GC in Business

1. Critical thinking
   Providing Department: GC in Business
   Learning Outcome Description:
   Critical thinking—: Students demonstrate the ability to think critically in analyzing a business problem.

2. Integrative problem solving
   Providing Department: GC in Business
   Learning Outcome Description:
   Integrative problem solving—Students demonstrate the ability to integrate ideas learned in class to solve a case.

3. Leading and managing human resources
   Providing Department: GC in Business
   Learning Outcome Description:
   Leading and managing human resources—Students demonstrate the key ideas behind leading and managing human resources. [Leading and Managing Human Resources]

4. Collaborative skills/teamwork
   Providing Department: GC in Business
   Learning Outcome Description:
   Collaborative skills/teamwork—Students demonstrate teamwork and collaboration skills. [Skills/ Teamwork Identify and Carry Out Collaboration with others. Team Product/]

5. Global analysis
   Providing Department: GC in Business
   Learning Outcome Description:
   Global analysis—Demonstrate the ability to analyze issues related to the global environment and recommend appropriate action. [Global Analysis, Strategic, Structural and environmental analysis Implementation]

6. Environmental analysis
   Providing Department: GC in Business
   Learning Outcome Description:
   Environmental analysis—Demonstrate the ability to recognize environmental uncertainty and use it to the firm’s advantage. Environmental Analysis

7. Core Content
   Providing Department: GC in Business
   Learning Outcome Description: Demonstrate basic knowledge of the core content of the MBA.

GC in DPD Academy

1. Communicate effectively in organizational contexts
   Providing Department: GC in DPD Academy
   Learning Outcome Description:
   Students are able to: Learning Objective 1a: Write effective business documents, prepare and deliver effective oral business presentations, master listening skills Learning Objective 1b: Understand and apply the concepts and theories of persuasive communication Learning Objective 1c: Analyze persuasive messages and arguments and develop persuasion campaigns Learning Objective 1d: Use communication principles and practices to improve effectiveness in interpersonal interactions across diverse managerial contexts
2. Examine the core functional business areas from a managerial perspective: accounting, finance, management (human resources).

Providing Department: GC in DPD Academy
Learning Outcome Description:
Students are able to: Learning Objective 2a: Examine the core functional business areas from a managerial perspective: accounting, finance, management (human resources). Learning Objective 2b: Apply the general principles of management including planning, organizing, leading, and controlling to current business events. Learning Objective 2c: Integrate managerial themes with current workplace (including ethics, culture, social responsibility, diversity, planning, organizational design, human resource management, innovation, motivation, communication, leadership, individual behaviors, decision making, and strategy). Learning Objective 2d: Demonstrate critical thinking, teamwork, and professional business skills for any work environment.

3. Demonstrate leadership and interpersonal skills

Providing Department: GC in DPD Academy
Learning Outcome Description:
Students are able to: Learning Objective 3a: Evaluated through a series of weekly exercises and reflection papers. Learning Objective 3b: Evaluated using the individual leadership development plan that students complete at the end of the course.

4. Examine the core functional business areas from a managerial perspective: accounting, finance, management (human resources)

Providing Department: GC in DPD Academy
Learning Outcome Description: This learning outcome is taught in BA 6020, BA 2030, MGT 7640 at the Mastery level.

**GC in Entrepreneurship and Innovation**

1. Distinguish between types of entrepreneurship and innovation

Providing Department: GC in Entrepreneurship and Innovation
Learning Outcome Description:
- Understand that there are many types of innovations and entrepreneurial thinking toward start up action plan programming
- Understand points of comparison

2. Demonstrate knowledge of the stages of new ventures creations

Providing Department: GC in Entrepreneurship and Innovation
Learning Outcome Description:
* understand that there are many types of innovation and entrepreneurial thinking and action
* demonstrate knowledge of sources, methods and processes for:
  * Discovering, creating refining ideas
  * Interacting with stakeholders
  * finding viable and sustaining and growing a new venture
  * building, testing, evaluating a business model/product/service
  * launching, sustaining new ventures
  * acquiring and managing operations

3. Describe the common factors for entrepreneurship and new venture success

Providing Department: GC in Entrepreneurship and Innovation
Learning Outcome Description:
- Work effectively within interdisciplinary teams to achieve success
- Identify what it takes to be successful and the common pitfalls facing entrepreneurs and new ventures

4. Compose and plan for the next steps for the journey of discovery, experimentation and action.

Providing Department: GC in Entrepreneurship and Innovation
Learning Outcome Description:
Map and effectively plan to position the offering in the ecosystem/industry of choice against key competitors

**Post-Bachelor Certificate in Accounting**

1. Written Communication

Providing Department: Post-Bachelor Certificate in Accounting
Learning Outcome Description:
- Communicate effectively in writing
- Express thoughts in writing using an appropriate format that includes proper grammar, punctuation, spelling, and sentence construction
- Understand what written format is suitable for a specific task
- Express thoughts concisely

2. Oral communication
Providing Department: Post-Bachelor Certificate in Accounting

Learning Outcome Description:
Students will: • Communicate effectively in oral presentations • Organize ideas, communicate messages appropriate to listeners and situations • Use appropriate presentation style, including use of visual aids and handout materials

3. Ethical Analysis
Providing Department: Post-Bachelor Certificate in Accounting

Learning Outcome Description:
Students will: • Demonstrate an understanding of ethical issues in contemporary business practice • Demonstrate objectivity, integrity, and ethical behavior • Understand ethical codes relevant to accounting practice, such as those promulgated by AICPA, IMA, and IAA

4. Collaborative Skills/Teamwork
Providing Department: Post-Bachelor Certificate in Accounting

Learning Outcome Description:
Students will: • Demonstrate effective interaction with others in team settings • Work productively with other individuals in diverse roles and with varying degrees of interest in the outcome • Influence, inspire, and motivate others to achieve results • Resolve conflicts within the group

5. Information Literacy/Research Skills
Providing Department: Post-Bachelor Certificate in Accounting

Learning Outcome Description:
Students will: • Demonstrate an ability to identify, find, interpret, evaluate, and use information appropriately

6. Technical Mastery of Accounting
Providing Department: Post-Bachelor Certificate in Accounting

Learning Outcome Description:
Students will: • Demonstrate an understanding of the common body of accounting knowledge, including both theory/concepts and real-world applications • Demonstrate the ability to perform accounting work and interpret accounting reports

7. Decision Making in Complex Environments
Providing Department: Post-Bachelor Certificate in Accounting

Learning Outcome Description:
Students will: • Recognize and analyze problems, their key causes, and their possible solutions • Critically analyze, evaluate, and synthesize information as a guide to action • Work within ambiguous or unstructured situations and make appropriate decisions • Understand the purposes and limitations of narrow, technical solutions within a broader business context • Apply technical rules, critical reasoning, and sound judgment to solve real-world accounting and tax problems

UGC in Entrepreneurship and Innovation

1 Distinguish between types of entrepreneurship and innovation
Providing Department: UGC in Entrepreneurship and Innovation

Learning Outcome Description:
- Understand that there are many types of innovations and entrepreneurial thinking toward start up action plan programming - Understand points of comparison

2 Demonstrate knowledge of the stages of new ventures creations
Providing Department: UGC in Entrepreneurship and Innovation

Learning Outcome Description:
* Identify the key elements and processes of new venture design and development * understand that there are many types of innovation and entrepreneurial thinking and action *demonstrate knowledge of sources, methods and processes for: * Discovering, creating refining ideas * Interacting with stakeholders * finding viable and sustaining and growing a new venture * building, testing, evaluating a business model/product/service * launching, sustaining new ventures * acquiring and managing operations

3 Describe the common factors for entrepreneurship and new venture success
Providing Department: UGC in Entrepreneurship and Innovation

Learning Outcome Description:
- Work effectively within interdisciplinary teams to achieve success - Identify what it takes to be successful and the common pitfalls facing entrepreneurs and new ventures
4 Plan for the next steps for the journey of discovery, experimentation and action.

