



Senado
Académico
*Academic
Senate*

Universidad de Puerto Rico, Recinto de Ciencias Médicas
University of Puerto Rico, Medical Sciences Campus

**2025-2026
Certification 058**

I, Mayra Olavarria Cruz, Interim Executive Secretary of the Academic Senate of the Medical Sciences Campus of the University of Puerto Rico,

Certify:

That the Academic Senate, at its regular meeting of June 4, 2026, after receiving the Report of the Academic Affairs Committee, agreed to:

- Approve the document *Institutional Domains and Student Learning Competencies*, as amended.

And, for the record, I issue and forward this Certification under the seal of the Medical Sciences Campus of the University of Puerto Rico, in San Juan, Puerto Rico, this 8th day of June 2026.

Mayra Olavarria Cruz, PhD.
Interim Executive Secretary

MOC/mmr

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University of Puerto Rico | Medical Sciences Campus
Deanship for Academic Affairs
**INSTITUTIONAL STUDENT LEARNING DOMAINS
AND COMPETENCIES**

Reviewed by CIPE on March 18, 2026 | Certification 058, 2025-26 AS

I. Introduction

In alignment with the University of Puerto Rico's institutional policies on continuous assessment (Certification #110, 2024-2025 GB, Article V, section B, item #6), the standards set forth by the Middle States Commission on Higher Education (MSCHE, Standard III and V), and academic excellence, this document outlines the campus-wide student learning competencies adopted by the Medical Sciences Campus. These **Institutional Student Learning Domains and Competencies** serve as a foundational framework to guide academic programs in their development, implementation, and evaluation of learning outcomes across disciplines.

The institution-wide student learning domains were first developed and approved by the Institutional Assessment Committee (CoIA, for its Spanish acronym) in years 2009-2011. These competencies were developed through a collaborative and consultative process involving faculty representatives from all schools, academic leadership, and assessment specialists. The process included a review of current literature, alignment with institutional mission, and consideration of the evolving demands of the health sciences professions. The result was the identification of six competencies of shared expectations that reflected both academic rigor and relevance to the broader societal context in which our graduates would serve (see Appendix A). These competencies have served the institution to ensure academic coherence and quality, foster holistic student development, and support its accreditation and accountability.

II. Purpose and Scope

The articulation and revision of the Institutional Student Learning Competencies reflect our commitment to fostering a culture of evidence-based decision-making, continuous improvement, and accountability. They are designed to ensure that all graduates, regardless of their field of study, acquire essential knowledge, skills, and attitudes that support their professional success and civic engagement. Furthermore, these domains and competencies support our compliance with accreditation requirements and institutional effectiveness efforts, while promoting coherence, transparency and mission accomplishment with the educational experience we offer. These will significantly contribute to aligning student learning with the institution's mission, vision, and with the academic excellence and innovation strategic goal of the MSC Strategic Plan.

Institutional Student Learning Competencies are utilized by all MSC academic programs and assessed according to program level: undergraduate, graduate, and first professional levels. It is expected that graduate and advanced degree students will accomplish higher skills in the domains than undergraduates such as associate degree level students. All academic programs must have courses or academic activities which include objectives

related to the learning domains and competency assessment measures which target substantial aspects of the Student Learning Competency based on degree level.

III. Core Institution-Wide Competencies for Student Learning Domains and Outcomes Revised

The following competency domains represent the essential knowledge, skills, and attitudes that all students graduating from the Medical Sciences Campus of the University of Puerto Rico are expected to demonstrate, regardless of their specific academic program. These competencies are aligned with the standards of the Middle States Commission on Higher Education and reflect the institution's mission to prepare health professionals who are competent, ethical, and committed to service.

1. Interdisciplinary or Interprofessional Collaboration

Is the ability to work effectively within and across disciplinary boundaries, contributing to team-based efforts by integrating diverse perspectives, knowledge, and skills. It includes effective and respectful communication, flexibility and openness, mutual respect and role clarity, shared decision-making, and the co-construction of knowledge to address complex challenges in healthcare, research, or community engagement.

Graduates will work effectively within and across different disciplinary professions by sharing ideas, respecting each other's roles, communicating clearly, being open and flexible, making decisions together, and combining knowledge to solve problems in areas of healthcare, research, or community work.

2. Professional Knowledge

Is defined by the theoretical and practical boundaries of a discipline according to its beliefs and values. It includes the central concepts of discipline, the phenomena of interest, the core problems, and the methods used to answer its questions. Even though it possesses focal characteristics, it contributes to the knowledge of other disciplines and is enriched and nourished by the knowledge coming from them. It refers to the understanding and application of the foundational theories, principles, practices, and standards relevant to a specific discipline or profession. It includes the ability to:

- Recognize and apply core concepts and methodologies within the field.
- Integrate evidence-based knowledge to inform decision-making.
- Demonstrate awareness of the evolving nature of the profession and its impact on society.

