OHSU School of Medicine - Graduate Studies

Student Learning Outcomes by Program

Program	Student Learning Outcome
Behavioral Neuroscience (MS-BEHN)	Accurately and professionally communicate results with others verbally and in writing.
	Collect and store data in accordance with good lab practices.
	Critically evaluate a defined body of knowledge relevant to their field.
	Demonstrate analytical skills.
	Design and conduct independent, innovative research in accordance with the scientific research method.

Program	Student Learning Outcome
Behavioral Neuroscience (MS-BEHN)	Identify significant and original problems that will impact human health.
Behavioral Neuroscience (PHD-BEHN)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.

Program	Student Learning Outcome
Behavioral Neuroscience (PHD-BEHN)	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature
Biochemistry Molecular Biolo (MS-BAMB)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.

Program	Student Learning Outcome
Biochemistry Molecular Biolo (MS-BAMB)	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.

Program	Student Learning Outcome
Biochemistry Molecular Biolo (MS-BAMB)	Interpret and critique scientific literature.
Biochemistry Molecular Biolo (MS-BMB)	Accurately and professionally communicate results with others verbally and in writing.
	Collect and store data in accordance with good lab practices.
	Critically evaluate a defined body of knowledge relevant to their field.
	Demonstrate analytical skills.
	Design and conduct independent, innovative research in accordance with the scientific research method.

Program	Student Learning Outcome
Biochemistry Molecular Biolo (MS-BMB)	Identify significant and original problems that will impact human health.
Biochemistry Molecular Biolo (PHD-BAMB)	Advance knowledge in selected area of concentration
	Demonstrate doctoral-level competence in written and verbal communication
	Demonstrate knowledge and understanding of core facts, concepts, and principles that is broad across the degree field and deep in the student's specialty field. (Domain: Cognitive; Levels: Knowledge, Comprehension) – This SLO is for acquiring existing kno
	Design, conduct, and interpret their own research
	Formulate hypothesis based on current concepts in the field

Program	Student Learning Outcome
Biochemistry Molecular Biolo (PHD-BMB)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.

Program	Student Learning Outcome
Biochemistry Molecular Biolo (PHD-BMB)	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.
Bioinform Computation Biomed (MS-BCB)	Adhere to the professional and legal conduct standards of the field of bioinformatics and computational biology.
	Apply bioinformatics methods and tools related to genomics, proteomics, biology, and physiology in an academic setting.
	Demonstrate scholarly oral and written presentations.

Program	Student Learning Outcome
Bioinform Computation Biomed (MS-BCB)	Evaluate statistical analyses which can be used to solve bioinformatics and computational biology problems.
	Exhibit knowledge in the underlying biological phenomena related to bioinformatics and computational biology.
	Produce solutions that address academic or industrial needs using bioinformatics and computational biology tools and knowledge.
Bioinform Computation Biomed (PHD-BCB)	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.

Program	Student Learning Outcome
Bioinform Computation Biomed (PHD-BCB)	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret his/her own research.
	Develop ancillary skills, where necessary, for career development.
	Evaluate statistical analyses which can be used to solve bioinformatics and computational biology problems.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.

Program	Student Learning Outcome
Biomedical Engineering (MS-BME)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.

Program	Student Learning Outcome
Biomedical Engineering (MS-BME)	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.
Biomedical Engineering (PHD-BME)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.

Program	Student Learning Outcome
Biomedical Engineering (PHD-BME)	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.

Program	Student Learning Outcome
Biomedical Informatics (BCRT-BMI)	Adhere to the educational standards for students in the field of clinical informatics.
	Apply selected informatics methods and tools related to personal health, health care, public health, and biomedical research in an industrial workplace.
	Display effective teamwork and written presentation skills.
	Display familiarity with the use of information technology tools.
	Exhibit knowledge in the underlying health domains that are related to the field of clinical informatics.
	Identify differences in organizations and personal behaviors that affect the diffusion of informatics technology.