**Providing Department:** UGC in Entrepreneurship and Innovation

**Learning Outcome Description:**
Map and effectively plan to position the offering in the ecosystem/industry of choice against key competitors

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**PhD in Business Administration (Ph.D.)**

1. **Advanced Knowledge of the student's area of specialization**

**Providing Department:** PhD in Business Administration (Ph.D.)

**Learning Outcome Description:**
The student will obtain a grade of B or better in each doctoral major course. The student will demonstrate an understanding of the global dimensions of the selected field of knowledge. The acquisition of this understanding will be demonstrated in the student’s evaluation in an appropriate course or Ph.D. level Directed Study incorporating a global perspective. The student will pass written and oral comprehensive examinations addressing the area of specialization.

2. **Development of advanced theoretical and practical research skills in the student's area of specialization**

**Providing Department:** PhD in Business Administration (Ph.D.)

**Learning Outcome Description:**
- The student will successfully complete at least 11 hours of statistics and quantitative methods classes, as prescribed in his or her plan of work.
- The student must utilize the advanced research skills in: 1) a paper presented at the Fall Ph.D. Research Conference, described below, and 2) an original paper submitted to an academic conference or an academic journal; or its equivalent.

3. **Development of research papers in the area of specialization that demonstrate the ability to make significant independent and original intellectual contributions that will advance the field’s knowledge**

**Providing Department:** PhD in Business Administration (Ph.D.)

**Learning Outcome Description:**
- Every fall term, there will be a Ph.D. Research Conference, where doctoral students who have not defended their dissertation proposal will make a formal presentation on (theoretical or empirical) research they have conducted during the prior year. The student must be the lead author on the paper.
- The student will work with appropriate faculty members with the objective of developing papers for academic conferences and academic journals. At least one paper written by the student will be empirical analysis of data and its interpretation rooted in discipline-specific theory.
- The student should submit an original paper at an academic conference, or have a research paper under submission to an academic journal or its equivalent, prior to graduation.

4. **Preparation for teaching responsibilities in higher education**

**Providing Department:** PhD in Business Administration (Ph.D.)

**Learning Outcome Description:**
- The student will teach at least one course prior to candidacy, and the student will be evaluated by students using Wayne State’s Student Evaluation of Instruction surveys, and the student will be observed teaching by a faculty member in the area of specialization. If the student’s evaluation of teaching is poor (average evaluation score less than 3.0 and/or the faculty evaluator deems the student teaching as unacceptable) then the student will be enrolled in a program for improved teaching at the Wayne State Office of Teaching and Learning and/or other programs to help improve teaching.

5. **Student dissertations demonstrating personal integration of, and original intellectual contribution to, the selected field of knowledge**

**Providing Department:** PhD in Business Administration (Ph.D.)

**Learning Outcome Description:**
- The student must conduct original research and defend a dissertation.

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**Master of Business Administration (MBA)**

1. **Content Knowledge**

**Providing Department:** Master of Business Administration (MBA)

**Learning Outcome Description:** Demonstrate basic knowledge of the core content of the MBA

2. **Quantitative**

**Providing Department:** Master of Business Administration (MBA)

**Learning Outcome Description:** Learning goal 2: Demonstrate sufficient quantitative skills

3. **Ethical Analysis**
Providing Department: Master of Business Administration (MBA)
Learning Outcome Description: Demonstrate a good understanding of the major theories in ethics

4. Critical Thinking
Providing Department: Master of Business Administration (MBA)
Learning Outcome Description: Demonstrate critical thinking in solving a business problem

5. Leadership
Providing Department: Master of Business Administration (MBA)
Learning Outcome Description: Demonstrate the ability to use concepts from the leadership literature to address how to implement the change

6. Global Analysis
Providing Department: Master of Business Administration (MBA)
Learning Outcome Description: Demonstrate the ability to analyze the different dimension of the global environment and provide an appropriate recommendation to deal with it

MS in Accounting (MSA)

1. Decision Making in Complex Environments
Providing Department: MS in Accounting (MSA)
Learning Outcome Description: Students will demonstrate the ability make effective decisions in complex environments

2. Written and Oral Communication
Providing Department: MS in Accounting (MSA)
Learning Outcome Description: Students will demonstrate the ability to communicate accounting (financial and tax) information in written and oral forms.

3. Accounting Content Knowledge
Providing Department: MS in Accounting (MSA)
Learning Outcome Description: Students will demonstrate an understanding of key Accounting knowledge Evaluate financial Statement Accounting Professional codes of conduct Accounting research resources for decision making

4. Ethical Analysis
Providing Department: MS in Accounting (MSA)
Learning Outcome Description: Students will demonstrate the ability to perform an ethical analysis relevant to the accounting practice

MS in Data Science and Business Analytics

PLO1 1. Critical Thinking
Providing Department: MS in Data Science and Business Analytics
Learning Outcome Description: Students will be able to produce accurate and timely insights from large quantities of data using data science and analytics techniques.

PLO2 2. Communication
Providing Department: MS in Data Science and Business Analytics
Learning Outcome Description: Students will be able to communicate analytics problems, methods, and findings effectively after considering the relevant audience (technical vs. non-technical stakeholders), situation, and purpose of the communication

PLO3 3. Technical Skills
Providing Department: MS in Data Science and Business Analytics
Learning Outcome Description: Students will be able to use technical skills in predictive and prescriptive modeling to support/drive decision-making
PLO4 4. Data Analysis Life Cycle
Providing Department: MS in Data Science and Business Analytics
Learning Outcome Description: Students will be able to employ the data analysis life cycle to find effective solutions to computing challenges in analytical projects.

PLO5 5. Teamwork & Collaboration
Providing Department: MS in Data Science and Business Analytics
Learning Outcome Description: Students collaborate productively with others to accomplish established goals.

MS in Finance

1 Assess a firm's financial condition
Providing Department: MS in Finance
Learning Outcome Description:
LO 1.1: Demonstrate knowledge of theories and models relevant to the field of finance. LO 1.2: Formulate and evaluate investment and financial decisions of a corporation LO 1.3: Interpret and synthesize data used in investment analysis. LO 1.4: Identify, evaluate, and explain the investment and financial decisions of corporations utilizing financial theory and decision-making tools

2 Demonstrate technical proficiency/skills used in the application of financial information technology
Providing Department: MS in Finance
Learning Outcome Description:
LO2.1: Apply standard quantitative techniques and financial analysis to corporate financial decisions. LO2.2: Apply standard quantitative techniques and financial analysis to the valuation of basic financial securities including equities, fixed income, futures and options. LO 2.3: Communicate effectively and professionally both in writing and by means of presentations using appropriate technical language. LO2.4: Integrate complex financial information and analysis into a written report in a well-organized and easy to understand manner.