This competency supports students in becoming informed, responsible, and adaptable professionals who can contribute meaningfully to their field.

Graduates will demonstrate a deep understanding of the foundational theories, principles, and practices of their discipline.

Graduates will apply discipline's core concepts and methodologies to real-world problems, integrate evidence-based knowledge into decision-making, and critically reflect on the evolving nature of their profession while contributing meaningfully within their field.

3. Critical Thinking and Problem Solving

Critical thinking is the process of analyzing, synthesizing, and evaluating information, ideas, evidence, assumptions, and perspectives to make reasoned judgments and informed decisions. It involves reflective and independent thinking, intellectual curiosity, logical reasoning, and the use of evidence to assess the credibility, relevance, and implications of information in academic, clinical, and real-world contexts.

Problem solving is a goal-oriented process that involves overcoming obstacles to achieve a specific end state. It involves the process of identifying, defining, and addressing challenges through the application of critical thinking, evidence-based reasoning, creativity, and decision-making. It involves gathering and analyzing relevant information, generating and evaluating alternative solutions, implementing appropriate strategies, and assessing outcomes to develop effective and innovative solutions across clinical and in real-world settings.

Graduates will demonstrate the capacity for critical thinking through the rigorous analysis, synthesis, and evaluation of information, evidence, assumptions, and perspectives from different sources while applying judgment, intellectual curiosity, and logical reasoning to make informed decisions in academic, clinical, and societal contexts.

Graduates will demonstrate competency in solving complex problems through critical thinking and the systematic analysis of information, evaluation of evidence, development of innovative solutions, and implementation of effective strategies to address challenges in professional, clinical, and real-world settings.

4. Lifelong Learning

Is an organizing principle of all forms of education— both formal and informal. It is founded on the premise that learning is not limited to a specific stage of life but rather extends from birth to death (horizontal dimension). It encompasses all contexts in which individuals live and learn—such as family, community, workplace, education, and leisure (vertical dimension)—and is rooted in humanistic and democratic values. It emphasizes the assurance of meaningful learning (not just education) beyond the boundaries of the school system. It involves a commitment to proactively seeking opportunities for personal and

professional development and an engagement in continuous self-directed learning to remain current and effective in one's field. It encompasses a reflection on personal learning experiences, the ability to identify one's learning needs, set goals, seek and integrate feedback, and adapt to new knowledge and evolving practices in a rapidly changing global environment.

Graduates will demonstrate the ability to engage in continuous, self-directed learning by identifying personal and professional development needs, setting learning goals, seeking and integrating feedback, and adapting to new knowledge and practices across diverse contexts.

5. Human Sensitivity and Social Conscience

Refers to the capacity to perceive, understand, and respond empathetically to the emotions, needs, challenges, and experiences of others—whether individuals, communities, or population. It involves recognizing social dynamics, and acknowledging cultural, social, and economic diversity, as well as systemic inequalities and the impact of one's actions on others. This competency fosters empathy, compassion, responsibility, and respect for human dignity. It also includes advocating for health equity and promoting social justice, culturally responsive care, and individual and collective well-being.

Graduates will demonstrate the ability to recognize and critically analyze social, cultural, and economic factors influencing individual, community or population well-being, and apply empathetic, culturally responsive approaches to advocate health equity, social justice, and inclusive practices in diverse settings.

6. Ethical Values, Responsibility, and Professionalism

Ethics refers to a system of moral principles that guide human behavior and decision-making. It involves the application of values such as integrity, respect, justice, fairness, and responsibility to ensure actions are aligned with societal and professional standards. Ethical practice requires individuals to critically reflect on the consequences of their actions and uphold the dignity and rights of others. Responsibility refers to being accountable for own actions, duties and decisions. Professionalism encompasses the conduct, attitudes, and standards expected of individuals within a professional setting. This competence includes demonstrating accountability, reliability, confidentiality, responsible decision-making, respect, integrity and competence in interactions with others. Professionalism also involves adherence to ethical guidelines, effective communication, and a commitment to continuous improvement and excellence in one's field. The following four bioethical principles are used to guide the conduct of health professionals: beneficence, non-maleficence, respect for individual autonomy, and justice (Beauchamp & Childress, 2001). Furthermore, new principles of data ethics and artificial intelligence explainability in health care and research should be considered as they

develop. Graduates will adhere to professional codes of conduct and professional standards in all academic, clinical, and research activities.

