

# **Report: Student Learning Outcomes by Program**

oM-GS	Behavioral & Systems Neuroscience (PHD-BEHN)	Academic Year: 2022-2023
Competency		
Communicat	on	
	nstrate doctoral-level competence in written and verbal communication.	
Competency Community I	Engagement, Social Justice and Equity	
	It Learning Outcome  Its apply principles of social justice, equity, and/or anti-racism through comership.	nmunity-engaged practice, service, or
Competency Information I	iteracy	
	t Learning Outcome ret and critique scientific literature.	
Competency Professional	Identity and Ethical Behavior	

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Apply fundamental knowledge of ethics in research.

# **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

# **Competency**

Professional Knowledge and Skills

#### **Student Learning Outcome**

Advance knowledge in selected area of concentration.

#### **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

#### **Student Learning Outcome**

Formulate hypothesis based on current concepts in the field.

# **Student Learning Outcome**

Design, conduct, and interpret their own research.

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

#### Competency

Teamwork

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#### **Student Learning Outcome**

Students work effectively within collaborative, team- or teaming-based interprofessional environments while acknowledging positionality and intentionally making space for diverse perspectives.

#### **Competency**

Communication

#### **Student Learning Outcome**

Demonstrate master's-level competence in written and verbal communication

#### Competency

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Students apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

#### **Competency**

Information Literacy

#### **Student Learning Outcome**

Interpret and critique scientific literature.

#### Competency

Professional Identity and Ethical Behavior

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#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

#### Competency

Professional Knowledge and Skills

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

#### **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

#### **Student Learning Outcome**

Design, conduct, and interpret their own research.

#### **Student Learning Outcome**

Advance knowledge in selected area of concentration.

#### **Competency**

Teamwork

# **Student Learning Outcome**

Students work effectively within collaborative, team- or teaming-based interprofessional environments while acknowledging positionality and intentionally making space for diverse perspectives.

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Collect and store data in accordance with good lab practices.

# Competency

Professional Knowledge and Skills

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#### **Student Learning Outcome**

Design and conduct independent, innovative research in accordance with the scientific research method.

# **Student Learning Outcome**

Establish new connections within their field of research by attending seminars, meetings, symposiums or conferences.

# **Student Learning Outcome**

Critically evaluate a defined body of knowledge relevant to their field.

#### Competency

**Teamwork** 

#### **Student Learning Outcome**

Develop ancillary skills, where, necessary, to obtain positions outside scientific research

# Competency

Communication

#### **Student Learning Outcome**

Interpret and critique scientific literature.

#### **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

# Competency

Community Engagement, Social Justice and Equity

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Apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

Academic Year: 2022-2023

#### **Competency**

Information Literacy

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

#### Competency

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

#### **Competency**

Professional Knowledge and Skills

#### **Student Learning Outcome**

Formulate hypothesis based on current concepts in the field.

#### **Student Learning Outcome**

Design, conduct, and interpret their own research.

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Advance knowledge in selected area of concentration.

# **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

#### Competency

Teamwork

#### **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

# Competency

Communication

# **Student Learning Outcome**

Communicate professionally, including during interactions with others, and while giving and receiving feedback.

Academic Year: 2022-2023

#### **Student Learning Outcome**

Communicate professionally, including during interactions with others, and while giving and receiving feedback.

#### **Student Learning Outcome**

Effectively communicate in written and verbal form to both peers and non-experts.

# Competency

Community Engagement, Social Justice and Equity

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Integrate the culture and diversity of a population when carrying out research and/or professional practice in informatics.

#### **Student Learning Outcome**

Integrate the culture and diversity of a population when carrying out research and/or professional practice in informatics.

#### **Student Learning Outcome**

Integrate the culture and diversity of a population when carrying out research and/or professional practice in informatics.

# **Competency**

Information Literacy

# **Student Learning Outcome**

Engage in lifelong learning through: finding, interpreting and critically appraising professional literature in order to stay informed of advances in their chosen field; and connecting with the larger professional community through participating in conferences and societies.

#### **Student Learning Outcome**

Engage in lifelong learning through: finding, interpreting and critically appraising professional literature in order to stay informed of advances in their chosen field; and connecting with the larger professional community through participating in conferences and societies.

#### Competency

Patient Centered Care

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#### **Student Learning Outcome**

Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings.

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Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings.

#### **Competency**

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics and implement solutions that assure confidentiality, security and integrity while maximizing the availability of data, infromation, and knowledge.

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics and implement solutions that assure confidentiality, security and integrity while maximizing the availability of data, infromation, and knowledge.

#### Competency

Professional Knowledge and Skills

#### **Student Learning Outcome**

Appraise applicable bioinformatics concepts, methods, and tools to solve challenging problems in their focus area.

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#### **Student Learning Outcome**

Given a problem, formulate a plan, critically compare options, make timely decisions or recommendations, identify, and improve outcomes in light of evolving evidence.

#### **Student Learning Outcome**

Apply knowledge of bioinformatics and computational biomedicine, and related disciplines, to solve problems in research, clinical and/or educational settings.

#### **Student Learning Outcome**

Identify and apply appropriate research and methods to analyze, contextualize, interpret results, and evalute their internal and external validity.

#### **Student Learning Outcome**

#### **Student Learning Outcome**

Appraise applicable bioinformatics concepts, methods, and tools to solve challenging problems in their focus area.

#### **Student Learning Outcome**

Apply knowledge of bioinformatics and computational biomedicine, and related disciplines, to solve problems in research, clinical and/or educational settings.

#### Competency

**Teamwork** 

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#### **Student Learning Outcome**

Function as a productive member of a multidisciplinary collaborative team of biological or other scientists, informatics, information technology, clinical, administrative, and other experts.

#### **Student Learning Outcome**

Apply the principles of team science to solve complex information problems.

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Apply the principles of team science to solve complex information problems.

# **Student Learning Outcome**

Apply the principles of team science to solve complex information problems.

#### **Competency**

Communication

#### **Student Learning Outcome**

Effectively communicate and disseminate scientific research in written and verbal form to both peers and non-experts.

#### **Student Learning Outcome**

Communicate professionally, including during interactions with others, and while giving and receiving feedback.

#### **Competency**

Community Engagement, Social Justice and Equity

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#### **Student Learning Outcome**

Integrate the culture and diversity of a population when developing research ideas, conducting research, evaluating implementation, and/or interpreting research findings.

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#### Competency

Information Literacy

#### **Student Learning Outcome**

All PhD students are expected to conceptualize, research, and prepare at least one first-author journal article prior to completion of the degree.

#### **Student Learning Outcome**

Engage in lifelong learning through: finding, interpreting and critically appraising scientific literature in order to fill knowledge gaps and stay informed of scientific advances; synthesizing and applying new knowledge to their own research; and connecting with the larger scientific community through participating in scientific conferences and societies.

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#### Competency

Patient Centered Care

#### **Student Learning Outcome**

Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings.

# **Competency**

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research and implement solutions that assure confidentiality, security and integrity while maximizing the availability of data, information, and knowledge.

# **Student Learning Outcome**

Apply fundamental knowledge of ethics in research and implement solutions that assure confidentiality, security and integrity while maximizing the availability of data, information, and knowledge.

#### **Competency**

Professional Knowledge and Skills

#### **Student Learning Outcome**

Have experience and training utilizing modern frameworks for rapid prototyping (as relevant), and how to extract information from a wide variety of databases.

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#### **Student Learning Outcome**

Identify gaps in scientific knowledge; formulate a research question; design a research study; employ and apply appropriate methods or develop new methods as necessary; analyze, contextualize, and interpret results; and evaluate the internal and external validity of the research findings.

#### **Student Learning Outcome**

Identify and define problems, critically compare options, make timely decisions or recommendations, identify uncertainties, and use findings to improve outcomes in light of evolving evidence.

# **Student Learning Outcome**

Identify and define problems, critically compare options, make timely decisions or recommendations, identify uncertainties, and use findings to improve outcomes in light of evolving evidence.

#### **Student Learning Outcome**

Apply a broad knowledge of bioinformatics and computational medicine, and related disciplines, to solve problems in research, clinical and educational settings.

#### **Student Learning Outcome**

Identify and define problems, critically compare options, make timely decisions or recommendations, identify uncertainties, and use findings to improve outcomes in light of evolving evidence.

#### **Student Learning Outcome**

Apply a broad knowledge of bioinformatics and computational medicine, and related disciplines, to solve problems in research, clinical and educational settings.

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Have experience and training utilizing modern frameworks for rapid prototyping (as relevant), and how to extract information from a wide variety of databases.

#### **Student Learning Outcome**

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#### **Student Learning Outcome**

Appraise applicable bioinformatics concepts, methods, and tools to solve challenging problems in their focus area.

#### **Student Learning Outcome**

Have experience and training utilizing modern frameworks for rapid prototyping (as relevant), and how to extract information from a wide variety of databases.