3 Evaluate choices between competing resource needs
Providing Department: MS in Finance
Learning Outcome Description:
LO 3.1: Select among and apply capital budgeting techniques LO 3.2: Evaluate investments in working capital and long-term assets. LO 3.3: Understand how to maximize shareholder wealth, or capital markets LO 3.4: Understand the trade-off between risk and return

4 Determine a firm's funding needs
Providing Department: MS in Finance
Learning Outcome Description:
LO 4.1: Design and analyze pro forma statements LO 4.2: Determine composition of short and long term funds LO 4.3: Identify and evaluate financing choices

5 Value a firm and its assets
Providing Department: MS in Finance
Learning Outcome Description:
LO 5.1: Select among and apply valuation techniques LO 5.2: Apply the contingent claims approach to valuation LO 5.3: Apply valuation models to estimate the value of financial assets and securities

6 Understand the portfolio management processes
Providing Department: MS in Finance
Learning Outcome Description:
LO 6.1: Evaluate securities and manage portfolios. LO 6.2: Apply models for pricing stocks, bonds, and derivative instruments LO 6.3: Construct optimal portfolios LO 6.4: Design hedging strategies to manage market risks

7 Evaluate the industry environment in which firms operate
Providing Department: MS in Finance
Learning Outcome Description:
LO 7.1: Perform competitive and comparative analyses of industries LO 7.2: Describe global capital markets

8 Entrepreneurial Finance and Venture Capital

https://wayne.campuslabs.com/planning/reports/view/18384/year/2670/unit/44855
Providing Department: MS in Finance
Learning Outcome Description:
LO 8.1: Understand entrepreneurial financing techniques  LO 8.2: Understand entrepreneurial financing techniques

**MS in Global Supply Chain**

1. Learning Goal Assess a firm's Supply Chain Strategy
Providing Department: MS in Global Supply Chain
Learning Outcome Description:
Learning Outcomes: LO 1.1: Demonstrate knowledge of theories and frameworks relevant to SCM.  LO 1.2: Interpret and synthesize data/information used for supply chain decisions.  LO 1.3: Evaluate operational and financial impact of Supply Chain decisions

2. Learning Goal Evaluate political, economic, social/cultural, legal, regulatory and environmental issues in global supply chains.
Providing Department: MS in Global Supply Chain
Learning Outcome Description:
Learning Outcomes: LO 2.1: Demonstrate knowledge of how global factors impact supply chain decisions (e.g. currency fluctuations, trade implications, etc.)  LO 2.2: Describe the legal and environmental implications of global locations  LO 2.3: Evaluate the regulatory and economic impact of global locations

3. Learning Goal Evaluate choices and tradeoffs in supply chain decision making
Providing Department: MS in Global Supply Chain
Learning Outcome Description:
Learning Outcomes: LO 3.1: Know tradeoffs and techniques for managing quality in supply chains  LO 3.2: Understand the importance of relationship development and evaluate the relational-economic tradeoffs in supply chain decisions  LO 3.3: Understand how to maximize supply chain coordination and efficiency

4. Learning Goal Demonstrate knowledge of managing supply chain risk
Providing Department: MS in Global Supply Chain
Learning Outcome Description:
Learning Outcomes: LO 4.1: Identify techniques and procedures for business continuity planning  LO 4.2: Identify and assess supply chain risks and mitigation strategies  LO 4.3: Develop risk mitigation strategies

5. Learning Goal Demonstrate skills for effective supply chain communication
Providing Department: MS in Global Supply Chain
Learning Outcome Description:
Learning Outcomes: LO 5.1: Communicate effectively and professionally both in writing and by means of presentations using appropriate technical language.  LO 5.2: Integrate complex financial information and analysis into a written report in a well-organized and easy to understand manner.

Providing Department: MS in Global Supply Chain
Learning Outcome Description:
Learning Outcomes: LO 6.1: Select among and apply evaluation techniques/frameworks for supply chain decisions  LO 6.2: Develop the ability to identify critical information and develop solutions  LO 6.3: Develop the ability to integrate relevant information for supply chain decisions

**MS in Taxation (MST)**

1. Written Communication
Providing Department: MS in Taxation (MST)
Learning Outcome Description:
Students will: communicate effectively in writing, express thoughts in writing using an appropriate format that includes proper grammar, punctuation, spelling, and sentence construction. understand what written format is suitable for a specific task. express thoughts concisely.

2. Oral communication
Providing Department: MS in Taxation (MST)
Learning Outcome Description:
Students will: communicate effectively in oral presentations, organize ideas, communicate messages appropriate to listeners and situations; use appropriate presentation style, including use of visual aids and handout materials.

3. Ethical Analysis
Providing Department: MS in Taxation (MST)
Learning Outcome Description:
Students will: demonstrate an understanding of ethical issues in contemporary business practice, demonstrate objectivity, integrity, and ethical behavior. Understand ethical codes relevant to accounting practice, such as those promulgated by AICPA, IMA, and IAA.

4. Collaborative Skills/Teamwork
Providing Department: MS in Taxation (MST)
Learning Outcome Description:
Students will: demonstrate effective interaction with others in team settings, work productively with other individuals in diverse roles and with varying degrees of interest in the outcome, influence, inspire, and motivate others to achieve results, resolve conflicts within the group.

5. Information Literacy/Research Skills
Providing Department: MS in Taxation (MST)
Learning Outcome Description:
Students will: demonstrate an ability to identify, find, interpret, evaluate, and use information appropriately.

6. Technical Mastery of Accounting
Providing Department: MS in Taxation (MST)
Learning Outcome Description:
Students will: demonstrate an understanding of the common body of accounting knowledge, including both theory/concepts and real-world applications, demonstrate the ability to perform accounting work and interpret accounting reports.

7. Decision Making in Complex Environments
Providing Department: MS in Taxation (MST)
Learning Outcome Description:
Students will: recognize and analyze problems, their key causes, and their possible solutions, critically analyze, evaluate, and synthesize information as a guide to action, work within ambiguous or unstructured situations and make appropriate decisions, understand the purposes and limitations of narrow, technical solutions within a broader business context, apply technical rules, critical reasoning, and sound judgment to solve real-world accounting and tax problems.

BA in Business Administration

1. Core Content Knowledge
Providing Department: BA in Business Administration
Learning Outcome Description:
Students will demonstrate business core content knowledge in Quant Methods II, Business Finance, Organizational Behavior, Global Supply Chain and Operations Management, Marketing and Strategic Management and Business Policy.

2. Critical Thinking
Providing Department: BA in Business Administration
Learning Outcome Description:
Students will apply content knowledge to demonstrate critical thinking for decisions in complex environments.

3. Teamwork Skills
Providing Department: BA in Business Administration
Learning Outcome Description: Students will demonstrate collaborative teamwork skills for diverse environments.

4. Oral and Written Communication
Providing Department: BA in Business Administration
Learning Outcome Description: Students will be effective oral and written communicators.