Graduates will demonstrate ethical reasoning and responsible professionalism by applying core moral principles—including beneficence, non-maleficence, autonomy, justice, and artificial intelligence explainability—in academic, clinical, and research settings, while upholding integrity, accountability, and respect for human dignity in alignment with professional codes of ethics, standards of practice and data ethics.

7. Information and Digital Technology

The ability to locate, evaluate, provide, and effectively, legally and ethically use information, and digital tools to support academic inquiry, clinical practice, and lifelong learning. It includes recognizing when information is needed, understanding data privacy, digital citizenship (etiquette, security, safety, property) and the effective use of technology to enhance communication, professional practice, research, and decision-making processes.

Graduates will locate, evaluate, provide, and ethically use information and digital technologies, including artificial intelligence, to support learning, academic inquiry, communication, clinical decision-making process, and professional practice, while upholding principles of data privacy, digital citizenship, and responsible use of technological tools. At the graduate level, students are expected to demonstrate fluency in information and digital technologies.

8. Scientific Inquiry and Research

The capacity to understand, apply, and contribute to scientific knowledge through systematic inquiry. This involves formulating research questions, identifying emerging phenomena, interpreting data, evaluating evidence, and engaging in ethical research practices to advance knowledge and inform evidence-based practice.

Graduates will apply principles of scientific research, including the ability to formulate research questions, critically evaluate scientific evidence, identify emerging phenomena, and apply ethical research practices to generate, interpret, and communicate knowledge that informs evidence-based decision-making and advances their professional field according to their academic degree level. At the graduate level, students are expected to demonstrate fluency in research rigor and reproducibility.

IV. Assessment and Evaluation

All academic programs are responsible for assessing student learning outcomes at a course, program and institutional level. The student learning domains and

competencies established at the institutional level, included in this document, will be assessed, at least every five years. Program directors, coordinators and associate academic deans are responsible for overseeing the assessment and evaluation processes. The Institutional Assessment Committee (CoIA) will be responsible of collecting and analyzing at the institutional level the evaluation results. The Academic Affairs Deanship and the Council for Educational Integration and Planning will develop data recollection tools and will use evaluation results to make recommendations for continuous improvement actions and for reporting and providing feedback to stakeholders and to the institutional community.

See Appendix B for a guide format to assess curricular mapping to Institutional Student Learning Competencies.

V. Severability Provision

The statements of this document constitute a set of provisions designed to ensure that all graduates, regardless of their field of study, acquire essential knowledge, skills, and attitudes that support their professional success and civic engagement. The stated competencies will contribute to aligning student learning with the institution's mission, vision, and with the academic excellence and innovation strategic goal of the MSC Strategic Plan, while fostering a culture of evidence-based decision-making, continuous improvement, and accountability.

However, each clause operates independently; therefore, the invalidation of any clause by a governing body of the University shall not affect the validity or enforceability of the remaining rules or procedures contained in the document.

This document was revised and endorsed by the CoIA on February 19, 2026, and by the Council of Educational Integration and Planning (CIPE) on March 18, 2026.

Approved by the MSC Academic Senate on June 4th, 2026, by Certification 058 2025–2026.

Appendix A

Definiciones conceptuales de los elementos del perfil del egresado RCM según establecido en las metas institucionales 1 y 3

Interdisciplinaridad e interprofesionalismo - se refiere a la integración de modos de pensar o de conocimientos que provengan de otras de disciplinas diferentes a la práctica de la profesión o a disciplina propia. También incluye la colaboración con otros profesionales de la salud en la búsqueda e implantación de alternativas para atender problemas o situaciones relacionadas con la salud, demostrando flexibilidad y apertura, como parte de un equipo de trabajo, para acordar sus roles en el logro de un propósito común.

Aprobada por el CoIA el 10 de mayo de 2011

Dominio del saber - es el territorio definido por los límites teóricos y prácticos de una disciplina de acuerdo a sus creencias y valores. Incluye los conceptos centrales de la disciplina, los fenómenos de interés, los problemas centrales y los métodos utilizados para contestar sus interrogantes. Aun cuando posee características focales, aporta al conocimiento de otras disciplinas y se enriquece y nutre del conocimiento proveniente éstas, respondiendo de forma dinámica a los cambios que ocurren en otras áreas de conocimiento.

Aprobada por el CoIA el 10 de mayo de 2011

Aprendizaje de por vida¹ - es la capacidad para reflexionar de forma continua en función de determinar las necesidades personales de aprendizaje, buscar de forma eficiente y precisa las fuentes necesarias de información y poder evaluarlas críticamente; aplicar esta información para contestar preguntas, manejar grandes cantidades de evidencia científica y evaluar sus propias competencias y prácticas profesionales a base de la retro-comunicación interna y externa.