Program	Student Learning Outcome
Biomedical Informatics (MBI-BMI)	Adhere to the professional and legal conduct standards of the field of clinical informatics.
	Apply informatics theories, methods and tools related to personal health, health care, public health, and biomedical research in an industrial workplace.
	Display effective oral and written presentation skills.
	Exhibit knowledge in the underlying biological and health domains that are related to the field of clinical informatics.
	Identify differences in organizations and personal behaviors that affect the diffusion of informatics technology.
	Show competence in use of information technology tools.

Program	Student Learning Outcome
Biomedical Informatics (MS-BMI)	Adhere to the professional and legal conduct standards of the field of clinical informatics.
	Apply informatics theories, methods and tools related to personal health, health care, public health, and biomedical research in an academic setting.
	Demonstrate scholarly oral and written presentations.
	Evaluate informatics tools and techniques for solving specific biomedical and health problems.
	Exhibit knowledge in the underlying biological and health domains that are related to the field of clinical informatics.
	Produce solutions that address academic or industrial needs using informatics tools and knowledge.

Program	Student Learning Outcome
Biomedical Informatics (PHD-BMI)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research;.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret his/her own research.

Program	Student Learning Outcome
Biomedical Informatics (PHD-BMI)	Develop ancillary skills, where necessary, for career development.
	Formulate hypotheses based on current concepts in the field.
	Interpret and critique scientific literature.
Cancer Biology (MS-CANB)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.

Program	Student Learning Outcome
Cancer Biology (MS-CANB)	Demonstrate advanced knowledge in one specialized area.
	Demonstrate masters-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.
Cancer Biology (PHD-CANB)	5.Design, conduct, and interpret their own research

Program	Student Learning Outcome
Cancer Biology (PHD-CANB)	Advance knowledge in selected area of concentration
	Apply fundamental knowledge of ethics in research
	Demonstrate a basic knowledge of central concepts in the relevant scientific field
	Demonstrate advanced knowledge in one specialized area
	Demonstrate doctoral-level competence in written and verbal communication
	Develop ancillary skills, where necessary, to obtain positions outside scientific research

Program	Student Learning Outcome
Cancer Biology (PHD-CANB)	Formulate hypothesis based on current concepts in the field
	Interpret and critique scientific literature
Cell & Developmental Biology (MS-CELL)	Accurately and professionally communicate results with others verbally and in writing.
	Collect and store data in accordance with good lab practices.
	Critically evaluate a defined body of knowledge relevant to their field.
	Demonstrate analytical skills.

Program	Student Learning Outcome
Cell & Developmental Biology (MS-CELL)	Design and conduct independent, innovative research in accordance with the scientific research method.
	Identify significant and original problems that will impact human health.
Cell & Developmental Biology (PHD-CELL)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.

Program	Student Learning Outcome
Cell & Developmental Biology (PHD-CELL)	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.
Computer Science & Engineering (MS-CSE)	Advance knowledge in selected area of concentration.

Program	Student Learning Outcome
Computer Science & Engineering (MS-CSE)	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate competence in written and verbal communication.
	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.

Program	Student Learning Outcome
Computer Science & Engineering (MS-CSE)	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.
Computer Science & Engineering (PHD-CSE)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.

Program	Student Learning Outcome
Computer Science & Engineering (PHD-CSE)	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.
Dietetic Internship (BCRT-CD)	Analyze quality, financial and productivity data for use in planning.

Program	Student Learning Outcome
Dietetic Internship (BCRT-CD)	Analyze risk in nutrition and dietetics practice.
	Apply current nutrition informatics to develop, store, retrieve and disseminate information and data.
	Apply evidence-based guidelines, systematic reviews and scientific literature.
	Apply leadership skills to achieve desired outcomes.
	Assign patient care activities to NDTRs and/or support personnel as appropriate.
	Conduct clinical and customer service quality management activities.

Program	Student Learning Outcome
Dietetic Internship (BCRT-CD)	Conduct feasibility studies for products, programs or services with consideration of costs and benefits.
	Conduct nutrition focused physical assessment.
	Conduct projects using appropriate research methods, ethical procedures and data analysis.
	Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources.
	Deliver respectful, science-based answers to client questions concerning emerging trends.
	Demonstrate active participation, teamwork and contributions in group settings.