5. Quantitative Reasoning
Providing Department: BA in Business Administration
Learning Outcome Description:
Students will demonstrate the ability to apply and explain mathematical models and their results

6. Technical Applications

Providing Department: BA in Business Administration

Learning Outcome Description: Students will demonstrate a level of fluency with using Microsoft Excel

BS in Business Administration

1. Core Content Knowledge

Providing Department: BS in Business Administration

Learning Outcome Description:
Students will apply content knowledge to demonstrate critical thinking for decisions in complex environments Quantitative Methods II: Statistical Methods (BA 3400) Students will demonstrate the ability to perform Hypothesis testing, Students will understand Sampling distribution inferences, Students will demonstrate the ability to perform Basic Stats computations Business Information Systems (ISM 3630): Students will understand the importance of Information Systems management and its use for competitive advantage. Students will understand the various types of information systems. Students will understand the importance of Security and Ethics in technology. Finance (FIN 3290): Students will understand the time value of money and how to calculate net present value (NPV) Students will demonstrate the ability to assess potential business outcomes and the expected rate of return Students will demonstrate the ability to examine a company’s cash inflow and outflow to perform an cash flow analysis Operations & Supply Chain Management (GSC 3600): Students will understand the context of purchasing and the overall duties Students will demonstrate an understanding of continuous improvement Students will demonstrate an understanding of how Outsourcing affects the organizations’ control structure Organizational Behavior (MGT 2530): Students will demonstrate knowledge of diversity Students will demonstrate an understanding of job satisfaction Students will demonstrate understanding of how to effectively motivate others. Marketing (MKT 2300): Students will understand the classes of consumer goods Students will understand the key components of integrated marketing communications Student will understand the value of service Strategic Management and Business Policy (MGT 6890): Students will understand the meaning of a value chain Students will understand competitive advantage Students will understand globalization and the necessary resource commitments for entry

2. Critical Thinking

Providing Department: BS in Business Administration

Learning Outcome Description:
Demonstrate critical thinking abilities including the ability to apply appropriate information to solve the problem, make recommendations, and draw logical conclusions.

3. Teamwork Skills

Providing Department: BS in Business Administration

Learning Outcome Description:
Collaborate with persons from a variety of backgrounds, interests, and roles, while fostering an atmosphere of tolerance and fairness, and demonstrate effective work in teams in order to accomplish business related goals and objectives.

4. Oral and Written Communication

Providing Department: BS in Business Administration

Learning Outcome Description:
Students will be effective oral and written communicators Use proper delivery tools, techniques and mechanics in oral and written presentations.

5. Quantitative Reasoning

Providing Department: BS in Business Administration

Learning Outcome Description:
Strong quantitative reasoning will result in competency and comfort to be able to apply mathematical models to real-world problems, carry out and justify calculations, draw conclusions based on quantitative evidence, and communicate arguments supported by quantitative evidence.

6. Technical Applications

Providing Department: BS in Business Administration

Learning Outcome Description:
Demonstrate effective use of workplace productivity technology such as spreadsheet, word processing, presentation, and database software, as well as electronic communication technology tools such as email, Internet, instant messenger, discussion groups and other Blackboard tools.
Education

1 BA/BS in Visual Arts Education
Providing Department: Education
Learning Outcome Description:
Demonstrate an understanding of specific visual art education theories and instructional strategies with regard to non-western cultures and multicultural pedagogy (Evidence: Grades for theoretical and qualitative research papers in AED 5890 and AED 6910)

BS in Education in Learning Design and Technology

LO1 Program-level Outcome - LO1
Providing Department: BS in Education in Learning Design and Technology
Learning Outcome Description:
LO1: Students demonstrate the knowledge necessary to design and develop, use, assess, and manage theoretical and practical applications of instructional technologies and processes.

LO2 Program-level Outcome - LO2
Providing Department: BS in Education in Learning Design and Technology
Learning Outcome Description:
LO2: Students develop as reflective practitioners able to demonstrate effective implementation of instructional technologies and processes based on contemporary content and pedagogy.

LO3 Program-level Outcome - LO3
Providing Department: BS in Education in Learning Design and Technology
Learning Outcome Description:
LO3: Students facilitate learning by designing, developing, using, evaluating, and managing effective learning interventions.

LO4 Program-level Outcome - LO4
Providing Department: BS in Education in Learning Design and Technology
Learning Outcome Description:
LO4: Students design, develop, implement, and evaluate technology-rich learning interventions within a supportive community of practice.

LO5 Program-level Outcome - LO5
Providing Department: BS in Education in Learning Design and Technology
Learning Outcome Description:
LO5: Students explore, evaluate, synthesize, and apply methods of inquiry to enhance learning and improve performance.

Ed Spec Cert in General Administration and Supervision

1 School Vision
Providing Department: Ed Spec Cert in General Administration and Supervision
Learning Outcome Description: The student will develop a vision of learning shared and supported by the school community.

2 School Instructional Program
Providing Department: Ed Spec Cert in General Administration and Supervision
Learning Outcome Description: The student will create a school instructional program including equity of educational opportunity for student growth and learning as an instructional leader.

3 Professional Growth
Providing Department: Ed Spec Cert in General Administration and Supervision
Learning Outcome Description: The student will formulate a plan for staff professional growth, including equity of educational opportunity for learning as an instructional leader.

4 Fiscal Management Skills
Providing Department: Ed Spec Cert in General Administration and Supervision
Learning Outcome Description:
The student will engage in activities that demonstrate organizational management skills in fiscal operations.

5 School Community Relations
Providing Department: Ed Spec Cert in General Administration and Supervision
Learning Outcome Description:
The student will facilitate activities that demonstrate the collaboration of staff and community member to respond to diverse community needs.

6 Ethics
Providing Department: Ed Spec Cert in General Administration and Supervision
Learning Outcome Description: The student will act with integrity, fairness, and in an ethical manner to promote student success.

7 Application of Theories & Principles
Providing Department: Ed Spec Cert in General Administration and Supervision
Learning Outcome Description: The student will apply the theories and principles from the administrative course work to her/his educational setting.

Ed Spec Cert in Learning Design and Technology

1 Design Thinking and Knowledge - LDT 7111
Providing Department: Ed Spec Cert in Learning Design and Technology
Learning Outcome Description:
June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

2 Evaluation of Learning and Performance - LDT 7150
Providing Department: Ed Spec Cert in Learning Design and Technology
Learning Outcome Description:
Successfully analyze and implement existing design techniques and criteria for evaluation of commercial products; models of instructional evaluation; methods of large-scale curriculum evaluation; summative evaluation; formative evaluation for review of instructional design. LDT 7150

3 Background, Issues and Trends in Instructional Technology - LDT 8100
Providing Department: Ed Spec Cert in Learning Design and Technology
Learning Outcome Description:
June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

4 Advanced Theory and Research in Instructional Design - LDT 8110
Providing Department: Ed Spec Cert in Learning Design and Technology
Learning Outcome Description:
June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

EdD in Education Leadership and Policy Studies

1 Synthesize research methods & theory
Providing Department: EdD in Education Leadership and Policy Studies
Learning Outcome Description:
Students will synthesize the research methods and theory related to design, approaches, and methods of educational leadership and educational policy.

2 Critique leadership theories
Providing Department: EdD in Education Leadership and Policy Studies
Learning Outcome Description: Students will critique several current leadership theories.

3 Demonstrate skills in policy analysis
Providing Department: EdD in Education Leadership and Policy Studies
Learning Outcome Description: Students will evaluate the significance of educational policy making for educational leaders.

4 Critique research and theory of policy
Providing Department: EdD in Education Leadership and Policy Studies
Learning Outcome Description: Students will critique the research and theory base for the key thematic variable which contribute to policy development, implementation, and effectiveness.

EdD in Educational Evaluation and Research

1 Learning Outcomes#1: Quantitative & Qualitative Statistical Software
Providing Department: EdD in Educational Evaluation and Research
Learning Outcome Description:
EER majors are required to master statistics packages and programming platforms that are essential for the coursework specific to their Plan of Work. This include SPSS, Minitab, StatXact, and LogXact; NVivo in the qualitative track.