#### **Student Learning Outcome**

Appraise applicable bioinformatics concepts, methods, and tools to solve challenging problems in their focus area.

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#### **Student Learning Outcome**

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Have experience and training utilizing modern frameworks for rapid prototyping (as relevant), and how to extract information from a wide variety of databases.

#### Competency

**Teamwork** 

# **Student Learning Outcome**

Function as a productive member of a multidisciplinary collaborative team of biological and related scientists, informatics, information technology, clinical, administrative, and other experts.

#### **Student Learning Outcome**

Apply the principles of team science to solve complex information problems.

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Apply the principles of team science to solve complex information problems.

#### **Student Learning Outcome**

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#### **Student Learning Outcome**

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# **Student Learning Outcome**

Apply the principles of team science to solve complex information problems.

#### Competency

Communication

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#### **Student Learning Outcome**

Demonstrate master's-level competence in written and verbal communication

#### Competency

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Students engage in principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

#### Competency

Information Literacy

#### **Student Learning Outcome**

Interpret and critique scientific literature.

#### **Competency**

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

#### Competency

Professional Knowledge and Skills

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# **Student Learning Outcome**

Advance knowledge in selected area of concentration.

# **Student Learning Outcome**

Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

#### Competency

**Teamwork** 

#### **Student Learning Outcome**

Students work effectively within collaborative, team- or teaming-based interprofessional environments while acknowledging positionality and intentionally making space for diverse perspectives.

#### Competency

Communication

#### **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

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#### **Competency**

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Students engage in principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

#### Competency

Information Literacy

# **Student Learning Outcome**

Interpret and critique scientific literature.

#### Competency

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

#### **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

#### Competency

Professional Knowledge and Skills

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#### **Student Learning Outcome**

Formulate hypothesis-driven or data-driven project based on current concepts in the field.

#### **Student Learning Outcome**

Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Advance knowledge in selected area of concentration.

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

#### **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

#### Competency

**Teamwork** 

# **Student Learning Outcome**

Students work effectively within collaborative, team- or teaming-based interprofessional environments while acknowledging positionality and intentionally making space for diverse perspectives.

#### **Competency**

Communication

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Demonstrate doctoral-level competence in written and verbal communication.

# **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

#### **Student Learning Outcome**

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#### **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

#### Competency

Community Engagement, Social Justice and Equity

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#### **Student Learning Outcome**

Integrate the culture and diversity of a population when developing research ideas, conducting research, evaluating implementation, and/or interpreting research findings.

#### **Student Learning Outcome**

Integrate the culture and diversity of a population when developing research ideas, conducting research, evaluating implementation, and/or interpreting research findings.

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#### **Student Learning Outcome**

Integrate the culture and diversity of a population when developing research ideas, conducting research, evaluating implementation, and/or interpreting research findings.

#### Competency

Information Literacy

#### **Student Learning Outcome**

Demonstrate the ability to recognize gaps in knowledge and experience through informed self-assessment and reflective practices, and take actions to address those gaps.

# Competency

**Patient Centered Care** 

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Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings.

#### **Competency**

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research;.

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#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research;.

#### Competency

Professional Knowledge and Skills

# **Student Learning Outcome**

Formulate hypotheses based on current concepts in the field.

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Demonstrate a basic knowledge of central concepts in the relevant scientific field.

#### **Student Learning Outcome**

Formulate hypotheses based on current concepts in the field.

#### **Student Learning Outcome**

Advance knowledge in selected area of concentration.

#### **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

#### **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

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Demonstrate a basic knowledge of central concepts in the relevant scientific field.

#### **Student Learning Outcome**

Advance knowledge in selected area of concentration.

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

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# Student Learning Outcome Advance knowledge in selected area of concentration. Student Learning Outcome Design, conduct, and interpret his/her own research. Student Learning Outcome Demonstrate advanced knowledge in one specialized area. Student Learning Outcome Demonstrate advanced knowledge in one specialized area. Student Learning Outcome Demonstrate advanced knowledge in one specialized area.

#### **Student Learning Outcome**

Design, conduct, and interpret his/her own research.

# **Student Learning Outcome**

Formulate hypotheses based on current concepts in the field.

#### **Student Learning Outcome**

Formulate hypotheses based on current concepts in the field.

#### **Student Learning Outcome**

Formulate hypotheses based on current concepts in the field.

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Design, conduct, and interpret his/her own research.

# **Student Learning Outcome**

Advance knowledge in selected area of concentration.

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

#### **Student Learning Outcome**

Advance knowledge in selected area of concentration.

#### **Student Learning Outcome**

Formulate hypotheses based on current concepts in the field.

#### **Student Learning Outcome**

Interpret and critique scientific literature.

#### **Student Learning Outcome**

Advance knowledge in selected area of concentration.

#### **Student Learning Outcome**

Design, conduct, and interpret his/her own research.

#### **Student Learning Outcome**

Interpret and critique scientific literature.

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Design, conduct, and interpret his/her own research.

### **Student Learning Outcome**

Design, conduct, and interpret his/her own research.

#### **Student Learning Outcome**

Interpret and critique scientific literature.

#### **Student Learning Outcome**

Interpret and critique scientific literature.

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

#### **Student Learning Outcome**

Interpret and critique scientific literature.

#### Competency

Teamwork

# **Student Learning Outcome**

Develop ancillary skills, where necessary, for career development.

#### **Student Learning Outcome**

Develop ancillary skills, where necessary, for career development.

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Apply knowledge to one specialized area.

#### **Student Learning Outcome**

Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Formulate hypothesis based on current concepts in the field.

#### **Competency**

**Teamwork** 

#### **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

# Competency

Communication

#### **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

#### Competency

Information Literacy

#### **Student Learning Outcome**

Interpret and critique scientific literature

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# **Competency**

Professional Identity and Ethical Behavior

# **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

#### **Competency**

Professional Knowledge and Skills

#### **Student Learning Outcome**

Interpret and critique scientific literature

#### **Student Learning Outcome**

Identify gaps in scientific knowledge and formulate hypothesis based on current concepts in the field.

# **Student Learning Outcome**

Design, conduct, and interpret their own research.

#### **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

# **Student Learning Outcome**

Demonstrate a broad knowledge of central concepts in the relevant scientific field.

#### **Student Learning Outcome**

Advance knowledge in selected area of concentration.

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#### **Competency**

Professional Knowledge and Skills

# **Student Learning Outcome**

5.Design, conduct, and interpret their own research

#### **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area

# **Student Learning Outcome**

Advance knowledge in selected area of concentration

#### **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research

#### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field

# Competency

Teamwork

#### **Student Learning Outcome**

#### Competency

Communication

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#### .....

Accurately and professionally communicate results with others verbally and in writing.

## **Competency**

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

**Student Learning Outcome** 

Apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship

Academic Year: 2022-2023

#### Competency

Information Literacy

#### **Student Learning Outcome**

Critically evaluate a defined body of knowledge relevant to their field.

## **Student Learning Outcome**

Identify significant and original problems that will impact human health.

#### **Competency**

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

## Competency

Professional Knowledge and Skills

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Establish new connections within their field of research by attending seminars, meetings, symposiums or conferences.

## **Student Learning Outcome**

Produce written documents appropriate for publication.

#### **Student Learning Outcome**

Demonstrate analytical skills.

#### **Student Learning Outcome**

Collect and store data in accordance with good lab practices.

#### **Student Learning Outcome**

Design and conduct independent, innovative research in accordance with the scientific research method.

## Competency

**Teamwork** 

## **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

## **Competency**

Communication

### **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

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## **Competency**

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

## Competency

Information Literacy

# **Student Learning Outcome**

Formulate hypothesis based on current concepts in the field.

## Competency

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

## Competency

Professional Knowledge and Skills

## **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

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Demonstrate a basic knowledge of central concepts in the relevant scientific field.

## **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

## **Student Learning Outcome**

Design, conduct, and interpret their own research.

#### **Student Learning Outcome**

Advance knowledge in selected area of concentration.

## **Student Learning Outcome**

Interpret and critique scientific literature.

#### Competency

Teamwork

## **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

## Competency

Communication

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SLO 7. Communication and interpersonal skills: Develop and maintain effective relationships with a wide range of individuals through oral, written and nonverbal means in an accurate and effective manner that is sensitive to a range of audiences.

## **Competency**

Community Engagement, Social Justice and Equity

## **Student Learning Outcome**

SLO 4. Individual and Cultural Diversity: The ability to integrate awareness and knowledge of individual and cultural differences in the conduct of professional roles (e.g., research, services, and other professional activities).

## Competency

Information Literacy

#### **Student Learning Outcome**

SLO 1. Research: Critically evaluate, independently formulate, conduct and disseminate research or other scholarly activities that are of sufficient quality and rigor to have the potential to contribute to the scientific, psychological, or professional knowledge base.