Program	Student Learning Outcome
Dietetic Internship (BCRT-CD)	Demonstrate advocacy on local, state or national legislative and regulatory issues or policies impacting the nutrition and dietetics profession.
	Demonstrate effective communications skills for clinical and customer services in a variety of formats and settings.
	Demonstrate negotiation skills.
	Demonstrate professional attributes in all areas of practice.
	Demonstrate professional writing skills in preparing professional communications.
	Design, implement and evaluate presentations to a target audience.

Program	Student Learning Outcome
Dietetic Internship (BCRT-CD)	Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.
	Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management.
	Develop and evaluate recipes, formulas and menus for acceptability and affordability that accommodate the cultural diversity and health needs of various populations, groups and individuals.
	Develop nutrition education materials that are culturally and age appropriate and designed for the educational level of the audience.
	Evaluate emerging research for application in nutrition and dietetics practice.
	Explain the process for coding and billing for nutrition and dietetics services to obtain reimbursement from public or private payers, fee-for-service and value-based payment systems.

Program	Student Learning Outcome
Dietetic Internship (BCRT-CD)	Function as a member of interprofessional teams.
	Incorporate critical-thinking skills in overall practice.
	Justify programs, products, services and care using appropriate evidence or data.
	Participate in management of human resources.
	Participate in professional and community organizations.
	Perform management functions related to safety, security and sanitation that affect employees, customers, patients, facilities and food.

Program	Student Learning Outcome
Dietetic Internship (BCRT-CD)	Perform self-assessment and develop goals for self-improvement throughout the program.
	Perform the Nutrition Care Process and use standardized nutrition language for individuals, groups and populations of differing ages and health status, in a variety of settings.
	Practice and/or role play mentoring and precepting others.
	Practice in compliance with current federal regulations and state statutes and rules, as applicable and in accordance with accreditation standards and the Scope of Nutrition and Dietetics Practice and Code of Ethics for the Profession of Nutrition and Die
	Prepare a plan for professional development according to Commission on Dietetic Registration guidelines.
	Propose and use procedures as appropriate to the practice setting to promote sustainability, reduce waste and protect the environment.

Program	Student Learning Outcome
Dietetic Internship (BCRT-CD)	Refer clients and patients to other professionals and services when needs are beyond individual scope of practice.
	Select indicators of program quality and/or customer service and measure achievement of objectives.
	Show cultural competence/sensitivity in interactions with clients, colleagues and staff.
	Use effective education and counseling skills to facilitate behavior change.
Electrical Engineering (MS-ECE)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.

Program	Student Learning Outcome
Electrical Engineering (MS-ECE)	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.

Program	Student Learning Outcome
Electrical Engineering (MS-ECE)	Interpret and critique scientific literature.
Electrical Engineering (PHD-ECE)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.

Program	Student Learning Outcome
Electrical Engineering (PHD-ECE)	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.
Environmental Sci & Enginrng (PHD-ESE)	Advance knowledge in selected area of concentration.
	Advance knowledge in selected area of concentration.

Program	Student Learning Outcome
Environmental Sci & Enginrng (PHD-ESE)	Apply fundamental knowledge of ethics in research
	Demonstrate a basic knowledge of central concepts in the relevant scientific field
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area
	Demonstrate doctoral-level competence in written and verbal communication
	Design, conduct, and interpret their own research.

Program	Student Learning Outcome
Environmental Sci & Enginrng (PHD-ESE)	Formulate hypothesis based on current concepts in the field
	Interpret and critique scientific literature
Health Clinical Informatics (BCRT-HCIN)	Adhere to the educational standards for students in the field of health information management.
	Apply selected informatics methods and tools related to personal health, health care, public health, and biomedical research in an industrial workplace.
	Display effective teamwork and written presentation skills.
	Display familiarity with the use of information technology tools .

Program	Student Learning Outcome
Health Clinical Informatics (BCRT-HCIN)	Exhibit knowledge in the underlying health domains that are related to the field of health information management.
	Identify differences in organizations and personal behaviors that affect the diffusion of informatics technology.
Health Clinical Informatics (MS-HCIN)	Adhere to the professional and legal conduct standards of the field of health information management.
	Apply informatics theories, methods and tools related to personal health, health care, public health, and biomedical research in an industrial workplace.
	Display effective oral and written presentation skills.
	Exhibit knowledge in the underlying biological and health domains that are related to the field of health information management.