2 Learning Outcomes #2: Psychomeditrics: CTT
Providing Department: EdD in Educational Evaluation and Research

3 Learning Outcomes #3: Research Design
Providing Department: EdD in Educational Evaluation and Research
Learning Outcome Description: In the Qualitative Track: Students acquire competencies in (1) fundamentals of epistemological issues, educational research perspectives and research design. Introduction to major research designs, including case study, narrative, phenomenological, grounded theory and ethnographic research. Overview of methods for analyzing talk, text, images, video and interaction. Readings in qualitative research; (2) Collecting, analyzing, and writing findings from ethnographic data (participant-observation field notes, interviews and artifacts); grounded theory; issues of rigor in naturalistic research in education. In the Quantitative Track: Students acquire competencies in the scientific approach to the social and behavioral sciences. Determine researchable problem, develop problem statement and research hypothesis. Determine dependent(s) and independent(s) variables and their level of measurement. Ethical considerations and CITI. Mathematical statistical treatment of random assignment and selection: Simple, stratified, Clustered. Overview of instrument reliability and validity of usage; and descriptive and inferential statistics. Statistical development of effect
sizes. Missing values analysis. Applied statistical treatment of experimental, Sawilowsky-Braver-Braver meta-analysis of Solomon four-group, quasi-experimental, causal-comparative, ex post facto, correlational, documentary (higher & lower criticism), and survey designs. Content analysis, case(s) records review.

4 Learning Outcomes #4: Applied Statistics

**Providing Department:** EdD in Educational Evaluation and Research

**Learning Outcome Description:**


5 Learning Outcome #5: Program Evaluation

**Providing Department:** EdD in Educational Evaluation and Research

**Learning Outcome Description:**

Students acquire skills in the historical development, purposes, usages, and activities of quantitative and qualitative educational program evaluation. Ethical and professional standards. Objectives, management, expertise, participant, comparative, and alternative approaches. Negotiating the evaluator’s role and purpose of the evaluation. Planning, design, cost analysis, data source, sampling, analysis, and reporting. Technical soundness of RFP. Evaluation Consulting.

6 EER Program Evaluation

**Providing Department:** EdD in Educational Evaluation and Research

**Learning Outcome Description:**

Quantitative and Qualitative Program Evaluation of the EER degree programs for University Program Review and Self-Study. This includes the annual (Fall/Winter) grade distribution for all students taking EER coursework.

**EdD in Learning Design and Technology**

1 Background, Issues and Trends in Instructional Technology - LDT 8100

**Providing Department:** EdD in Learning Design and Technology

**Learning Outcome Description:**

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

2 Advanced Theory and Research in Instructional Design - LDT 8110

**Providing Department:** EdD in Learning Design and Technology

**Learning Outcome Description:**

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.
3 Conducting Research in Instructional Technology - LDT 9105

Providing Department: EdD in Learning Design and Technology

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

4 Advanced Research Seminar and Practicum - LDT 9110

Providing Department: EdD in Learning Design and Technology

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

GC in College and University Teaching

1 Prepare Course Syllabus

Providing Department: GC in College and University Teaching

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

2 Create Learning Assessments

Providing Department: GC in College and University Teaching

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

4 Use technology in teaching

Providing Department: GC in College and University Teaching

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in
the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

5 Facilitate Learning

Providing Department: GC in College and University Teaching

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

GC in Online Teaching

1 Foundations of distance education

Providing Department: GC in Online Teaching

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

2 Create and renovate materials, resources, activities for online courses

Providing Department: GC in Online Teaching

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

3 Facilitate online learning

Providing Department: GC in Online Teaching

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

4 Integrate technology in online teaching

Providing Department: GC in Online Teaching

Learning Outcome Description:

June 11, 2020 The LDT faculty have had many meetings to review 5-year data reports on the enrollment trends, sustainability, and growth potential of our existing programs. We decided to move forward with moratoria for the EdD, Ed Specialist, College and University Certificate, and the Online Teaching Certificate programs. The plan is to begin the official paperwork process to close these programs in the fall term while guiding the current students until graduation. Our rationale is that these low and declining enrollment programs require a great deal of immediate administrative, compliance, and organizational revisions as well as marketing
and recruitment attention that is beyond our capacity. If we do not close them now, they will likely be forced to close with RCM in the future because the growth outlook is not viable. We feel our strengths, time, and energy would have a better, long term impact if we focus on the BS, Minor, MEd, and PhD programs.

**MEd in Educational Evaluation and Research**

1 Learning Outcome #1: Quantitative & Qualitative Statistical Software

**Providing Department:** MEd in Educational Evaluation and Research

**Learning Outcome Description:**
EER majors are required to master statistics packages and programming platforms that are essential for the coursework specific to their Plan of Work. Currently, this may include SPSS, Minitab for the quantitative track; and NVivo in the qualitative track.

2 Learning Outcome 2: Measurement & Testing

**Providing Department:** MEd in Educational Evaluation and Research

**Learning Outcome Description:**
Students will master competencies pertaining to Mastery level and Standardized testing, and Classical Measurement theory.

3 Learning Outcomes 3: Research Design

**Providing Department:** MEd in Educational Evaluation and Research

**Learning Outcome Description:**
Students will master concepts pertaining to quantitative writing skills, thesis chapters 1 - 3 (introduction, literature review, methodology), ethics in research, basic sampling plans, instrument reliability and validity, overview of applied statistics, and research designs.

4 Learning Outcomes 4: Applied Statistics

**Providing Department:** MEd in Educational Evaluation and Research

**Learning Outcome Description:**
Students will master data structures, variables, summation notation, graphing, measures of central tendency, measures of variability, measures of bivariate analysis, normal distribution and Z scores, correlation, simple linear regression, sampling theory, hypothesis testing, two sample independent and dependent tests, nominal based analysis, and factorial layouts.

5 EER Program Evaluation

**Providing Department:** MEd in Educational Evaluation and Research

**Learning Outcome Description:**
Quantitative and Qualitative Program Evaluation of the EER degree programs for University Program Review and Self-Study. This includes the annual (Fall/Winter) grade distribution for all students taking EER coursework.

**MEd in Educational Leadership**

1 School Vision

**Providing Department:** MEd in Educational Leadership

**Learning Outcome Description:** The student will articulate a vision of learning shared and supported by the school community.

2 School Instructional Program

**Providing Department:** MEd in Educational Leadership

**Learning Outcome Description:**
The student will create a school instructional program including equity of educational opportunity for student growth and learning as an instructional leader.

3 Professional Growth

**Providing Department:** MEd in Educational Leadership

**Learning Outcome Description:**
The student will develop a staff professional growth plan, including equity of educational opportunity for learning as an instructional leader.

4 Fiscal Management Skills

**Providing Department:** MEd in Educational Leadership

**Learning Outcome Description:**
The student will engage in activities that demonstrate organizational management skills in fiscal operations.

5 School Community Relations
Providing Department: MEd in Educational Leadership
Learning Outcome Description: The student will facilitate activities that demonstrate the collaboration of staff and community member to respond to diverse community needs.

6 Ethics
Providing Department: MEd in Educational Leadership
Learning Outcome Description: The student will act with integrity, fairness, and in an ethical manner to promote student success.

7 Application of Theories & Principles
Providing Department: MEd in Educational Leadership
Learning Outcome Description: The student will apply the theories and principles from the administrative course work to her/his internship setting.

**MEd in Learning Design and Technology**

**LO1 Program-level Outcome - LO1**
Providing Department: MEd in Learning Design and Technology
Learning Outcome Description: LO1: Students demonstrate the knowledge necessary to design and develop, use, assess, and manage theoretical and practical applications of instructional technologies and processes.