#### Competency

Patient Centered Care

#### **Student Learning Outcome**

SLO 3. Individual and Cultural Diversity: Work effectively and respectfully with diverse individuals and groups including an understanding of how their own personal/cultural history, attitudes, and biases may affect how they understand and interact with people different from themselves.

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## **Competency**

Professional Identity and Ethical Behavior

## **Student Learning Outcome**

SLO 6. Professional values and attitudes: Engage in self-reflection regarding one's personal and professional functioning and engage in activities to maintain and improve performance, well-being, and professional effectiveness.

## **Student Learning Outcome**

SLO5. Professional values and attitudes: Respond and behave professionally and ethically in ways that reflect the values and attitudes of psychology, including integrity, deportment, behavior, professional identity, accountability, lifelong learning, and concern for the welfare of others.

## **Student Learning Outcome**

SLO 2. Ethics: Apply ethical decision-making processes in accordance with relevant laws, regulations, rules, and policies; and relevant professional standards and guidelines.

## Competency

Professional Knowledge and Skills

#### **Student Learning Outcome**

SLO 8. Assessment: Select, apply and interpret appropriate and evidenced-based assessment tools and methods to measure and gather relevant data using multiple sources to gain an understanding of human behavior within its context (e.g., family, social, societal and cultural).

## **Student Learning Outcome**

SLO 9. Intervention: Implement evidence-based interventions informed by the current scientific literature, assessment findings, diversity characteristics, and contextual variables by modifying and adapting evidence-based approaches, intervention goals and methods consistent with ongoing evaluation.

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## **Competency**

**Teamwork** 

## **Student Learning Outcome**

SLO 11. Consultation and interprofessional/interdisciplinary skills: Demonstrates knowledge of consultation models and practices and respect for the roles and perspectives of other professions.

## Competency

Communication

## **Student Learning Outcome**

SLO 7. Communication and interpersonal skills: Develop and maintain effective relationships with a wide range of individuals through oral, written and nonverbal means in an accurate and effective manner that is sensitive to a range of audiences.

## Competency

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

SLO 4. Individual and Cultural Diversity: The ability to integrate awareness and knowledge of individual and cultural differences in the conduct of professional roles (e.g., research, services, and other professional activities).

#### Competency

Information Literacy

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## **Student Learning Outcome**

SLO 1. Research: Critically evaluate, independently formulate, conduct and disseminate research or other scholarly activities that are of sufficient quality and rigor to have the potential to contribute to the scientific, psychological, or professional knowledge base.

## **Competency**

Patient Centered Care

## **Student Learning Outcome**

SLO 3. Individual and Cultural Diversity: Work effectively and respectfully with diverse individuals and groups including an understanding of how their own personal/cultural history, attitudes, and biases may affect how they understand and interact with people different from themselves.

#### **Student Learning Outcome**

SLO 3. Individual and Cultural Diversity: Work effectively and respectfully with diverse individuals and groups including an understanding of how their own personal/cultural history, attitudes, and biases may affect how they understand and interact with people different from themselves.

#### Competency

Professional Identity and Ethical Behavior

## **Student Learning Outcome**

SLO 6. Professional values and attitudes: Engage in self-reflection regarding one's personal and professional functioning and engage in activities to maintain and improve performance, well-being, and professional effectiveness.

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SLO5. Professional values and attitudes: Respond and behave professionally and ethically in ways that reflect the values and attitudes of psychology, including integrity, deportment, behavior, professional identity, accountability, lifelong learning, and concern for the welfare of others.

#### **Student Learning Outcome**

SLO 2. Ethics: Apply ethical decision-making processes in accordance with relevant laws, regulations, rules, and policies; and relevant professional standards and guidelines.

## **Competency**

Professional Knowledge and Skills

## **Student Learning Outcome**

SLO 10. Supervision: Demonstrate knowledge of supervision models and practices.

## **Student Learning Outcome**

SLO 8. Assessment: Select, apply and interpret appropriate and evidenced-based assessment tools and methods to measure and gather relevant data using multiple sources to gain an understanding of human behavior within its context (e.g., family, social, societal and cultural).

#### **Student Learning Outcome**

SLO 9. Intervention: Implement evidence-based interventions informed by the current scientific literature, assessment findings, diversity characteristics, and contextual variables by modifying and adapting evidence-based approaches, intervention goals and methods consistent with ongoing evaluation.

## Competency

Teamwork

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#### **Student Learning Outcome**

SLO 11. Consultation and interprofessional/interdisciplinary skills: Demonstrates knowledge of consultation models and practices and respect for the roles and perspectives of other professions.

## Competency

Communication

#### **Student Learning Outcome**

Demonstrate master's-level competence in written and verbal communication

## **Student Learning Outcome**

Demonstrate master's-level competence in written and verbal communication

## Competency

Community Engagement, Social Justice and Equity

## **Student Learning Outcome**

Understand the Impact of Machine Learning Algorithms on Social Justice and Equity

#### Competency

Information Literacy

#### **Student Learning Outcome**

Interpret and critique scientific literature.

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# **Student Learning Outcome**

Interpret and critique scientific literature.

## **Competency**

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

## **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

## Competency

Professional Knowledge and Skills

## **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in Computer Science and Machine Learning

## **Student Learning Outcome**

Design, conduct, and interpret their own research (MS thesis)

## **Student Learning Outcome**

Demonstrate advanced knowledge in one area of Computer Science and Machine Learning (MS non-thesis)

#### **Student Learning Outcome**

Demonstrate advanced knowledge in Computer Science and Machine Learning.

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## **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in Computer Science and Machine Learning

## Competency

Teamwork

#### **Student Learning Outcome**

Work effectively in teams

#### Competency

Communication

#### **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

## **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

## **Competency**

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Understand the Impact of Machine Learning Algorithms on Social Justice and Equity

## Competency

Information Literacy

Tuesday, July 12, 2022 Page 48 of 134

Interpret and critique scientific literature.

## **Student Learning Outcome**

Interpret and critique scientific literature.

#### Competency

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

## Competency

Professional Knowledge and Skills

## **Student Learning Outcome**

Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

## **Student Learning Outcome**

Formulate hypothesis based on current concepts in the field.

Tuesday, July 12, 2022 Page 49 of 134

Design, conduct, and interpret their own research.

## **Competency**

Teamwork

#### **Student Learning Outcome**

Work effectively in teams.

#### Competency

Communication

## **Student Learning Outcome**

Apply leadership skills to achieve desired outcomes.

## **Student Learning Outcome**

Demonstrate negotiation skills.

## **Student Learning Outcome**

Demonstrate effective communications skills for clinical and customer services in a variety of formats and settings.

## **Student Learning Outcome**

Practice and/or role play mentoring and precepting others.

#### **Student Learning Outcome**

Demonstrate professional writing skills in preparing professional communications.

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#### **Student Learning Outcome**

Deliver respectful, science-based answers to client questions concerning emerging trends.

## Competency

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Participate in professional and community organizations.

## **Student Learning Outcome**

Show cultural competence/sensitivity in interactions with clients, colleagues and staff.

#### **Student Learning Outcome**

Demonstrate advocacy on local, state or national legislative and regulatory issues or policies impacting the nutrition and dietetics profession.

#### **Student Learning Outcome**

Propose and use procedures as appropriate to the practice setting to promote sustainability, reduce waste and protect the environment.

## Competency

Information Literacy

## **Student Learning Outcome**

Evaluate emerging research for application in nutrition and dietetics practice.

Tuesday, July 12, 2022 Page 51 of 134

Select indicators of program quality and/or customer service and measure achievement of objectives.

## **Student Learning Outcome**

Conduct clinical and customer service quality management activities.

## **Student Learning Outcome**

Conduct feasibility studies for products, programs or services with consideration of costs and benefits.

#### **Student Learning Outcome**

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.

#### **Student Learning Outcome**

Apply evidence-based guidelines, systematic reviews and scientific literature.

## Competency

Patient Centered Care

## **Student Learning Outcome**

Develop nutrition education materials that are culturally and age appropriate and designed for the educational level of the audience.

#### **Student Learning Outcome**

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.

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#### **Student Learning Outcome**

Refer clients and patients to other professionals and services when needs are beyond individual scope of practice.

## **Competency**

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Demonstrate professional attributes in all areas of practice.

#### **Student Learning Outcome**

Perform self-assessment and develop goals for self-improvement throughout the program.

#### **Student Learning Outcome**

Analyze risk in nutrition and dietetics practice.

## **Student Learning Outcome**

Prepare a plan for professional development according to Commission on Dietetic Registration guidelines.

## **Student Learning Outcome**

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 Dietetics.

#### Competency

Professional Knowledge and Skills

Tuesday, July 12, 2022 Page 53 of 134

Apply current nutrition informatics to develop, store, retrieve and disseminate information and data.

