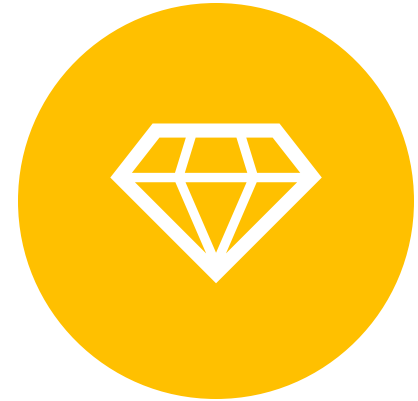
OUR GOAL IS TO CREATE CLINICAL EVALUATIONS THAT ARE DISCERNING AND TO WEIGH IT SUFFICIENTLY TO COUNTERBALANCE THE OBJECTIVITY OF THE SHELF SCORE.

Review of Grading - Ongoing

- Beginning in the fall semester of 2019, large scale effort to review all semester of clerkship grades and determine fairness in weight of the shelf exam and percentile cutoffs.

- Resulted in a fairer distribution of A's across clerkships.

- We continue to review grades on a semi-annual and annual basis and adjust with each new academic year to ensure fair and accurate grading.

Lastly, apples and oranges ≠

- The NBME reports the raw scores (mean equated percent correct score).
- When using these for calculation of the final grade (along with clinical evaluations, oral/slide exams, etc), it is essential to convert the raw score to the same format we use for grading.
- **All "raw scores" are then converted to the UTHSC grading scale to be included in the final grade calculation.**
- UTHSC Clerkship Grading Scale:

 =

A = 89.5-100
B = 78.5-89.49
C = 67.5-78.49
F < 67.49

Shelf Score Conversion

- The purpose of the conversion is to apply the raw shelf scores, which are on variable scales, to a normative (compared to national peer performance) and standardized scale (0-100%). This allows comparison of students' performance across clerkships and in relation to their peers nationally.

- 75th percentile aligns with 89.5% (equivalent of an A on the shelf).

- 5th percentile aligns with 67.5% (cutoff for passing).

- Note: Recall that the 50% is the minimum cutoff to be eligible for an A in the clerkship.

Shelf score conversion formula

- Here is the formula for converted shelf score:

$$89.5 - [(75^{th}\%ile - \text{Raw Shelf Score}) * 22 / (75^{th}\%ile - 5^{th}\%ile)]$$

- Notes: The percentiles are variable for each clerkship each year. The 22 is derived from the difference between an A and F (89.5-67.5) in the UT grading scale.

- Example for RSS of 78 in 3rd Clerkship (Surgery)

$$89.5 - [(80 - 78)*22/(80-59)] = 87.4$$

Quarterly Conversions		Q1	Q2	Q3	Q4
Number of clerkships completed PRIOR to the START of THIS rotation		0-1	2-3	4-5	6
Raw shelf score = 89.5 (i.e. A on the shelf)	75th percentile	78.5	80	80.2	80.2
Raw shelf score to be eligible for an A in the clerkship	50th percentile	72	74	74	74
Minimum passing raw shelf score	5th percentile	57	59	59	59