**LO2 Program-level Outcome - LO2**
Providing Department: MEd in Learning Design and Technology
Learning Outcome Description: LO2: Students develop as reflective practitioners able to demonstrate effective implementation of instructional technologies and processes based on contemporary content and pedagogy.

**LO3 Program-level Outcome - LO3**
Providing Department: MEd in Learning Design and Technology
Learning Outcome Description: LO3: Students facilitate learning by designing, developing, using, evaluating, and managing effective learning interventions.

**LO4 Program-level Outcome - LO4**
Providing Department: MEd in Learning Design and Technology
Learning Outcome Description: LO4: Students design, develop, implement, and evaluate technology-rich learning interventions within a supportive community of practice.

**LO5 Program-level Outcome - LO5**
Providing Department: MEd in Learning Design and Technology
Learning Outcome Description: LO5: Students explore, evaluate, synthesize, and apply methods of inquiry to enhance learning and improve performance.

**PhD in Education Leadership and Policy Studies**

1 Synthesize research methods & theory
Providing Department: PhD in Education Leadership and Policy Studies
Learning Outcome Description: Students will synthesize the research methods and theory related to design, approaches, and methods of educational leadership and educational policy.

2 Critique leadership theories
Providing Department: PhD in Education Leadership and Policy Studies
Learning Outcome Description: Students will critique several current leadership theories.
Learning Outcome Description: Students will evaluate the significance of educational policy making for educational leaders.

4 Critique research and theory
Providing Department: PhD in Education Leadership and Policy Studies
Learning Outcome Description: Students will critique the research and theory base for the key thematic variable which contribute to policy development, implementation, and effectiveness.

PhD in Educational Evaluation and Research

1 Learning Outcomes: Statistical Software
Providing Department: PhD in Educational Evaluation and Research
Learning Outcome Description: EER majors are required to master statistics packages and programming platforms that are essential for the coursework specific to their Plan of Work. Currently, this may include SPSS, Minitab, StatXact, LogXact, AMOS, LISREL, Excel, Fortran, and R in the quantitative track; NVivo in the qualitative track; and Iteman, ASCAL, Multilog, and AMOS in the Measurement track.

2 Learning Outcomes #2: Psychometrics (CTT & IRT)
Providing Department: PhD in Educational Evaluation and Research

3 Learning Outcomes #3: Research and Experimental Design
Providing Department: PhD in Educational Evaluation and Research
Learning Outcome Description: In the Qualitative Track: Students acquire competencies in (1) fundamentals of epistemological issues, educational research perspectives and research design. Introduction to major research designs, including case study, narrative, phenomenological, grounded theory and ethnographic research. Overview of methods for analyzing talk, text, images, video and interaction. Readings in qualitative research; (2) Collecting, analyzing, and writing findings from ethnographic data (participant-observation field notes, interviews and artifacts); (3) NVivo software. Documenting personal research lens. Role of activism and advocacy. Qualitative tradition and the topology of science. Written, performance, visual, oral records. Memoing. 14 sampling strategies. Within-case, between-case, matrix, and network displays. Sequential analyses. Transcription. 29 Coding methods (Unit of Analysis, Pre-coding, Cycles, Post-coding, Pattern coding). Node creation. Thematic analysis. Negative case analysis. Peer- & Member-checking. Technical soundness and RFP writing. Expert testimony. In the Quantitative Track: Students acquire competencies in the scientific approach to the social and behavioral sciences. Determine researchable problem, develop problem statement and research hypothesis. Determine dependent(s) and independent(s) variables and their level of measurement. Ethical considerations and CITI. Mathematical statistical treatment of random assignment and selection: Simple, stratified, Clustered. Overview of instrument reliability and validity of usage; and descriptive and inferential statistics. Statistical development of effect sizes. Missing values analysis. Applied statistical treatment of experimental, Sawilowsky-Braver-Braver meta-analysis of Solomon four-group, quasi-experimental, causal-comparative, ex post facto, correlational, documentary (higher & lower criticism), and survey designs. Content analysis, case(s) records review.

4 Learning Outcome #4: Applied Statistics
Providing Department: PhD in Educational Evaluation and Research

Learning Outcome Description:


5 Learning Outcome #5: Program Evaluation

Providing Department: PhD in Educational Evaluation and Research

Learning Outcome Description:

Students acquire skills in the historical development, purposes, usages, and activities of quantitative and qualitative educational program evaluation. Ethical and professional standards. Objectives, management, expertise, participant, comparative, and alternative approaches. Negotiating the evaluator's role and purpose of the evaluation. Planning, design, cost analysis, data source, sampling, analysis, and reporting. Technical soundness of RFP. Evaluation Consulting.

6 EER Program Evaluation

Providing Department: PhD in Educational Evaluation and Research

Learning Outcome Description:

Quantitative and Qualitative Program Evaluation of the EER degree programs for University Program Review and Self-Study. This includes the annual (Fall/Winter) grade distribution for all students taking EER coursework.

PhD in Learning Design and Technology

LO1 Program-level Outcome - LO1

Providing Department: PhD in Learning Design and Technology

Learning Outcome Description:

LO1: Students demonstrate the knowledge necessary to design and develop, use, assess, and manage theoretical and practical applications of instructional technologies and processes.

LO2 Program-level Outcome - LO2

Providing Department: PhD in Learning Design and Technology

Learning Outcome Description:

LO2: Students develop as reflective practitioners able to demonstrate effective implementation of instructional technologies and processes based on contemporary content and pedagogy.

LO3 Program-level Outcome - LO3

Providing Department: PhD in Learning Design and Technology

Learning Outcome Description:

LO3: Students facilitate learning by designing, developing, using, evaluating, and managing effective learning interventions.

LO4 Program-level Outcome - LO4

Providing Department: PhD in Learning Design and Technology

Learning Outcome Description:

LO4: Students design, develop, implement, and evaluate technology-rich learning interventions within a supportive community of practice.
LOS Program-level Outcome - LO5

Providing Department: PhD in Learning Design and Technology

Learning Outcome Description:
LO5: Students explore, evaluate, synthesize, and apply methods of inquiry to enhance learning and improve performance.

BS in Education in Kinesiology

1 - ESS Program Learning Outcome - Exercise Physiology - KIN 6300

Providing Department: BS in Education in Kinesiology

Learning Outcome Description:
Official Bulletin Description: Basic physiological concepts as they relate to exercise and human performance. Practical applications incorporated into the laboratory component. Prerequisite: Introductory Anatomy and Physiology (BIO 2870 or equivalent) Course Learning Outcomes At the conclusion of the course, the student will be able to 1. Describe the field of exercise physiology and its role in improving the quality of life. 2. Define cellular bioenergetics sources and pathways available at rest and during exercise. 3. Explain basic physiological responses and adaptations that occur with exercise. 4. Describe and interpret work, energy, and power. 5. Explain the cardiorespiratory response to exercise. 6. Explain the structure and function of skeletal muscle. 7. Explain the neuromuscular adaptations that occur with exercise. 8. Identify the general principles of physical training. 9. Explain the role of exercise and physical activity for fitness and health. 10. Correlate the interaction between exercise, nutrition, and weight control. 11. Differentiate between basic clinical and laboratory research techniques utilized to evaluate the components of human performance.