Program	Student Learning Outcome
Health Clinical Informatics (MS-HCIN)	Identify differences in organizations and personal behaviors that affect the diffusion of informatics technology.
	Show competence in use of information technology tools.
Healthcare Management (BCRT-HCMN)	Apply basic qualitative and quantitative concepts and tools to support analysis and decision making of a problem/opportunity faced by a healthcare organization and generate alternatives for action that take into account different viewpoints.
	Apply insights on the complexity of the American healthcare system to examine the healthcare organization in which they are employed.
	Demonstrate self-awareness and self-management competencies in team environments.
	Demonstrate the knowledge of fundamental and technical concepts of managing projects in healthcare.

Program	Student Learning Outcome
Healthcare Management (BCRT-HCMN)	Demonstrate understanding of selected contemporary health policy issues in Oregon and at the federal level.
	Perform effectively in work teams, both as leader and follower.
Healthcare Management (MBA-HCMN)	Analyze the potential short- and long-term implications (intended and unintended) that healthcare policy, finance, and operations decisions have on providing value from multiple stakeholders' (especially patients') points of view.
	Craft meaningful and actionable problem statements with strong consideration towards diverse stakeholders.
	Demonstrate a thorough consideration of context, purpose and audience in the communication.
	Demonstrate an awareness of the perspectives of others in professional settings.

Program	Student Learning Outcome
Healthcare Management (MBA-HCMN)	Demonstrate the ability to create positive, productive relationships in professional settings.
	Demonstrate the ability to manage one's behavior appropriately in professional settings.
	Exhibit awareness of one's strengths and weaknesses in professional environments.
	Identify relevant and specific stakeholders in the healthcare system, articulate their stakes, and illustrate how those stakeholders operate in a mutually influencing system.
	Present a central message in a clear, concise and convincing manner.
	Propose solutions that address the needs of diverse stakeholders and are sensitive to contextual factors.

Program	Student Learning Outcome
Healthcare Management (MBA-HCMN)	Skillfully articulate complex information in a manner that allows the message to be understood by non-healthcare stakeholders.
	Systematically gather and methodically analyze primary and secondary data most relevant to the situation.
	Thoughtfully design and rigorously evaluate potential solutions
	Translate and apply their understanding of the complex healthcare system to address specific healthcare organizational, business, and quality issues faced by stakeholders in the healthcare system.
Healthcare Management (MS-HCMN)	Analyze the potential short- and long-term implications (intended and unintended) of healthcare policy and operations decisions.
	Critically evaluate information.

Program	Student Learning Outcome
Healthcare Management (MS-HCMN)	Demonstrate a thorough consideration and understanding of context, purpose and audience in the communication.
	Describe and assess how those stakeholders operate in a mutually influencing system.
	Describe complex organizational situations from multiple perspectives.
	Describe specific and relevant stakeholders in the healthcare system and define their stakes.
	Identify and define problems with consideration of uncertainties and risks.
	Identify strengths and consider perspectives of others to build relationships.

Program	Student Learning Outcome
Healthcare Management (MS-HCMN)	Make decisions and evidence-based recommendations that improve outcomes.
	Present a central message that is clear, concise and convincing.
	Reflect on and assess one's own emotions, strengths, weaknesses, drivers, values and goals and analyze how they impact others.
	Skillfully present complex information that is readily understood by a broad range of stakeholders.
Human Investigations Prgm (BCRT-HIP)	Appraise the role of community engagement as a strategy for identifying community health issues, translating health research to communities and reducing health disparities
	Communicate clinical and translational research findings to different groups of individuals, including colleagues, students, the lay public, and the media.