#### **Student Learning Outcome**

Coordinate procurement, production, distribution and service of goods and services, demonstrating and promoting responsible use of resources.

#### **Student Learning Outcome**

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.

#### **Student Learning Outcome**

Perform management functions related to safety, security and sanitation that affect employees, customers, patients, facilities and food.

#### **Student Learning Outcome**

Incorporate critical-thinking skills in overall practice.

#### **Student Learning Outcome**

Use effective education and counseling skills to facilitate behavior change.

## **Student Learning Outcome**

Conduct projects using appropriate research methods, ethical procedures and data analysis.

## **Student Learning Outcome**

Participate in management of human resources.

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#### **Student Learning Outcome**

Develop and deliver products, programs or services that promote consumer health, wellness and lifestyle management.

## **Student Learning Outcome**

Design, implement and evaluate presentations to a target audience.

## **Student Learning Outcome**

Conduct nutrition focused physical assessment.

#### **Student Learning Outcome**

Analyze quality, financial and productivity data for use in planning.

#### **Student Learning Outcome**

Justify programs, products, services and care using appropriate evidence or data.

#### **Student Learning Outcome**

Develop a plan to provide or develop a product, program or service that includes a budget, staffing needs, equipment and supplies.

## Competency

**Teamwork** 

## **Student Learning Outcome**

Demonstrate active participation, teamwork and contributions in group settings.

Tuesday, July 12, 2022 Page 55 of 134

Assign patient care activities to NDTRs and/or support personnel as appropriate.

## **Student Learning Outcome**

Function as a member of interprofessional teams.

## Competency

Communication

#### **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

#### **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

## Competency

Community Engagement, Social Justice and Equity

## **Student Learning Outcome**

Understand the Impact of Machine Learning Algorithms on Social Justice and Equity

#### Competency

Information Literacy

## **Student Learning Outcome**

Interpret and critique scientific literature.

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# Competency

SoM-GS

Professional Identity and Ethical Behavior

## **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

## **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

## Competency

Professional Knowledge and Skills

## **Student Learning Outcome**

Formulate hypothesis based on current concepts in the field.

## **Student Learning Outcome**

Design, conduct, and interpret their own research.

## **Student Learning Outcome**

Design, conduct, and interpret their own research.

## **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

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## Competency

Teamwork

#### **Student Learning Outcome**

Work effectively in teams.

## **Competency**

Communication

## **Student Learning Outcome**

Program Learning Objective 3: Apply critical thinking, communication, and collaboration skills to address social problems in food systems and society.

## Competency

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Program Learning Objective 3: Apply critical thinking, communication, and collaboration skills to address social problems in food systems and society.

## Competency

Information Literacy

#### **Student Learning Outcome**

Program Learning Objective 3: Apply critical thinking, communication, and collaboration skills to address social problems in food systems and society.

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Program Learning Objective 1: Explain concepts, theories, and processes of social justice and social change in food systems and society.

## Competency

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Program Learning Objective 2: Analyze theory and evidence to address social problems in food systems and society.

## Competency

Professional Knowledge and Skills

## **Student Learning Outcome**

Program Learning Objective 3: Apply critical thinking, communication, and collaboration skills to address social problems in food systems and society.

#### **Competency**

Teamwork

#### **Student Learning Outcome**

Program Learning Objective 3: Apply critical thinking, communication, and collaboration skills to address social problems in food systems and society.

#### Competency

Communication

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#### **Student Learning Outcome**

Communicate effectively and equitably with peers, diverse individuals, organizations, and communities to support stakeholder decision-making and promote culturally responsive exchanges of information.

## Competency

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

## **Student Learning Outcome**

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## **Student Learning Outcome**

Apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

## Competency

Information Literacy

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#### **Student Learning Outcome**

Exhibit knowledge in the biological, health and clinical information systems domains that are related to the field of health and clinical informatics.

## **Competency**

Patient Centered Care

#### **Student Learning Outcome**

Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings.

#### **Student Learning Outcome**

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Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings.

### **Competency**

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Adhere to the professional and legal conduct standards of the field of health and clinical informatics.

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## **Competency**

Professional Knowledge and Skills

## **Student Learning Outcome**

Exhibit knowledge in the biological, health and clinical information systems that are related to the field of biomedical informatics.

#### **Student Learning Outcome**

Exhibit knowledge in the biological, health and clinical information systems that are related to the field of biomedical informatics.

#### **Student Learning Outcome**

Apply selected informatics methods and tools related to personal health, health care, public health, and biomedical research in an industrial workplace.

## **Student Learning Outcome**

Apply selected informatics methods and tools related to personal health, health care, public health, and biomedical research in an industrial workplace.

## **Student Learning Outcome**

Display familiarity with the use of information technology tools .

## **Student Learning Outcome**

Identify differences in organizations and personal behaviors that affect the diffusion of informatics technology.

#### **Student Learning Outcome**

Identify differences in organizations and personal behaviors that affect the diffusion of informatics technology.

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Exhibit knowledge in the biological, health and clinical information systems that are related to the field of biomedical informatics.

Academic Year: 2022-2023

## **Competency**

**Teamwork** 

#### **Student Learning Outcome**

Display effective teamwork and written presentation skills.

#### **Student Learning Outcome**

Display effective teamwork and written presentation skills.

#### **Student Learning Outcome**

Display effective teamwork and written presentation skills.

#### Competency

Communication

## **Student Learning Outcome**

Effectively communicate in written and verbal form to both peers and non-experts.

#### **Student Learning Outcome**

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#### **Student Learning Outcome**

Communicate professionally, including during interactions with others, and while giving and receiving feedback.

#### **Student Learning Outcome**

Communicate professionally, including during interactions with others, and while giving and receiving feedback.

## Competency

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Integrate the culture and diversity of a population when carring out research and/or professional practice in informatics.

## **Student Learning Outcome**

Integrate the culture and diversity of a population when carring out research and/or professional practice in informatics.

#### **Student Learning Outcome**

Integrate the culture and diversity of a population when carring out research and/or professional practice in informatics.

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Integrate the culture and diversity of a population when carring out research and/or professional practice in informatics.

Academic Year: 2022-2023

## **Competency**

Information Literacy

#### **Student Learning Outcome**

Engage in lifelong learning through: finding, interpreting and critically appraising professional literature in order to stay informed of advances in their chosen field; and connecting with the larger professional community through participating in conferences and societies.

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## Competency

Patient Centered Care

## **Student Learning Outcome**

Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings

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Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings

Academic Year: 2022-2023

## **Student Learning Outcome**

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Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings

## Competency

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics and implement solutions that assure confidentiality, security and integrity while maximizing the availability of data, information, and knowledge.

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## **Student Learning Outcome**

Apply fundamental knowledge of ethics and implement solutions that assure confidentiality, security and integrity while maximizing the availability of data, information, and knowledge.

## **Competency**

Professional Knowledge and Skills

## **Student Learning Outcome**

Apply knowledge of health and clinical informatics and related disciplines, to solve problems in research, clinical and/or educational settings.

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Apply knowledge of health and clinical informatics and related disciplines, to solve problems in research, clinical and/or educational settings.

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## **Student Learning Outcome**

Given a problem, formulate a plan, critically compare options, make timely decisions or recommendations, identify, and improve outcomes in light of evolving evidence.

#### **Student Learning Outcome**

Apply knowledge of health and clinical informatics and related disciplines, to solve problems in research, clinical and/or educational settings.

#### **Student Learning Outcome**

Solve complex health and health information problems by balancing constraints (economic, regulatory) while integrating the priorities of different stakeholders (including health care professionals, researchers, and patients).

## **Student Learning Outcome**

Given a problem, formulate a plan, critically compare options, make timely decisions or recommendations, identify, and improve outcomes in light of evolving evidence.

#### **Student Learning Outcome**

Apply knowledge of health and clinical informatics and related disciplines, to solve problems in research, clinical and/or educational settings.

#### **Student Learning Outcome**

Identify and apply appropriate research and methods to analyze, contextualize, interpret results, and evaluate their internal and external validity.

#### **Student Learning Outcome**

Solve complex health and health information problems by balancing constraints (economic, regulatory) while integrating the priorities of different stakeholders (including health care professionals, researchers, and patients).

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## **Student Learning Outcome**

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#### **Student Learning Outcome**

Given a problem, formulate a plan, critically compare options, make timely decisions or recommendations, identify, and improve outcomes in light of evolving evidence.

#### **Student Learning Outcome**

Apply knowledge of health and clinical informatics and related disciplines, to solve problems in research, clinical and/or educational settings.

## **Competency**

**Teamwork** 

## **Student Learning Outcome**

Function as a productive member of a multidisciplinary collaborative team of biological or other scientists, informatics, information technology, clinical, administrative, and other experts.