2 - ESS Program Learning Outcome - Physical Activity and Exercise Psych - KHS 5523

Providing Department: BS in Education in Kinesiology

Learning Outcome Description:
Course Title: KIN 5523 Exercise Psychology Course Description: Introduction of physical activity and exercise psychology from a multi-theory perspective. Determinants, well-being and interventions in physical activity, physical education and exercise settings will be explored through a broad spectrum. Course Objectives: At the finish of the course the student will be able to; 1) Describe the emerging field of exercise psychology. 2) Illustrate the relationship between exercise and quality of life, self-esteem, mood, mood alteration and self-awareness. 3) Describe stress, the stress process, stress management and personality and exercise. 4) Discuss coping with injury. 7) Summarize exercise models and theories. 8) Discuss the motivational determinants of exercise. 9) Review the motivational strategies for exercise adherence. 10) Discover personal meaning in physical activity, understand peak moments in exercise research and be familiar with common exercise concerns. 11) Be cognizant of gender, children and youth, and older adult issues related to exercise. 12) Express the exercise guidelines for promoting optimal mood states.

3 - ESS Program Learning Outcome - Biomechanics - KIN 3580

Providing Department: BS in Education in Kinesiology

Learning Outcome Description:
Course Title: KIN 3580 Biomechanics Official Bulletin Description: Development of knowledge of human physical structure and function in the analysis and appreciation of human movement; theory and practice of human movement analytic techniques. Course Goal: Developing an understanding of biomechanics to prepare the student to use a scientific approach for examining exercise and sports activities. Course Learning Outcomes: By the end of this course, learners will be able to: 1) Describe the terms biomechanics, statics, dynamics, kinematics, and kinetics and the scope of scientific inquiry addressed by biomechanics 2) Interpret and explain the relationship of human physical structure and function related to movements 3) Compare and contrast kinematic and kinetic concepts to human motion analysis 4) Discriminate foundational principles of human bone growth during biomechanical application 5) Determine the significant relationship between muscles and joints and its influence on human movement 6) Describe the appropriate biomechanical principles and methods to analyze human movement

4 - ESS Program Learning Outcome - Motor Learning and Control - KIN 3550

Providing Department: BS in Education in Kinesiology

Learning Outcome Description:
Course Title: KIN 3550 Motor Learning and Control Official Bulletin Description: The study of motor skill acquisition and motor control with applications to physical activity. Focus on the cognitive processes and neural mechanisms that contribute to motor learning and control. Course Goal: Acquisition of current theories, principles, and applications of human motor control and learning. Development of scientific skills for data collection, critical thinking, and writing. Course Learning Outcomes: By the end of this course, learners will be able to: a) Learning outcome 1: Demonstrate the acquisition of the nervous system functions on motor behavior. b) Learning outcome 2: Demonstrate the acquisition of motor control theories and application. c) Learning outcome 3: Demonstrate the knowledge of the principles of motor control d) Learning outcome 4: Demonstrate the knowledge of motor learning processing and variables optimizing the processing. e) Learning outcome 5: Develop the skill to collect data and assess performance in the labs. f) Learning outcome 6: Develop problem solution and writing skill through reviewing scientific research.

MEd in Kinesiology

https://wayne.campuslabs.com/planning/reports/view/18384/year/2070/unit/44855

20/217
1 - ESS Program Learning Outcome - Motor Learning and Control - KIN 8530

**Providing Department:** MEd in Kinesiology

**Learning Outcome Description:**
Course Title: KIN 8530 Motor Learning  
Official Bulletin Description: Examination of current research in motor control and learning.
Relation of the nervous system and other physiological mechanisms to motor behavior and other conditions which affect the acquisition of motor skill: perception, motivation, psychology of motor behavior. Course Goal: Acquisition of current and advanced theories for human motor control and learning. Development of scientific skills for literature review, critical thinking, verbal presentation, and research writing Course Learning Outcomes: By the end of this course, learners will be able to: a) Learning outcome 1: Demonstrate the acquisition of human nervous system functions on motor behavior. b) Learning outcome 2: Demonstrate the acquisition of motor control theories and principles. c) Learning outcome 3: Demonstrate the knowledge of human memory and motor learning processing. d) Learning outcome 4: Demonstrate the knowledge of the variables optimizing motor skill learning. e) Learning outcome 5: Develop critical review and presentation skills on research literature. f) Learning outcome 6: Develop the skills proposing and designing scientific research in motor behavior.

2 - ESS Program Learning Outcome - Biomechanical Analysis of Motor Activity - KIN 7580

**Providing Department:** MEd in Kinesiology

**Learning Outcome Description:**
Course Title: KIN 7580 Biomechanical Analysis of Motor Activity  
Official Bulletin Description: Principles and practice in the analysis of human movement. Selected methods of analysis are used in demonstrations and lab experiences. Students complete a biomechanical analysis project on an appropriate human motor skill. Course Goal: Acquisition of current theories and methods of biomechanics in human movements. Development of scientific skills for literature review, critical thinking, verbal presentation, and research writing Course Learning Outcomes: By the end of this course, learners will be able to: a) Learning outcome 1: Demonstrate the acquisition of kinematic principles for the human movements. b) Learning outcome 2: Demonstrate the acquisition of kinetic principles for the human movements. c) Learning outcome 3: Demonstrate the knowledge of human motor system structures and functions. d) Learning outcome 4: Develop the skills of critical review and verbal presentation on current research literature in human biomechanics. e) Learning outcome 5: Develop the skills of using motion analysis and electromyography (EMG). f) Learning outcome 6: Develop the skills to propose hypotheses and problem solution in the analysis of human movements.

3 - ESS Program Learning Outcome - Internship Placement - KHS 8750

**Providing Department:** MEd in Kinesiology

**Learning Outcome Description:**
Course Title: KHS 8750 Internship in KHS  
Official Bulletin Description: Professional experience in public or private institutions relevant to student's field of specialization. Initial plan of involvement and final evaluation. Course Goal: This course involves an individually arranged, supervised, educational, and professional experience at an approved on-campus or off-campus based internship site. Course Learning Outcomes: By the end of this course, learners will be able to: a) Perform 5-8 exercise science national competencies of the CoAES/CAAHEP accreditation standards at a proficient level. b) Employ, differentiate, and demonstrate the knowledge, dispositions, and skills they acquired during the pursuit of their undergraduate exercise and sport science track degree. c) Complete practical experiences under the direct supervision of an experienced professional in either a clinical or non-clinical health and exercise program of the students' choosing. d) Practice knowledge, skills, and abilities through experience gained from direct participation and/or observation on effectively interacting with co-workers as well as clients/customers in various professional work situations. e) Compare and develop practical insights regarding the typical work-related expectations in a specific clinical or nonclinical health and exercise-related employment setting. f) Appraise and report on their personal strengths and limitations as a developing professional in the field.

4 - ESS Program Learning Outcome - Exercise Physiology 2 - KIN 6310

**Providing Department:** MEd in Kinesiology

**Learning Outcome Description:**
Course Title: KIN 6310 Exercise Physiology II  
Official Bulletin Description: Basic physiological concepts as they relate to exercise and human performance. Practical applications incorporated into the laboratory component. Prerequisite: Introductory Anatomy and Physiology (BIO 2870 or equivalent) Metabolic, neuromuscular, cardiovascular, and respiratory adjustments to acute and chronic exercise in health and disease, including body composition and weight control, nutritional considerations, and the effects of different environments on exercise performance. Prerequisite: KIN 6300 with a minimum grade of C (undergraduates) Course Goal: To demonstrate a knowledge of the elements, experimental processes, and organizing strategies for conducting, analyzing, interpreting and prescribing exercise in a variety of individuals. Course Learning Outcomes: By the end of this course, learners will be able to: 1. Explain the strengths and limitations of science in understanding human movement. 2. Define the nature of human adaptation in diverse environments. 3. Explain the effect of environmental conditions on both acute and chronic exercise. 4. Explain the benefits and detrimental effects of exercise on human health. 5. Perform body composition and metabolic tests and interpret the data correctly. 6. Conduct exercise counseling and prescription, based upon evidenced-based data. 7. Translate subject-specific information related to physical activity in practical settings through development of critical thinking and presentation skills.