Program	Student Learning Outcome
Human Investigations Prgm (BCRT-HIP)	Describe the basic principles and practical importance of random variation, systematic error, sampling error, measurement error, hypothesis testing, type I and type II errors, and confidence limits.
	Describe trends and best practices in informatics for the organization of biomedical and health information and research data.
	Evaluate the reliability and validity of measures, threats to study validity (bias).
	Generate a hypothesis and specific aims for a clinical or translational research study.
	Identify appropriate study methods (study design) for a research question as to feasibility, efficiency, and bias-free inference.
	Identify the fundamental principles of the protection of human subjects and essential elements of voluntary informed consent; minimize risks to human subjects; and protect vulnerable populations.

Program	Student Learning Outcome
Human Investigations Prgm (BCRT-HIP)	Identify, interpret, and critique the state of knowledge regarding a research question.
	Incorporate adult learning principles and mentoring strategies into interactions with beginning scientists and scholars in order to engage them in clinical and translational research.
	Manage a research project across its fiscal, personnel, regulatory compliance and problem solving requirements.
	Propose an appropriate study design and protocol for a clinical and translational research study.
	Recognize the principles of building and managing an interdisciplinary/ intradisciplinary/ multidisciplinary team that matches the objectives of the research problem.
	Recognize the relevance of demographic, geographic, and ethnographic features within communities and populations when designing a clinical study.

Program	Student Learning Outcome
Human Investigations Prgm (MCR-HIP)	Appraise the role of community engagement as a strategy for identifying community health issues, translating health research to communities and reducing health disparities
	Communicate clinical and translational research findings to different groups of individuals, including colleagues, students, the lay public, and the media
	Describe the basic principles and practical importance of random variation, systematic error, sampling error, measurement error, hypothesis testing, type I and type II errors, and confidence limits.
	Describe trends and best practices in informatics for the organization of biomedical and health information and research data.
	Evaluate the reliability and validity of measures, threats to study validity (bias).
	Generate a hypothesis and specific aims for a clinical or translational research study.

Program	Student Learning Outcome
Human Investigations Prgm (MCR-HIP)	Identify appropriate study methods (study design) for a research question as to feasibility, efficiency, and bias-free inference
	Identify the fundamental principles of the protection of human subjects and essential elements of voluntary informed consent; minimize risks to human subjects; and protect vulnerable populations.
	Identify, interpret, and critique the state of knowledge regarding a research question.
	Incorporate adult learning principles and mentoring strategies into interactions with beginning scientists and scholars in order to engage them in clinical and translational research.
	Manage a research project across its fiscal, personnel, regulatory compliance and problem solving requirements.
	Propose an appropriate study design and protocol for a clinical and translational research study.

Program	Student Learning Outcome
Human Investigations Prgm (MCR-HIP)	Recognize the principles of building and managing an interdisciplinary/ intradisciplinary/ multidisciplinary team that matches the objectives of the research problem.
	Recognize the relevance of demographic, geographic, and ethnographic features within communities and populations when designing a clinical study.
Human Nutrition (MS-DI)	Analyze quality, financial and productivity data for use in planning.
	Analyze risk in nutrition and dietetics practice.
	Apply current nutrition informatics to develop, store, retrieve and disseminate information and data.
	Apply evidence-based guidelines, systematic reviews and scientific literature.

Program	Student Learning Outcome
Human Nutrition (MS-DI)	Apply leadership skills to achieve desired outcomes.
	Apply their advanced knowledge of nutrient metabolism to explain relationships between nutrient intake, indicators of nutritional status, and health and disease.
	Apply their advanced knowledge of nutrient metabolism to explain relationships between nutrient intake, indicators of nutritional status, and health and disease.
	Assign patient care activities to NDTRs and/or support personnel as appropriate.
	Communicate effectively with clients, patients, peers, mentors, and collaborators in a professional and ethical manner that fosters a constructive and collaborative working environmental for all.
	Communicate effectively with clients, patients, peers, mentors, and collaborators in a professional and ethical manner that fosters a constructive and collaborative working environmental for all.

Program	Student Learning Outcome
Human Nutrition (MS-DI)	Communicate effectively with clients, patients, peers, mentors, and collaborators in a professional and ethical manner that fosters a constructive and collaborative working environmental for all.
	Conduct clinical and customer service quality management activities.
	Conduct feasibility studies for products, programs or services with consideration of costs and benefits.
	Conduct nutrition focused physical assessment.
	Conduct projects using appropriate research methods, ethical procedures and data analysis.
	Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources.