Aprobada por el CoIA el 10 de mayo de 2011

Aprendizaje a lo largo de la vida² ("lifelong learning") - es un principio organizativo de todas las formas de educación (formal, no formal e informal) con componentes mejor integrados e interrelacionados. Se basa en la premisa de que el aprendizaje no está confinado a un periodo específico de la vida, sino que va "de la cuna a la tumba" (sentido horizontal), considera todos los contextos en los que conviven las personas como familia, comunidad, trabajo, estudio, ocio, (sentido vertical), y supone valores humanísticos y democráticos como la emancipación y la inclusión (sentido profundo). Enfatiza el aseguramiento de los aprendizajes relevantes (y no sólo la educación) más allá del sistema escolar.

Definición de la UNESCO y cuya inclusión fue aprobada en diciembre de 2012

Social Consciousness³ - is the visible way in which people respond to social injustice in their lives and in the lives of others. It also determines how the future health professionals see themselves in relation to others and whether or not they become part of the solution to social issues.

Aprobada por el CoIA el 10 de mayo de 2011

Pensamiento crítico - conjunto de destrezas cognoscitivas y disposiciones afectivas que se usan para evaluar una situación, creencia o información tomando como base el conocimiento y la

¹ Traducción al español que el CoIA aprobó en mayo de 2011 para referirse al concepto "lifelong learning". En diversos documentos de la institución se usa "aprendizaje para toda la vida" y la UNESCO se refiere al concepto como "educación o aprendizaje a lo largo de la vida". Más tarde en 2012, el CoIA acordó incluir la definición de la UNESCO junto a la definición trabajada por el comité como una manera de ampliar la definición aprobada en reunión ordinaria de mayo de 2011.

² El término acuñado por la UNESCO en la década de los setenta y ochenta fue el de Educación a lo largo de la vida. Sin embargo, en 1996 la Organización de Cooperación y Desarrollo Económico (OCDE) así como el informe Delors enfatizaron nuevamente la importancia del aprendizaje, por lo que la UNESCO retomó el término de aprendizaje a lo largo de la vida y hoy bajo ese nombre se le denomina en la mayoría de los países.

³ Esta definición aprobada en inglés en mayo de 2011, más tarde fue traducida al español y aprobada en reunión ordinaria de diciembre de 2012. Véase traducción más adelante.

evidencia que lo apoya. Consiste en la habilidad para: reconocer problemas, proponer formas para solucionarlos, recoger información relevante, reconocer supuestos y valores, comprender y usar el lenguaje con precisión y claridad, interpretar e informar datos, evaluar evidencia y argumentos con el propósito de revisar las formas propias de pensar y formular juicios precisos en asuntos pertinentes a interrogantes, solución de problemas y toma de decisiones.

Aprobada por el CoIA el 10 de mayo de 2011

Aprobado por el Comité Institucional de Avalúo en reunión ordinaria del 10 de mayo de 2011.

Valores éticos son principios con respecto a los cuales las personas sienten un fuerte compromiso de conciencia y los emplean para juzgar lo adecuado de las conductas propias y ajenas. Los valores se proyectan a través de actitudes y acciones ante personas y situaciones concretas. Estos también sirven para orientar la acción humana. En el campo de la biomedicina se utilizan como guías del comportamiento de los profesionales de la salud, los siguientes cuatro principios bioéticos: beneficencia, no maleficencia, respeto a la autonomía de cada persona y justicia (Beauchamp y Childress, 2001). Los valores éticos, así como los derechos humanos, descansan sobre el deber sagrado de respetar siempre la dignidad humana.

Aprobada por el CoIA el 13 de diciembre de 2012

Sensibilidad humana – se refiere a la dimensión de nuestra conciencia moral que nos permite experimentar o sentirnos afectados ante situaciones en las que está en juego el bienestar humano. Tener sensibilidad humana implica la captación cognitiva o contemplativa de una situación así como sentirnos involucrados en ella y por lo tanto movidos a actuar porque está en juego el bienestar humano. Señala el grado en que un sujeto fusiona el humanismo con el pensamiento, la preocupación, el respeto, la consideración y el trato hacia las demás personas. Es decir, la sensibilidad humana implica simpatía, empatía, compasión y solidaridad para con los otros seres humanos. Comprende una capacidad reflexiva y la habilidad de salirse de la escena, en ciertos momentos, para poder discernir los asuntos que están en juego y apreciar las diferencias entre los puntos de vista bajo consideración. La sensibilidad humana se cultiva y se refina a lo largo de toda la vida.

