



**COURSE GRADES: WHAT EVERY MSUCOM STUDENT SHOULD KNOW**

**Do course grades matter?**

Simply put, yes. Statistical analyses of performance data from current MSUCOM students and recent graduates reveal: (1) A strong, direct relationship between a student's average preclerkship course percentage and their COMLEX Level 1 score (e.g., by the end of semester 6, the Pearson's coefficient of correlation ( $r = 0.75$ ), and (2) Average course percentages for students who passed COMLEX Level 1 on their first attempt are significantly higher than average course percentages for those who did not pass.

The bottom line is that course grades do indeed matter because they tend to reflect the same types of factors that also lead to success on board exams: content knowledge (information, facts, details), cognitive skills (problem-solving, analytical thinking, clinical reasoning), study behaviors (goal-setting, planning, prioritizing, scheduling, effort), and mental state (focus, resiliency, conscientiousness, attitude, mental health). *As residency programs become more competitive, there will be greater emphasis placed on student academic performance: course grades as well as board scores (COMLEX and USMLE).*

Courses taken in the MSUCOM D.O. program are graded using the Pass/No grade system: on the Official MSU Transcript, each completed course, in both the Preclerkship and Clerkship Curricula, will have a grade listed as a P or an N. In addition, each MSUCOM student has a Student Grade Report generated by the College, which lists for each completed course in the Preclerkship Curriculum both the student's course percentage and course percentile rank, as well as the student's cumulative score and overall class rank by quintile, determined by the cumulative score. *Residency programs will have access to both the Official MSU Transcript as well as the MSUCOM Student Grade Report, which is incorporated into the Medical Student Performance Evaluation (MSPE).*

The P-N grade system creates a quandary for many medical students who, as a rule, are familiar with a numerical (4.0 scale) or letter grading (ABCD) system. Some mistakenly assume that obtaining a passing score is sufficient. Others find that the P-N grade system makes it difficult to sustain a high level of performance because there is no obvious benefit of

high achievement. Many students simply do not know what level of academic performance to aim for in order to maximize their competitiveness and minimize their risk.

Quantitative measures of academic performance fall into two basic categories: relative and absolute. Examples of relative measures include percentile (quintile) rank and "curved" grading scales. Examples of absolute measures include percentages and "straight" grading scales. With relative measures, students within a cohort (e.g., graduating class) are compared to one another; no matter how well all students perform, only one student can be at the 99<sup>th</sup> percentile. Focusing on relative performance can foster an overly competitive environment and can also be demoralizing for some. It is a point of pride that MSUCOM students are extremely generous and helpful to one another—this does not need to change. The primary competition for residency slots will not be from other MSUCOM students. In contrast to percentile rank (class rank), in a straight grading scale there exists the *potential for all students to excel; this is the goal.*

**Student tool for gauging academic performance and setting performance achievement goals**

The grading scale presented below is provided as a supplemental tool to give students a more detailed picture of their performance and what it might mean for their career. This grading scale can be used by students to set performance goals that are in line with their career aspirations. It **does not represent a student's official MSUCOM grade** and it will not be used to assign grades in MSUCOM courses.

The table shows the predictive relationship between average end-of-semester course percentages in the MSUCOM Preclerkship Curriculum and COMLEX Level 1 scores. For example, by the end of Semester 6, a student whose average course percentage exceeds 92.5% (4.0 range) has a 95% chance of scoring between 517-757 on COMLEX Level 1. The table also shows that for a student with a 2.0 grade or lower (<85%) in the MSUCOM Preclerkship Curriculum, the 95% prediction interval for COMLEX Level 1 includes failing scores.

**Table: Cumulative Average Course Percentage as a Predictor<sup>1</sup> of COMLEX Level 1 Score<sup>2</sup>**

| Percentage <sup>3</sup><br>Range <sup>4</sup> | Grade   | 95% Prediction Interval for COMLEX Level 1 scores |            |            |            |            |            |
|---|---------|---|------------|------------|------------|------------|------------|
|   |         | Semester 1  | Semester 2 | Semester 3 | Semester 4 | Semester 5 | Semester 6 |
| (92.5, 100]                                   | 4.0 (A) | 472 – 764   | 494 – 756  | 507 – 758  | 512 – 759  | 517 – 757  | 517 – 757  |
| (90.0, 92.5]                                  | 3.5     | 422 – 713   | 452 – 716  | 463 – 714  | 461 – 706  | 467 – 707  | 467 – 706  |
| (87.5, 90.0]                                  | 3.0 (B) | 394 – 684   | 413 – 676  | 421 – 673  | 425 – 671  | 427 – 667  | 428 – 668  |
| (85.0, 87.5]                                  | 2.5     | 369 – 660   | 401 – 664  | 394 – 646  | 398 – 643  | 401 – 640  | 403 – 642  |
| (82.5, 85.0]                                  | 2.0 (C) | 337 – 628   | 360 – 623  | 374 – 626  | 364 – 610  | 367 – 606  | 366 – 605  |
| (80.0, 82.5]                                  | 1.5     | 315 – 606   | 339 – 602  | 339 – 591  | 331 – 576  | 339 – 578  | 340 – 580  |
| (77.5, 80.0]                                  | 1.0 (D) | 293 – 585   | 320 – 584  | 331 – 563  | 309 – 555  | 297 – 537  | 296 – 536  |
| (75.0, 77.5]                                  | 0.5     | 310 – 603   | 301 – 564  | 301 – 553  | 290 – 537  | 295 – 536  | 294 – 535  |
| 75>   | 0.0 (F) | 286 – 593   | 290 – 561  | 265 – 526  | 211 – 484  | 212 – 488  | 233 – 500  |

<sup>1</sup>Details regarding the statistical analysis are available in the Office of Academic and Career Guidance.

<sup>2</sup>When COMLEX Level 1 is taken after semester 6.

<sup>3</sup>Percentages exclude longitudinal courses: Osteopathic Patient Care (OPC), Osteopathic Manipulative Medicine (OMM), and Young and Aging Adult

<sup>4</sup>Percentage ranges are listed in interval notation, for example, (85.0, 87.5] includes all percentages >85.0% (greater than but not including 85%), and ≤87.5 (less than or equal to 87.5%). (YAA).