Program	Student Learning Outcome
Human Nutrition (MS-DI)	Deliver respectful, science-based answers to client questions concerning emerging trends.
	Demonstrate active participation, teamwork and contributions in group settings.
	Demonstrate advocacy on local, state or national legislative and regulatory issues or policies impacting the nutrition and dietetics profession.
	Demonstrate effective communications skills for clinical and customer services in a variety of formats and settings.
	Demonstrate negotiation skills.
	Demonstrate professional attributes in all areas of practice.

Program	Student Learning Outcome
Human Nutrition (MS-DI)	Demonstrate professional writing skills in preparing professional communications.
	Design, implement and evaluate presentations to a target audience.
	Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.
	Develop a project to answer a nutrition-related question: including problem identification, a review of existing literature, collection of data or conduction of a project, analysis of results and statement of conclusion.
	Develop a project to answer a nutrition-related question: including problem identification, a review of existing literature, collection of data or conduction of a project, analysis of results and statement of conclusion.
	Develop a project to answer a nutrition-related question: including problem identification, a review of existing literature, collection of data or conduction of a project, analysis of results and statement of conclusion.

Program	Student Learning Outcome
Human Nutrition (MS-DI)	Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management.
	Develop and evaluate recipes, formulas and menus for acceptability and affordability that accommodate the cultural diversity and health needs of various populations, groups and individuals.
	Develop nutrition education materials that are culturally and age appropriate and designed for the educational level of the audience.
	Disseminate research results or other scholarly work about nutrition-related topics to scientists, health care professionals and members of the general public using poster, oral presentation, and written formats.
	Evaluate emerging research for application in nutrition and dietetics practice.
	Explain the process for coding and billing for nutrition and dietetics services to obtain reimbursement from public or private payers, fee-for-service and value-based payment systems.

Program	Student Learning Outcome
Human Nutrition (MS-DI)	Function as a member of interprofessional teams.
	Incorporate critical-thinking skills in overall practice.
	Justify programs, products, services and care using appropriate evidence or data.
	Participate in management of human resources.
	Participate in professional and community organizations.
	Perform a thorough review of the nutrition-related scientific literature using library resources, evidence-based guidelines, systematic reviews and other peer-reviewed material and critically analyze this material for scientific merit.

Program	Student Learning Outcome
Human Nutrition (MS-DI)	Perform a thorough review of the nutrition-related scientific literature using library resources, evidence-based guidelines, systematic reviews and other peer-reviewed material and critically analyze this material for scientific merit.
	Perform a thorough review of the nutrition-related scientific literature using library resources, evidence-based guidelines, systematic reviews and other peer-reviewed material and critically analyze this material for scientific merit.
	Perform management functions related to safety, security and sanitation that affect employees, customers, patients, facilities and food.
	Perform self-assessment and develop goals for self-improvement throughout the program.
	Perform the Nutrition Care Process and use standardized nutrition language for individuals, groups and populations of differing ages and health status, in a variety of settings.
	Practice and/or role play mentoring and precepting others.

Program	Student Learning Outcome
Human Nutrition (MS-DI)	Practice in compliance with current federal regulations and state statutes and rules, as applicable and in accordance with accreditation standards and the Scope of Nutrition and Dietetics Practice and Code of Ethics for the Profession of Nutrition and Die
	Prepare a plan for professional development according to Commission on Dietetic Registration guidelines.
	Propose and use procedures as appropriate to the practice setting to promote sustainability, reduce waste and protect the environment.
	Refer clients and patients to other professionals and services when needs are beyond individual scope of practice.
	Select indicators of program quality and/or customer service and measure achievement of objectives.
	Show cultural competence/sensitivity in interactions with clients, colleagues and staff.