## **Student Learning Outcome**

Function as a productive member of a multidisciplinary collaborative team of biological or other scientists, informatics, information technology, clinical, administrative, and other experts.

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## **Student Learning Outcome**

Function as a productive member of a multidisciplinary collaborative team of biological or other scientists, informatics, information technology, clinical, administrative, and other experts.

## **Competency**

Communication

## **Student Learning Outcome**

Effectively communicate and disseminate scientific research in written and verbal form to both peers and non-experts.

#### **Student Learning Outcome**

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Effectively communicate and disseminate scientific research in written and verbal form to both peers and non-experts.

#### **Student Learning Outcome**

Communicate professionally, including during interactions with others, and while giving and receiving feedback.

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## Competency

Community Engagement, Social Justice and Equity

## **Student Learning Outcome**

Integrate the culture and diversity of a population when developing research ideas, conducting research, evaluating implementation, and/or interpreting research findings.

Academic Year: 2022-2023

## **Student Learning Outcome**

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Integrate the culture and diversity of a population when developing research ideas, conducting research, evaluating implementation, and/or interpreting research findings.

## Competency

Information Literacy

## **Student Learning Outcome**

Identify gaps in scientific knowledge; formulate a research question; design a research study; employ and apply appropriate methods or develop new methods as necessary; analyze, contextualize, and interpret results; and evaluate the internal and external validity of the research findings.

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Identify gaps in scientific knowledge; formulate a research question; design a research study; employ and apply appropriate methods or develop new methods as necessary; analyze, contextualize, and interpret results; and evaluate the internal and external validity of the research findings.

Academic Year: 2022-2023

## **Student Learning Outcome**

Engage in lifelong learning through: finding, interpreting and critically appraising scientific literature in order to fill knowledge gaps and stay informed of scientific advances; synthesizing and applying new knowledge to their own research; and connecting with the larger scientific community through participating in scientific conferences and societies.

## **Student Learning Outcome**

Identify gaps in scientific knowledge; formulate a research question; design a research study; employ and apply appropriate methods or develop new methods as necessary; analyze, contextualize, and interpret results; and evaluate the internal and external validity of the research findings.

## **Student Learning Outcome**

All PhD students are expected to conceptualize, research, and prepare at least one first-author journal article prior to completion of the degree.

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Academic Year: 2022-2023

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Academic Year: 2022-2023

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Identify gaps in scientific knowledge; formulate a research question; design a research study; employ and apply appropriate methods or develop new methods as necessary; analyze, contextualize, and interpret results; and evaluate the internal and external validity of the research findings.

Academic Year: 2022-2023

## **Competency**

Patient Centered Care

## **Student Learning Outcome**

Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings.

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Academic Year: 2022-2023

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Demonstrate and promote informatics solutions that help to ensure patient safety within relevant clinical settings.

## Competency

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research and implement solutions that assure confidentiality, security and integrity while maximizing the availability of data, information, and knowledge.

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Apply fundamental knowledge of ethics in research and implement solutions that assure confidentiality, security and integrity while maximizing the availability of data, information, and knowledge.

Academic Year: 2022-2023

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Academic Year: 2022-2023

#### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research and implement solutions that assure confidentiality, security and integrity while maximizing the availability of data, information, and knowledge.

## Competency

Professional Knowledge and Skills

## **Student Learning Outcome**

Appraise applicable informatics concepts, methods, and tools to solve challenging health informatics problems in their focus area.

## **Student Learning Outcome**

Apply a broad knowledge of health and clinical informatics, and related disciplines, to solve problems in research, clinical and educational settings.

## **Student Learning Outcome**

Identify and define problems, critically compare options, make timely decisions or recommendations, identify uncertainties, and use findings to improve outcomes in light of evolving evidence.

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Identify and define problems, critically compare options, make timely decisions or recommendations, identify uncertainties, and use findings to improve outcomes in light of evolving evidence.

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Apply a broad knowledge of health and clinical informatics, and related disciplines, to solve problems in research, clinical and educational settings.

Academic Year: 2022-2023

#### **Student Learning Outcome**

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Tuesday, July 12, 2022 Page 82 of 134

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Academic Year: 2022-2023

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## **Student Learning Outcome**

Have experience and training utilizing modern frameworks for rapid prototyping, and how to extract information from a wide variety of databases, as relevant.

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Apply a broad knowledge of health and clinical informatics, and related disciplines, to solve problems in research, clinical and educational settings.

#### **Student Learning Outcome**

Have experience and training utilizing modern frameworks for rapid prototyping, and how to extract information from a wide variety of databases, as relevant.

Tuesday, July 12, 2022 Page 84 of 134

Apply a broad knowledge of health and clinical informatics, and related disciplines, to solve problems in research, clinical and educational settings.

Academic Year: 2022-2023

#### **Student Learning Outcome**

Appraise applicable informatics concepts, methods, and tools to solve challenging health informatics problems in their focus area.

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Tuesday, July 12, 2022 Page 85 of 134

Appraise applicable informatics concepts, methods, and tools to solve challenging health informatics problems in their focus area.

Academic Year: 2022-2023

#### **Student Learning Outcome**

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Academic Year: 2022-2023

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## **Student Learning Outcome**

Identify and define problems, critically compare options, make timely decisions or recommendations, identify uncertainties, and use findings to improve outcomes in light of evolving evidence.

## Competency

**Teamwork** 

Tuesday, July 12, 2022 Page 87 of 134

Function as a productive member of a multidisciplinary collaborative team of informatics, information technology, clinical, administrative, and other experts.

Academic Year: 2022-2023

#### **Student Learning Outcome**

Function as a productive member of a multidisciplinary collaborative team of informatics, information technology, clinical, administrative, and other experts.

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Function as a productive member of a multidisciplinary collaborative team of informatics, information technology, clinical, administrative, and other experts.

## **Student Learning Outcome**

Function as a productive member of a multidisciplinary collaborative team of informatics, information technology, clinical, administrative, and other experts.

#### **Student Learning Outcome**

Solve complex health and health information problems by applying the principles of team science to the scope of practice and roles of different stakeholders (including health care professionals, researchers, and patients).

## **Student Learning Outcome**

Function as a productive member of a multidisciplinary collaborative team of informatics, information technology, clinical, administrative, and other experts.

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Tuesday, July 12, 2022 Page 88 of 134

Solve complex health and health information problems by applying the principles of team science to the scope of practice and roles of different stakeholders (including health care professionals, researchers, and patients).

Academic Year: 2022-2023

#### **Student Learning Outcome**

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Tuesday, July 12, 2022 Page 89 of 134

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Academic Year: 2022-2023

#### **Student Learning Outcome**

Solve complex health and health information problems by applying the principles of team science to the scope of practice and roles of different stakeholders (including health care professionals, researchers, and patients).

## **Student Learning Outcome**

Function as a productive member of a multidisciplinary collaborative team of informatics, information technology, clinical, administrative, and other experts.

## Competency

Community Engagement, Social Justice and Equity

## **Student Learning Outcome**

Assess how those stakeholders operate in a mutually influencing system.

## **Student Learning Outcome**

Describe specific and relevant stakeholders in the healthcare system and describe their stakes.

## Competency

Professional Knowledge and Skills

#### **Student Learning Outcome**

Analyze complex organiations using frameworks.

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# Competency

SoM-GS

Teamwork

## **Student Learning Outcome**

**Student Learning Outcome** 

Demonstrate awareness of differing perspectives of others.

Predict problems with consideration of uncertainties and risks.

## Competency

Communication

## **Student Learning Outcome**

Present complex information with relevant justification and analysis.

## **Student Learning Outcome**

Create a message that is clear and concise.

## **Student Learning Outcome**

Present information appropriate to the context, purpose, and audience.

## **Student Learning Outcome**

Create a message that is clear and concise.

## **Student Learning Outcome**

Create a message that is clear and concise.

Tuesday, July 12, 2022 Page 91 of 134

Present information appropriate to the context, purpose, and audience.

## **Competency**

Community Engagement, Social Justice and Equity

## **Student Learning Outcome**

Describe specific and relevant stakeholders in the healthcare system and describe their stakes.

Academic Year: 2022-2023

## **Student Learning Outcome**

Assess how those stakeholders operate in a mutually influencing system.

## Competency

Information Literacy

## **Student Learning Outcome**

Critically evaluate qualitative and quantitative information using decision-making frameworks and tools.

## Competency

Professional Identity and Ethical Behavior

#### **Student Learning Outcome**

Evaluate an organizational dilemma through an ethical framework.

## Competency

Professional Knowledge and Skills

Tuesday, July 12, 2022 Page 92 of 134

## **Student Learning Outcome**

Predict problems with consideration of uncertainties and risks.

## **Student Learning Outcome**

Analyze the potential short- and long-term implications (intended and unintended) of healthcare policy and operations decisions.

## **Student Learning Outcome**

Make decisions and evidence-based recommendations that improve outcomes.