Why don't we just give all A's?!
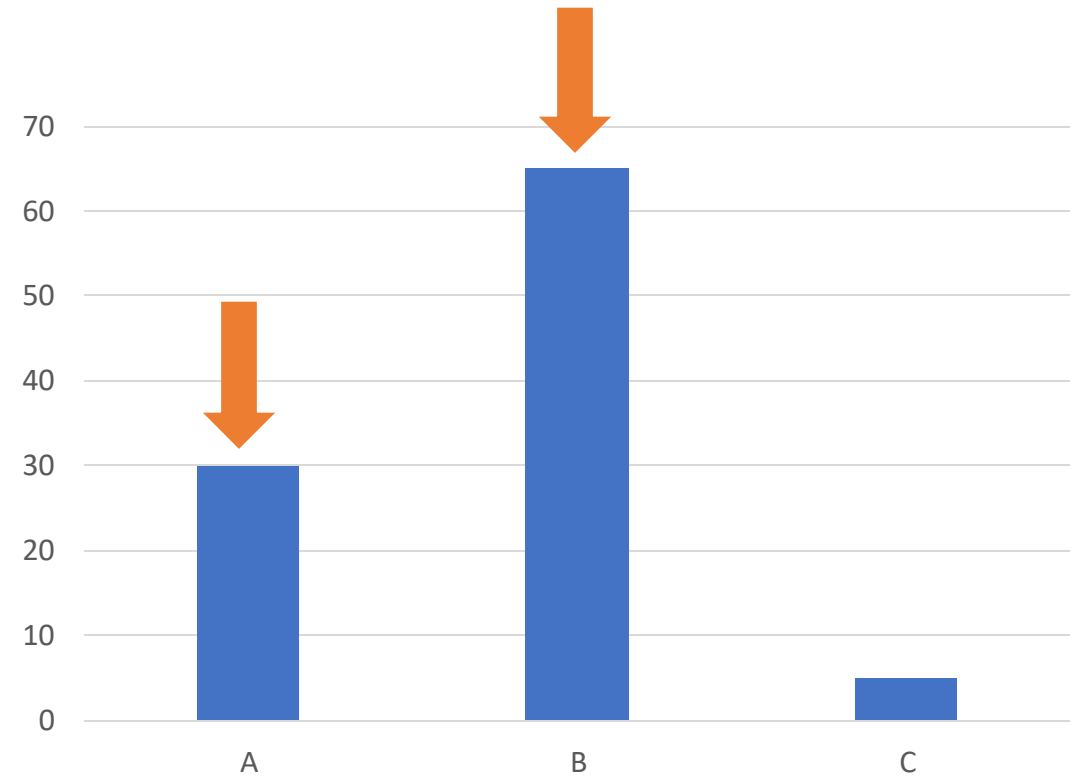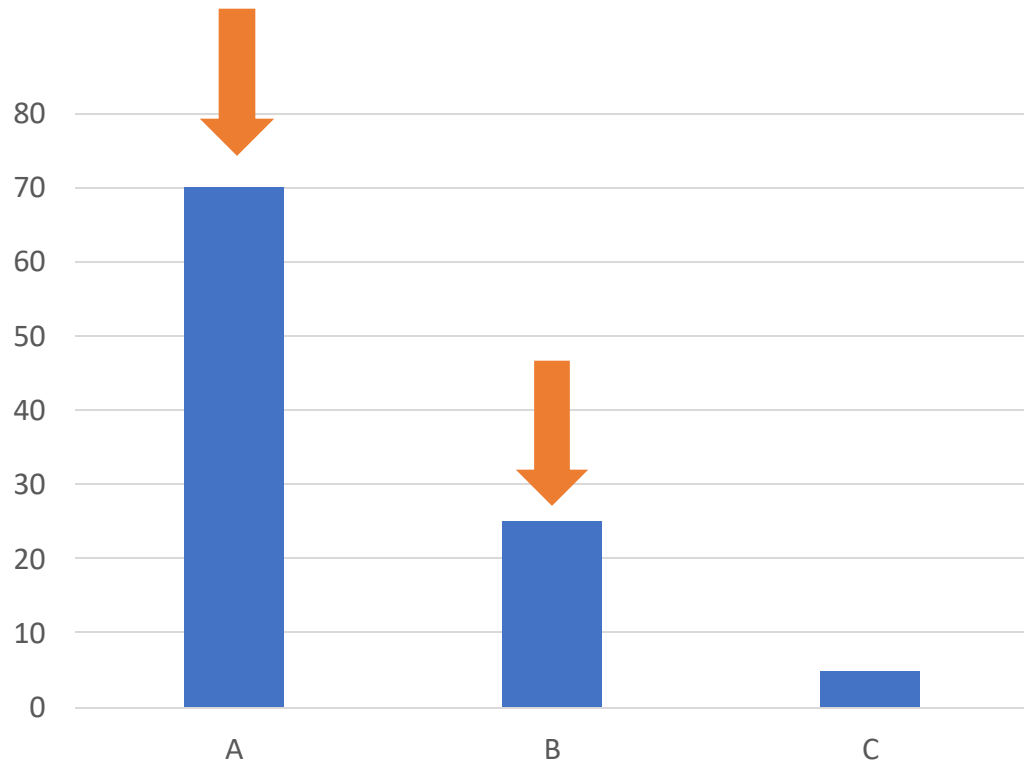
Correct weighting

- Potential outcomes
  - Super nice, hard working student but average performance on the shelf
    - Clerkship Grade B
  - Never available and only putting in the minimal work on the ward in order to be off studying for the shelf which they blow out of the water
    - Clerkship Grade B
  - Excellent performance on the wards, well integrated into the team, barely makes above the cutoff for honors on the shelf
    - Clerkship Grade A
- The student must excel in all areas to receive an A in the clerkship.

Why should we grade at all?

- To reduce reliance on USMLE Step scores.

- Because residencies DO look at the MSPE (Dean's Letter) to see who will be a good fit for their program.

- Most importantly, the only way for a student to improve their skills is by receiving valid, useful, timely, specific, discerning feedback.

Questions? Email us!

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