Program	Student Learning Outcome
Human Nutrition (MS-DI)	Use effective education and counseling skills to facilitate behavior change.
	Utilize the Nutrition Physical Examination to identify physical signs and symptoms of nutrition-related disease in patients and communicate these findings to the healthcare team using the Nutrition Care Process.
	Utilize the Nutrition Physical Examination to identify physical signs and symptoms of nutrition-related disease in patients and communicate these findings to the healthcare team using the Nutrition Care Process.
Human Nutrition (MS-HNUT)	Apply their advanced knowledge of nutrient metabolism to explain relationships between nutrient intake, indicators of nutritional status, and health and disease.
	Apply their advanced knowledge of nutrient metabolism to explain relationships between nutrient intake, indicators of nutritional status, and health and disease.
	Communicate effectively with clients, patients, peers, mentors, and collaborators in a professional and ethical manner that fosters a constructive and collaborative working environmental for all.

Program	Student Learning Outcome
Human Nutrition (MS-HNUT)	Communicate effectively with clients, patients, peers, mentors, and collaborators in a professional and ethical manner that fosters a constructive and collaborative working environmental for all.
	Communicate effectively with clients, patients, peers, mentors, and collaborators in a professional and ethical manner that fosters a constructive and collaborative working environmental for all.
	Develop a project to answer a nutrition-related question: including problem identification, a review of existing literature, collection of data or conduction of a project, analysis of results and statement of conclusion.
	Develop a project to answer a nutrition-related question: including problem identification, a review of existing literature, collection of data or conduction of a project, analysis of results and statement of conclusion.
	Develop a project to answer a nutrition-related question: including problem identification, a review of existing literature, collection of data or conduction of a project, analysis of results and statement of conclusion.
	Disseminate research results or other scholarly work about nutrition-related topics to scientists, health care professionals and members of the general public using poster, oral presentation, and written formats.

Program	Student Learning Outcome
Human Nutrition (MS-HNUT)	Perform a thorough review of the nutrition-related scientific literature using library resources, evidence-based guidelines, systematic reviews and other peer-reviewed material and critically analyze this material for scientific merit.
	Perform a thorough review of the nutrition-related scientific literature using library resources, evidence-based guidelines, systematic reviews and other peer-reviewed material and critically analyze this material for scientific merit.
	Perform a thorough review of the nutrition-related scientific literature using library resources, evidence-based guidelines, systematic reviews and other peer-reviewed material and critically analyze this material for scientific merit.
	Utilize the Nutrition Physical Examination to identify physical signs and symptoms of nutrition-related disease in patients and communicate these findings to the healthcare team using the Nutrition Care Process.
	Utilize the Nutrition Physical Examination to identify physical signs and symptoms of nutrition-related disease in patients and communicate these findings to the healthcare team using the Nutrition Care Process.
Medical Doctor (PHD)	Demonstrate advanced knowledge of translational research processes and outcomes.

Program	Student Learning Outcome
Medical Doctor (PHD)	Demonstrate doctoral-level competence in presenting information effectively in both written and spoken form to a wide range of audiences from scientists to patients at audience appropriate levels.
	Develop and submit NIH or other similar grant applications.
	Evaluate a broad range of scientific literature beyond their area of expertise in terms of valid methods, good results, and clinical relevance.
	Successfully demonstrate the student learning outcomes for the Doctor of Medicine and respective School of Medicine PhD program.
Microbiology (PHD-MBIO)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.

Program	Student Learning Outcome
Microbiology (PHD-MBIO)	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.

Program	Student Learning Outcome
Microbiology (PHD-MBIO)	Interpret and critique scientific literature.
Molecular Medical Genetics (MS-MGEN)	Accurately and professionally communicate results with others verbally and in writing.
	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Collect and store data in accordance with good lab practices.
	Critically evaluate a defined body of knowledge relevant to their field.

Program	Student Learning Outcome
Molecular Medical Genetics (MS-MGEN)	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate analytical skills.
	Demonstrate doctoral-level competence in written and verbal communication.
	Design and conduct independent, innovative research in accordance with the scientific research method.
	Design, conduct, and interpret their own research.

Program	Student Learning Outcome
Molecular Medical Genetics (MS-MGEN)	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
	Identify significant and original problems that will impact human health.
	Interpret and critique scientific literature.
Molecular Medical Genetics (PHD-MGEN)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.

Program	Student Learning Outcome
Molecular Medical Genetics (PHD-MGEN)	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.
	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.