## **Student Learning Outcome**

Analyze complex organizations using frameworks.

## Competency

Teamwork

## **Student Learning Outcome**

Demonstrate awareness of differing perspectives of others.

## Competency

Communication

## **Student Learning Outcome**

Present complex information with relevant justification and analysis.

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## **Student Learning Outcome**

Demonstrate a thorough consideration of context, purpose and audience.

## **Student Learning Outcome**

Demonstrate a thorough consideration of context, purpose and audience.

## **Student Learning Outcome**

Present a message that is clear, concise and insightful.

## Competency

Community Engagement, Social Justice and Equity

## **Student Learning Outcome**

Describe relevant and specific stakeholders in the healthcare system, articulate their stakes, and illustrate how those stakeholders operate in a mutually influencing system.

## **Student Learning Outcome**

Describe complex relationships from multiple perspectives.

## **Student Learning Outcome**

Assess how those stakeholders operate in a mutually influencing system.

## **Student Learning Outcome**

Craft meaningful and actionable problem statements with strong consideration towards diverse stakeholders.

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## Competency

Information Literacy

## **Student Learning Outcome**

Thoughtfully design and rigorously evaluate potential solutions.

#### **Student Learning Outcome**

Systematically gather and methodically analyze primary and secondary data most relevant to the situation.

## Competency

Professional Identity and Ethical Behavior

## **Student Learning Outcome**

Evaluate an organizational dilemma through an ethical framework.

## **Student Learning Outcome**

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.

## **Competency**

Professional Knowledge and Skills

#### **Student Learning Outcome**

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.

Tuesday, July 12, 2022 Page 95 of 134

## **Competency**

**Teamwork** 

## **Student Learning Outcome**

Identify strengths and perspectives of others to build and strengthen relationships.

## **Student Learning Outcome**

Assess your emotions, strengths, weaknesses, drivers, values and goals and analyze how they affect others.

## Competency

Communication

## **Student Learning Outcome**

Communicate clinical and translational research findings to different groups of individuals, including colleagues, students, the lay public, and the media.

## Competency

Community Engagement, Social Justice and Equity

#### **Student Learning Outcome**

Recognize the relevance of demographic, geographic, and ethnographic features within communities and populations when designing a clinical study.

## Competency

Information Literacy

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#### **Student Learning Outcome**

Identify and interpret the state of knowledge regarding a research question through critical appraisal of published literature.

## Competency

Professional Identity and Ethical Behavior

## **Student Learning Outcome**

Utilize adult learning principles to assess areas for growth in clinical and translational research skills

## **Student Learning Outcome**

Incorporate 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.

## **Student Learning Outcome**

Apply best practices in informatics for the organization of biomedical and health information and research data in the management of data for clinical and translational research.

## Competency

Professional Knowledge and Skills

## **Student Learning Outcome**

Generate a hypothesis and specific aims for a clinical or translational research study.

#### **Student Learning Outcome**

Interpret the basic principles of random variation, systematic error, sampling error, measurement error, hypothesis testing, type I and type II errors, and confidence limits.

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## **Student Learning Outcome**

Evaluate the reliability and validity of measures, threats to study validity (bias).

Student Learning Outcome

Compare and assess appropriate study methods (study design) for a research question as to feasibility, efficiency, and bias-free inference

**Student Learning Outcome** 

Propose an appropriate study design and protocol for a clinical and translational research study.

**Competency** 

Communication

**Student Learning Outcome** 

Communicate clinical and translational research findings to different groups of individuals, including colleagues, students, the lay public, and the media

Competency

Community Engagement, Social Justice and Equity

**Student Learning Outcome** 

Appraise the role of community engagement as a strategy for identifying community health issues, translating health research to communities and reducing health disparities

**Student Learning Outcome** 

Recognize the relevance of demographic, geographic, and ethnographic features within communities and populations when designing a clinical study.

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## **Competency**

Information Literacy

## **Student Learning Outcome**

Identify and interpret the state of knowledge regarding a research question through critical appraisal of published literature.

## Competency

Professional Identity and Ethical Behavior

## **Student Learning Outcome**

Utilize adult learning principles to assess areas for growth in clinical and translational research skills and engage in opportunities for growth in those areas.

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## **Student Learning Outcome**

Apply best practices in informatics for the organization of biomedical and health information and research data in the management of data for clinical and translational research.

## **Student Learning Outcome**

Incorporate 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.

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## **Competency**

Professional Knowledge and Skills

## **Student Learning Outcome**

Propose an appropriate study design and protocol for a clinical and translational research study.

#### **Student Learning Outcome**

Apply management best practices in a research project across its fiscal, personnel, regulatory compliance and problem solving requirements

## **Student Learning Outcome**

Generate a hypothesis and specific aims for a clinical or translational research study.

## **Student Learning Outcome**

Apply the basic principles of random variation, systematic error, sampling error, measurement error, hypothesis testing, type I and type II errors, and confidence limits.

## **Student Learning Outcome**

Evaluate the reliability and validity of measures, threats to study validity (bias).

#### **Student Learning Outcome**

Compare and assess appropriate study methods (study design) for a research question as to feasibility, efficiency, and bias-free inference.

## Competency

Teamwork

Tuesday, July 12, 2022 Page 100 of 134

Model the principles of building and managing an interdisciplinary/ intradisciplinary/ multidisciplinary team that matches the objectives of the research problem.

Academic Year: 2022-2023

## **Competency**

Communication

## **Student Learning Outcome**

Apply their advanced knowledge of nutrient metabolism and physiology to explain relationships between nutrient intake, indicators of nutritional status, and health and disease.

## **Student Learning Outcome**

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.

## Competency

Community Engagement, Social Justice and Equity

## **Student Learning Outcome**

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.

## **Student Learning Outcome**

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.

Tuesday, July 12, 2022 Page 101 of 134

## **Competency**

Information Literacy

## **Student Learning Outcome**

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, statistical analysis of results and statement of conclusion.

## **Student Learning Outcome**

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.

## **Student Learning Outcome**

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, statistical analysis of results and statement of conclusion.

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## **Student Learning Outcome**

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## **Student Learning Outcome**

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.

## **Competency**

Patient Centered Care

## **Student Learning Outcome**

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.

## Competency

Professional Identity and Ethical Behavior

## **Student Learning Outcome**

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.

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## **Student Learning Outcome**

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.

## **Competency**

Professional Knowledge and Skills

## **Student Learning Outcome**

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.

## **Student Learning Outcome**

Apply their advanced knowledge of nutrient metabolism and physiology to explain relationships between nutrient intake, indicators of nutritional status, and health and disease.

## Competency

**Teamwork** 

## **Student Learning Outcome**

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.

## **Student Learning Outcome**

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.

Tuesday, July 12, 2022 Page 104 of 134

## **Competency**

Communication

## **Student Learning Outcome**

2. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to explain the components, functionality and design of a linear accelerator utilized for external beam radiation therapy treatment in Radiation Medicine.

## **Student Learning Outcome**

3. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to communicate the risks associated with the use of radiation to members of the general public, patients, and professionals in healthcare.

## **Student Learning Outcome**

6. Students will execute a research project based on in-depth knowledge of scientific literature, experimental design, and statistical tools.

#### **Student Learning Outcome**

4. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to apply radiation safety principles in the calculation and design of radiation shielding. This will include communicating with a team of individuals from equipment manufacturers, design and construction, architects, hospital administration and clinicians.

## **Student Learning Outcome**

1. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to explain the components, functionality and design of x-ray systems utilized in imaging and therapeutic devices found in Radiation Medicine or Diagnostic Radiology.

## Competency

Information Literacy

Tuesday, July 12, 2022 Page 105 of 134

## **Student Learning Outcome**

6. Students will execute a research project based on in-depth knowledge of scientific literature, experimental design, and statistical tools.

## **Student Learning Outcome**

3. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to communicate the risks associated with the use of radiation to members of the general public, patients, and professionals in healthcare.

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## **Competency**

Professional Identity and Ethical Behavior

## **Student Learning Outcome**

8. Students will exhibit professional and ethical characteristics in the clinical areas where medical imaging exams and radiation therapy treatments are performed.

## **Student Learning Outcome**

5. Upon graduation, students will be prepared to take Part 1 of the American Board of Radiology Initial Certificaion Exam.

## Competency

Professional Knowledge and Skills

Tuesday, July 12, 2022 Page 106 of 134

2. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to explain the components, functionality and design of a linear accelerator utilized for external beam radiation therapy treatment in Radiation Medicine.

## **Student Learning Outcome**

7. At the end of the Oregon Medical Physics Program (OMPP), students will be able to explain the biological and chemical pathway for radiation-induced carcinogenesis, including time intervals and all potential outcomes.

## **Student Learning Outcome**

1. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to explain the components, functionality and design of x-ray systems utilized in imaging and therapeutic devices found in Radiation Medicine or Diagnostic Radiology.