Aprobada por el CoIA el 13 de diciembre de 2012

Conciencia social es la manera visible como las personas responden a la injusticia social en sus vidas y en las vidas de otros. También determina cómo los futuros profesionales de la salud se ven a sí mismos en relación a otros y si se convierten o no en parte de la solución a los asuntos sociales.

Aprobada por el CoIA el 13 de diciembre de 2012

Definiciones discutidas por Comité Institucional de Avalúo en reunión ordinaria del 27 de septiembre de 2012 previa aprobación con enmiendas a través de referéndum en línea (aprobación de enmiendas condicionada a consultas con Dr. Bonilla y Prof. González).

Definiciones con enmiendas aprobadas por el Comité Institucional de Avalúo en reunión ordinaria del 13 de diciembre de 2012.

Appendix B

Guide for Curriculum Mapping of Institutional Student Learning Outcomes

Academic Program: _____ Date of Assessment: _____

MSC School: _____

INSTITUTIONAL STUDENT LEARNING DOMAIN AND COMPETENCY	PROGRAM LEARNING OBJECTIVE / OUTCOME OR GRADUATE PROFILE STATEMENT	COURSES THAT SUPPORT COMPETENCY (List at Least One Course and No More than Three)	ASSESSMENT MEASURES (List at Least One and No More than Three)
Interdisciplinary or Interprofessional Collaboration <i>Graduates will work effectively within and across different disciplinary professions by sharing ideas, respecting each other's roles, communicating clearly, being open and flexible, making decisions together, and combining knowledge to solve problems in areas of healthcare, research, or community work.</i>			
Professional Knowledge <i>Graduates will demonstrate a deep understanding of the foundational</i>			

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<i>theories, principles, and practices of their discipline.</i> <i>Graduates will apply discipline's core concepts and methodologies to real-world problems, integrate evidence-based knowledge into decision-making, and critically reflect on the evolving nature of their profession while contributing meaningfully within their field.</i>			
Critical Thinking and Problem Solving <i>Graduates will demonstrate the capacity for critical thinking through the rigorous analysis, synthesis, and evaluation of information, evidence, assumptions, and perspectives from different sources while applying judgment, intellectual curiosity, and logical reasoning to make informed decisions in academic, clinical, and societal contexts.</i> <i>Graduates will demonstrate competency in solving complex problems through critical thinking and the systematic analysis of information, evaluation of evidence, development of innovative solutions, and implementation of effective strategies to address challenges in</i>			

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<i>professional, clinical, and real-world settings.</i>			
Lifelong Learning <i>Graduates will demonstrate the ability to engage in continuous, self-directed learning by identifying personal and professional development needs, setting learning goals, seeking and integrating feedback, and adapting to new knowledge and practices across diverse contexts.</i>			
Human Sensitivity and Social Conscience <i>Graduates will demonstrate the ability to recognize and critically analyze social, cultural, and economic factors influencing individual, community or population well-being, and apply empathetic, culturally responsive approaches to advocate health equity, social justice, and inclusive practices in diverse settings.</i>			
Ethical Values, Responsibility, Professional Behavior <i>Graduates will demonstrate ethical reasoning and responsible professional conduct by applying core moral principles—including beneficence, non-</i>			

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<i>maleficence, autonomy, justice, and artificial intelligence explainability—in academic, clinical, and research settings, while upholding integrity, accountability, and respect for human dignity in alignment with professional codes of ethics, standards of practice and data ethics.</i>			
Information and Digital Technology <i>Graduates will locate, evaluate, provide, and ethically use information and digital technologies, including artificial intelligence, to support learning, academic inquiry, communication, clinical decision-making process, and professional practice, while upholding principles of data privacy, digital citizenship, and responsible use of technological tools. At the graduate level, students are expected to demonstrate fluency in information and digital technologies.</i>			
Scientific Inquiry and Research <i>Graduates will apply principles of scientific research, including the ability to formulate research questions, critically evaluate scientific evidence, identify emerging phenomena, and apply ethical research practices to generate, interpret, and</i>			

INSTITUTIONAL STUDENT LEARNING DOMAIN AND COMPETENCY	PROGRAM LEARNING OBJECTIVE / OUTCOME OR GRADUATE PROFILE STATEMENT	COURSES THAT SUPPORT COMPETENCY (List at Least One Course and No More than Three)	ASSESSMENT MEASURES (List at Least One and No More than Three)
<i>communicate knowledge that informs evidence-based decision-making and advances their professional field according to their academic degree level. At the graduate level, students are expected to demonstrate fluency in research rigor and reproducibility.</i>			