Program	Student Learning Outcome
Molecular Medical Genetics (PHD-MGEN)	Interpret and critique scientific literature.
Neuroscience (MS-NSC)	Accurately and professionally communicate results with others verbally and in writing.
	Collect and store data in accordance with good lab practices.
	Critically evaluate a defined body of knowledge relevant to their field.
	Demonstrate analytical skills.
	Design and conduct independent, innovative research in accordance with the scientific research method.

Program	Student Learning Outcome
Neuroscience (MS-NSC)	Identify significant and original problems that will impact human health.
Neuroscience (PHD-NSC)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.

Program	Student Learning Outcome
Neuroscience (PHD-NSC)	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
Physician Assistant (MPAS-PHAS)	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Clinical Reasoning. Clinical reasoning is defined as the ability to identify and define problems, critically compare options, make timely decisions
	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Interpersonal & communication skills. Interpersonal and communication skills encompass verbal, nonverbal, and written exchange of information. Physi
	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in lifelong learning. Lifelong learning includes practice-based learning and improvement including the processes through which clinicians engage in cri

Program	Student Learning Outcome
Physician Assistant (MPAS-PHAS)	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Medical knowledge: Medical knowledge includes an understanding of the pathophysiology, etiology, risk factors, epidemiology, signs and symptoms, dif
	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Patient care. Patient care includes age appropriate assessment, evaluation, and management. Physician assistants must demonstrate caring and respect
	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Practice-based learning and improvement. Practice-based learning and improvement includes the processes through which clinicians engage in critical
	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Professionalism. Professionalism is the expression of positive values and ideals as care is delivered. Foremost, it involves prioritizing the intere
	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in safety and quality improvement. Safety and Quality Improvement are defined as the ability to identify situations that compromise safety and particip
	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Systems-based practice. Systems-based practice encompasses the societal, organizational, and economic environments in which health care is delivered

Program	Student Learning Outcome
Physician Assistant (MPAS-PHAS)	Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in teamwork. Teamwork is defined as knowledge of team-based professional skills, roles, and responsibilities to ensure an environment for safe, efficie
Physiology Pharmacology (PHD-PHPH)	Advance knowledge in selected area of concentration.
	Apply fundamental knowledge of ethics in research.
	Demonstrate a basic knowledge of central concepts in the relevant scientific field.
	Demonstrate advanced knowledge in one specialized area.
	Demonstrate doctoral-level competence in written and verbal communication.

Program	Student Learning Outcome
Physiology Pharmacology (PHD-PHPH)	Design, conduct, and interpret their own research.
	Develop ancillary skills, where necessary, to obtain positions outside scientific research.
	Formulate hypothesis based on current concepts in the field.
	Interpret and critique scientific literature.
Radiation Therapy (BS-RATH)	Apply foundational knowledge of Physics, Anatomy, Physiology, Oncology and Professional Ethics in clinical decision-making
	Apply radiation safety practices.

Program	Student Learning Outcome
Radiation Therapy (BS-RATH)	Demonstrate an understanding of health policy and systems with specific attention towards billing, compliance, and error reporting.
	Demonstrate professionalism and the ability to communicate and work effectively in an interdisciplinary team.
	Demonstrate understanding of current concepts related to organs at risk (OAR), acceptable dose limits and the side effects associated with radiation.
	Employ effective oral and written communication skills with colleagues and patients of all ages, backgrounds and beliefs.
	Interact with patients and their family professionally with cultural sensitivity using appropriate written, verbal and nonverbal communication.
	Operate ionizing-radiation producing equipment, and recognize any inconsistencies or malfunctions of that equipment.

Program	Student Learning Outcome
Radiation Therapy (BS-RATH)	Recognize side-effects or complications commonly associated with each treatment procedure, and recommend the appropriate patient care.
	Safely deliver an approved treatment plan to patients of all ages and physical conditions.
	Students will review and verify all approved treatment plans, instructions, prescriptions and images to ensure that the information is consistent and valid before delivering any treatment.
	Understand the value of continuing education and apply research skills towards increasing knowledge and understanding of the current trends in the treatment and cure of cancer.