#### **Student Learning Outcome**

4. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to apply radiation safety principles in the calculation and design of radiation shielding. This will include communicating with a team of individuals from equipment manufacturers, design and construction, architects, hospital administration and clinicians.

#### **Student Learning Outcome**

6. Students will execute a research project based on in-depth knowledge of scientific literature, experimental design, and statistical tools.

#### **Student Learning Outcome**

3. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to communicate the risks associated with the use of radiation to members of the general public, patients, and professionals in healthcare.

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## Competency

**Teamwork** 

## **Student Learning Outcome**

4. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to apply radiation safety principles in the calculation and design of radiation shielding. This will include communicating with a team of individuals from equipment manufacturers, design and construction, architects, hospital administration and clinicians.

## **Competency**

Communication

## **Student Learning Outcome**

6. Students will execute a research project based on in-depth knowledge of scientific literature, experimental design, and statistical tools.

## **Student Learning Outcome**

4. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to apply radiation safety principles in the calculation and design of radiation shielding. This will include communicating with a team of individuals from equipment manufacturers, design and construction, architects, hospital administration and clinicians.

#### **Student Learning Outcome**

10. Demonstrate the ability to transfer knowledge through the formal education process (ability to teach in the formal educational setting).

#### **Student Learning Outcome**

1. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to explain the components, functionality and design of x-ray systems utilized in imaging and therapeutic devices found in Radiation Medicine or Diagnostic Radiology.

Tuesday, July 12, 2022 Page 108 of 134

2. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to explain the components, functionality and design of a linear accelerator utilized for external beam radiation therapy treatment in Radiation Medicine.

### **Student Learning Outcome**

3. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to communicate the risks associated with the use of radiation to members of the general public, patients, and professionals in healthcare.

# Competency

Information Literacy

# **Student Learning Outcome**

4. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to apply radiation safety principles in the calculation and design of radiation shielding. This will include communicating with a team of individuals from equipment manufacturers, design and construction, architects, hospital administration and clinicians.

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# **Student Learning Outcome**

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### **Student Learning Outcome**

6. Students will execute a research project based on in-depth knowledge of scientific literature, experimental design, and statistical tools.

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# **Competency**

Professional Identity and Ethical Behavior

# **Student Learning Outcome**

8. Students will exhibit professional and ethical characteristics in the clinical areas where medical imaging exams and radiation therapy treatments are performed.

### **Student Learning Outcome**

5. Upon graduation, students will be prepared to take Part 1 of the American Board of Radiology Initial Certification Exam.

### Competency

Professional Knowledge and Skills

# **Student Learning Outcome**

2. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to explain the components, functionality and design of a linear accelerator utilized for external beam radiation therapy treatment in Radiation Medicine.

# **Student Learning Outcome**

6. Students will execute a research project based on in-depth knowledge of scientific literature, experimental design, and statistical tools.

### **Student Learning Outcome**

7. At the end of the Oregon Medical Physics Program (OMPP), students will be able to explain the biological and chemical pathway for radiation-induced carcinogenesis, including time intervals and all potential outcomes.

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9. Contribute to the application and translation of new Medical Physics knowledge through scholarly inquiry, discovery, and dissemination.

### **Student Learning Outcome**

1. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to explain the components, functionality and design of x-ray systems utilized in imaging and therapeutic devices found in Radiation Medicine or Diagnostic Radiology.

## **Student Learning Outcome**

3. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to communicate the risks associated with the use of radiation to members of the general public, patients, and professionals in healthcare.

# **Student Learning Outcome**

10. Demonstrate the ability to transfer knowledge through the formal education process (ability to teach in the formal educational setting).

### Competency

**Teamwork** 

# **Student Learning Outcome**

4. At the end of the Oregon Medical Physics Program (OMPP), the graduate will be able to apply radiation safety principles in the calculation and design of radiation shielding. This will include communicating with a team of individuals from equipment manufacturers, design and construction, architects, hospital administration and clinicians.

# Competency

Communication

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Effectively communicate in written and verbal form to both peers and experts

### **Competency**

Information Literacy

### **Student Learning Outcome**

Interpret and critique scientific literature.

### Competency

Professional Identity and Ethical Behavior

## **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

### Competency

Professional Knowledge and Skills

### **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

# **Student Learning Outcome**

Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Advance knowledge in selected area of concentration.

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Formulate hypothesis based on current concepts in the field.

# **Student Learning Outcome**

Interpret and critique scientific literature

## **Student Learning Outcome**

Apply knowledge to one specialized area

### **Competency**

**Teamwork** 

### **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

# Competency

Communication

# **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

### Competency

Information Literacy

# **Student Learning Outcome**

Interpret and critique scientific literature.

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Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Demonstrate a broad knowledge of central concepts in the relevant scientific field.

# **Student Learning Outcome**

Identify gaps in scientific knowledge and formulate hypothesis based on current concepts in the field.

### Competency

**Teamwork** 

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## **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

# **Competency**

Communication

### **Student Learning Outcome**

Accurately and professionally communicate results with others verbally and in writing.

### Competency

Information Literacy

### **Student Learning Outcome**

Critically evaluate a defined body of knowledge relevant to their field.

# **Student Learning Outcome**

Identify significant and original problems that will impact human health.

### Competency

Professional Identity and Ethical Behavior

### **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

# **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

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# **Competency**

Professional Knowledge and Skills

# **Student Learning Outcome**

Collect and store data in accordance with good lab practices.

### **Student Learning Outcome**

Produce written documents appropriate for publication.

### **Student Learning Outcome**

Establish new connections within their field of research by attending seminars, meetings, symposiums or conferences.

### **Student Learning Outcome**

Design and conduct independent, innovative research in accordance with the scientific research method.

## **Student Learning Outcome**

Demonstrate analytical skills.

# Competency

Communication

# **Student Learning Outcome**

Demonstrate doctoral-level competence in written and verbal communication.

# Competency

Information Literacy

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### **Student Learning Outcome**

Interpret and critique scientific literature.

# **Competency**

Professional Identity and Ethical Behavior

### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

# **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

# Competency

Professional Knowledge and Skills

# **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

# **Student Learning Outcome**

Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Formulate hypothesis based on current concepts in the field.

# **Student Learning Outcome**

Advance knowledge in selected area of concentration.

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Actively engage in diversity, equity, and inclusion work

### Competency

Information Literacy

# **Student Learning Outcome**

Advance knowledge in selected area of concentration.

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Interpret and critique scientific literature.

# Competency

Professional Identity and Ethical Behavior

### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

### Competency

Professional Knowledge and Skills

## **Student Learning Outcome**

Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

# **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

# **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

# Competency

Teamwork

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Interpret and critique scientific literature.

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Advance knowledge in selected area of concentration.

# **Competency**

Professional Identity and Ethical Behavior

### **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

### Competency

Professional Knowledge and Skills

## **Student Learning Outcome**

Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

# **Student Learning Outcome**

Formulate hypothesis based on current concepts in the field.

# **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

### **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

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# **Competency**

**Teamwork** 

# **Student Learning Outcome**

Develop collaboration skills

# **Competency**

Communication

### **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Communication: Effectively communicate with other members of the healthcare team including accurately and adequately documenting information regarding care for medical, legal, quality, and financial purposes. Elicit information from patients in an organized, efficient manner based on an appropriate differential diagnosis. Educate patients about medical conditions and health promotion and disease prevention principles. Apply the concepts of health literacy.

# **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Communication: Effectively communicate with other members of the healthcare team including accurately and adequately documenting information regarding care for medical, legal, quality, and financial purposes. Elicit information from patients in an organized, efficient manner based on an appropriate differential diagnosis. Educate patients about medical conditions and health promotion and disease prevention principles. Apply the concepts of health literacy.

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Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Communication: Effectively communicate with other members of the healthcare team including accurately and adequately documenting information regarding care for medical, legal, quality, and financial purposes. Elicit information from patients in an organized, efficient manner based on an appropriate differential diagnosis. Educate patients about medical conditions and health promotion and disease prevention principles. Apply the concepts of health literacy.

### Competency

Community Engagement, Social Justice and Equity

### **Student Learning Outcome**

Upon completion of the Physician Assistant program, graduates will demonstrate competence in Social Justice and Equity:Apply the principles of social justice and equity.Recognize and work against systemic structures that contribute to health care disparities.

### Competency

Information Literacy

# **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Clinical Reasoning:Formulate a differential diagnosis for a presenting problem based on an appropriate history, physical examination and diagnostic workup.Locate, appraise, and integrate information from evidence-based studies related to patients' health.Determine the appropriate interventions and plan for disease management.Our Program operationalizes information literacy "locate, appraise, and integrate information" from evidence-based studies related to patients' health through the competency of clinical reasoning.

# Competency

**Patient Centered Care** 

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Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Patient Centered Care:Recognize the importance of coordinating patient care effectively with the health care team.Incorporate patient preferences when determining diagnostic and therapeutic interventions.Advocate for equitable, accessible, high-quality patient care.Apply the concepts of population health to patient care.

### **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Patient Centered Care:Recognize the importance of coordinating patient care effectively with the health care team.Incorporate patient preferences when determining diagnostic and therapeutic interventions.Advocate for equitable, accessible, high-quality patient care.Apply the concepts of population health to patient care.

### **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Patient Centered Care:Recognize the importance of coordinating patient care effectively with the health care team.Incorporate patient preferences when determining diagnostic and therapeutic interventions.Advocate for equitable, accessible, high-quality patient care.Apply the concepts of population health to patient care.

### **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Patient Centered Care:Recognize the importance of coordinating patient care effectively with the health care team.Incorporate patient preferences when determining diagnostic and therapeutic interventions.Advocate for equitable, accessible, high-quality patient care.Apply the concepts of population health to patient care.

### Competency

Professional Identity and Ethical Behavior

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Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Professionalism: Demonstrate accountability and integrity in actions and decision making in regards to patients, the profession, the public, and oneself. Recognize and work within personal and professional limitations. Center shared-decision making with patients and advocate for equitable access to effective healthcare. Commit to lifelong learning and practice improvement. Intentionally collaborate with all members of the healthcare team. Endorse the value of positionality. Contribute to an environment that is safe and free from harassment.

Academic Year: 2022-2023

### **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Professionalism: Demonstrate accountability and integrity in actions and decision making in regards to patients, the profession, the public, and oneself. Recognize and work within personal and professional limitations. Center shared-decision making with patients and advocate for equitable access to effective healthcare. Commit to lifelong learning and practice improvement. Intentionally collaborate with all members of the healthcare team. Endorse the value of positionality. Contribute to an environment that is safe and free from harassment.

# Competency

Professional Knowledge and Skills

### **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Practice Knowledge: Learn and apply foundational knowledge in pathophysiology, etiology, risk factors, epidemiology, signs and symptoms, differential diagnosis, diagnostic work-up, patient management, surgical principles, health promotion, and disease prevention for a variety of acute and chronic medical conditions. Demonstrate foundational knowledge in social determinants of health.

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Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Practice Knowledge: Learn and apply foundational knowledge in pathophysiology, etiology, risk factors, epidemiology, signs and symptoms, differential diagnosis, diagnostic work-up, patient management, surgical principles, health promotion, and disease prevention for a variety of acute and chronic medical conditions. Demonstrate foundational knowledge in social determinants of health.

### **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Practice Knowledge: Learn and apply foundational knowledge in pathophysiology, etiology, risk factors, epidemiology, signs and symptoms, differential diagnosis, diagnostic work-up, patient management, surgical principles, health promotion, and disease prevention for a variety of acute and chronic medical conditions. Demonstrate foundational knowledge in social determinants of health.

# **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Practice Knowledge: Learn and apply foundational knowledge in pathophysiology, etiology, risk factors, epidemiology, signs and symptoms, differential diagnosis, diagnostic work-up, patient management, surgical principles, health promotion, and disease prevention for a variety of acute and chronic medical conditions. Demonstrate foundational knowledge in social determinants of health.

### **Competency**

Teamwork

### **Student Learning Outcome**

Upon completion of the Physician Assistant program, the graduate will be able to demonstrate competence in Professionalism:Intentionally collaborate with all members of the healthcare team.

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Formulate hypothesis based on current concepts in the field.

# Competency

Professional Identity and Ethical Behavior

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# **Student Learning Outcome**

Develop ancillary skills, where necessary, for career development

# **Student Learning Outcome**

Apply fundamental knowledge of ethics in research.

### Competency

Professional Knowledge and Skills

### **Student Learning Outcome**

Formulate hypothesis based on current concepts in the field

### **Student Learning Outcome**

Demonstrate advanced knowledge in one specialized area.

# **Student Learning Outcome**

Design, conduct, and interpret their own research.

# **Student Learning Outcome**

Demonstrate a basic knowledge of central concepts in the relevant scientific field.

# **Student Learning Outcome**

Advance knowledge in selected area of concentration.

### **Competency**

Teamwork

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# **Student Learning Outcome**

Develop ancillary skills, where necessary, to obtain positions outside scientific research.

# **Student Learning Outcome**

Students work effectively within collaborative, team-based environment while acknowledging positionally and intentionally making space for diverse perspectives

# Competency

Communication

### **Student Learning Outcome**

Demonstrate active listening and oral and written communication skills with diverse individuals, communities and colleagues to ensure effective, culturally appropriate exchange of information.

# **Student Learning Outcome**

Demonstrate active listening and oral and written communication skills with diverse individuals, communities and colleagues to ensure effective, culturally appropriate exchange of information.

# Competency

Community Engagement, Social Justice and Equity

### **Student Learning Outcome**

Social Justice and Equity: Apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

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### **Student Learning Outcome**

Social Justice and Equity: Apply principles of social justice, equity, and/or anti-racism through community-engaged practice, service, or scholarship.

# Competency

Information Literacy

### **Student Learning Outcome**

Demonstrate an appropriate understanding of evolving health care systems, health and science policy and resource allocation in order to optimize human health and scientific discovery.

# **Student Learning Outcome**

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.

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# **Student Learning Outcome**

Demonstrate an appropriate understanding of evolving health care systems, health and science policy and resource allocation in order to optimize human health and scientific discovery.

## Competency

**Patient Centered Care** 

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# **Student Learning Outcome**

Recognize side-effects or complications commonly associated with each treatment procedure, and recommend the appropriate patient care, with respect for patient preferences, needs, attitudes, beliefs and values.

### **Student Learning Outcome**

Collaborate with diverse patients, families and communities professionally, with integrity, using appropriate verbal and nonverbal communication.

### **Student Learning Outcome**

Collaborate with diverse patients, families and communities professionally, with integrity, using appropriate verbal and nonverbal communication.

# **Student Learning Outcome**

Recognize side-effects or complications commonly associated with each treatment procedure, and recommend the appropriate patient care, with respect for patient preferences, needs, attitudes, beliefs and values.

# **Competency**

Professional Identity and Ethical Behavior

# **Student Learning Outcome**

Demonstrate radiation therapy specific behaviors and norms, as well as the ability to work effectively in an interdisciplinary/ interprofessional team in clinical decision-making and ethical problem-solving.

### **Student Learning Outcome**

Demonstrate radiation therapy specific behaviors and norms, as well as the ability to work effectively in an interdisciplinary/ interprofessional team in clinical decision-making and ethical problem-solving.

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# **Competency**

Professional Knowledge and Skills

# **Student Learning Outcome**

Demonstrate the ability to identify situations that compromise safety and participate in risk reduction and continuous quality improvement

### **Student Learning Outcome**

Demonstrate competence in the core knowledge, skills, and practices as defined by degree programs and relevant professional licensing and credentialing boards.

# **Student Learning Outcome**

Demonstrate the ability to identify situations that compromise safety and participate in risk reduction and continuous quality improvement

# **Student Learning Outcome**

Operate ionizing-radiation producing equipment, and recognize any inconsistencies or malfunctions, and apply radiation safety practices to safely deliver an approved treatment plan for quality care.

# **Student Learning Outcome**

Operate ionizing-radiation producing equipment, and recognize any inconsistencies or malfunctions, and apply radiation safety practices to safely deliver an approved treatment plan for quality care.

## **Student Learning Outcome**

Demonstrate the ability to identify and define problems, critically compare options, make timely decisions or recommendations, identify uncertainties and use findings to improve outcomes in light of evolving evidence.

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Demonstrate the ability to identify and define problems, critically compare options, make timely decisions or recommendations, identify uncertainties and use findings to improve outcomes in light of evolving evidence.

### **Student Learning Outcome**

Apply foundational knowledge of ethics, physics, anatomy, & physiology and oncology in the review and verification of all approved treatment plans, instructions, prescriptions and imaging, to ensure that the information is consistent and valid before delivering any radiation therapy treatment.

# **Student Learning Outcome**

Apply foundational knowledge of ethics, physics, anatomy, & physiology and oncology in the review and verification of all approved treatment plans, instructions, prescriptions and imaging, to ensure that the information is consistent and valid before delivering any radiation therapy treatment.

### **Student Learning Outcome**

Demonstrate competence in the core knowledge, skills, and practices as defined by degree programs and relevant professional licensing and credentialing boards.

# Competency

**Teamwork** 

# **Student Learning Outcome**

Work effectively within collaborative, team- or teaming-based interprofessional environments while acknowledging positionality and intentionally making space for diverse perspectives.

# **Student Learning Outcome**

Work effectively within collaborative, team- or teaming-based interprofessional environments while acknowledging positionality and intentionally making space for diverse perspectives.

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