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**PhD in Kinesiology**
1 - ESS Program Learning Outcome - Doctoral Sem. in Kinesiology, Health, and Sport Studies - KHS 9601

Providing Department: PhD in Kinesiology

Learning Outcome Description:
Course Title: KHS 9601 Professional Seminar  Course Official Bulletin Description: Critical examination, presentation, and discussion of current interest in kinesiology and health. The emphasis is on interdisciplinary communication and presentation skills.  Course Goal: To prepare PhD students to be successful in the PhD program and as professional upon graduation.  Course Learning Outcomes: By the end of this course, students will be able to: a) Demonstrate the understanding of current and relevant topics across different disciplines including exercise & sport science, physical education & physical activity leadership, and health education. b) Demonstrate the skill of effective poster and conference presentations in kinesiology and health. c) Demonstrate the understanding of teaching in higher education and other professional development. d) Demonstrate the skill of critical thinking and professional reflection.

2 - ESS Program Learning Outcome - Exercise Physiology - KIN 6310

Providing Department: PhD in Kinesiology

Learning Outcome Description:
Course Title: KIN 6310 Exercise Physiology II  Official Bulletin Description: Basic physiological concepts as they relate to exercise and human performance. Practical applications incorporated into the laboratory component. Prerequisite: Introductory Anatomy and Physiology (BIO 2870 or equivalent)  Metabolic, neuromuscular, cardiovascular, and respiratory adjustments to acute and chronic exercise in health and disease, including body composition and weight control, nutritional considerations, and the effects of different environments on exercise performance. Course Goal: To demonstrate a knowledge of the elements, experimental processes, and organizing strategies for conducting, analyzing, interpreting and prescribing exercise in a variety of individuals. Course Learning Outcomes: By the end of this course, learners will be able to: 1. Explain the strengths and limitations of science in understanding human movement. 2. Define nature of human adaptation in diverse environments. 3. Explain the effect of environmental conditions on both acute and chronic exercise. 4. Explain the benefits and detrimental effects of exercise on human health. 5. Perform body composition and metabolic tests and interpret the data correctly. 6. Conduct exercise counseling and prescription, based upon evidenced-based data. 7. Translate subject-specific information related to physical activity in practical settings through development of critical thinking and presentation skills.

3 - ESS Program Learning Outcome - Motor Learning and Control - KIN 8530

Providing Department: PhD in Kinesiology

Learning Outcome Description:
Course Title: KIN 8530 Motor Learning Official Bulletin Description: Examination of current research in motor control and learning. Relation of the nervous system and other physiological mechanisms to motor behavior and other conditions which affect the acquisition of motor skill: perception, motivation, psychology of motor behavior. Course Goal: Acquisition of current and advanced theories for human motor control and learning. Development of scientific skills for literature review, critical thinking, verbal presentation, and research writing Course Learning Outcomes: By the end of this course, learners will be able to: a) Learning outcome 1: Demonstrate the acquisition of human nervous system functions on motor behavior. b) Learning outcome 2: Demonstrate the acquisition of motor control theories and principles. c) Learning outcome 3: Demonstrate the knowledge of human memory and motor learning processing. d) Learning outcome 4: Demonstrate the knowledge of the variables optimizing motor skill learning. e) Learning outcome 5: Develop critical review and presentation skills on research literature. f) Learning outcome 6 Develop the skills proposing and designing scientific research in motor behavior.

4 - ESS Program Learning Outcome - Research in Psycho-Social Dimensions of Physical Activity - KHS 8700

Providing Department: PhD in Kinesiology

Learning Outcome Description:
Course Title: KHS 8700 Psychosocial Aspects of Physical Activity  Course Official Bulletin Description: Development of in-depth understanding of psychosocial aspects of research in physical activity (exercise, sport, leisure activity).  COURSE OBJECTIVES: There are two broad objectives to this course; 1) The Development of Critical Thinking Skills  a) Develop critical reviewing skills of published research. b) Identify research gaps in the literature for future research projects. c) Identify research weaknesses across all phases of research (e.g., developing an argument, measurement, statistics, and conclusions). d) Develop your writing skills.  e) Identify research strengths. f) Incorporate cutting edge mainstream psychology research ideas into your research agenda. g) Understand common methodological and statistical advancements and flaws. 2) Substantive Content  a) Know about the emerging trends in research in the psychosocial aspects of PA. b) Understand the role of emotion/affect in PA. c) Comprehend the theories and research examining personality and sport. pg. 2  d) Discuss and critique the 5 theories comprising self-determination theory. e) Know about body image and SPA theory and research. f) Understand the positive psychology movement and research within this framework. g) Understand self-concept and self-efficacy theory and their differences and similarities. h) Discuss sport and exercise achievement motivation theory models and research  i) Know the theories/models and research of your classmates.

Health & Physical Education Teaching

1 New Learning Outcome (Program-level) Item
Providing Department: Health & Physical Education Teaching
Learning Outcome Description:
Candidates demonstrate acquisition of functional health content and proficiency in health-related skills for the purpose of enhancing healthy behaviors in learners.

2 New Learning Outcome (Program-level) Item
Providing Department: Health & Physical Education Teaching
Learning Outcome Description:
Candidates demonstrate an understanding of common and specialized-content, physical education curriculum models, comprehensive school physical activity programming, and scientific foundations for the delivery of an effective physical education program that interconnects with other subject areas.

3 New Learning Outcome (Program-level) Item
Providing Department: Health & Physical Education Teaching
Learning Outcome Description: Candidates plan for effective instruction in health and physical education.

4 New Learning Outcome (Program-level) Item
Providing Department: Health & Physical Education Teaching
Learning Outcome Description:
Candidates select and implement appropriate assessments to monitor learners' progress, guide decision making related to instruction and learning, and engage learners in their own growth in health and physical education.

5 New Learning Outcome (Program-level) Item
Providing Department: Health & Physical Education Teaching
Learning Outcome Description: Candidates implement effective instruction in health and physical education.

New Learning Outcome (Program-level) Item
Providing Department: Health & Physical Education Teaching
Learning Outcome Description:

BS in Health & Physical Education Teaching

1 New Learning Outcome (Program-level) Item
Providing Department: BS in Health & Physical Education Teaching
Learning Outcome Description:
1) Candidates demonstrate acquisition of functional health content and proficiency in health-related skills for the purpose of enhancing healthy behaviors in learners.

2 New Learning Outcome (Program-level) Item
Providing Department: BS in Health & Physical Education Teaching
Learning Outcome Description:
2) Candidates demonstrate an understanding of common and specialized-content, physical education curriculum models, comprehensive school physical activity programming, and scientific foundations for the delivery of an effective physical education program that interconnects with other subject areas.

3 New Learning Outcome (Program-level) Item
Providing Department: BS in Health & Physical Education Teaching
Learning Outcome Description: 3) Candidates plan for effective instruction in health and physical education.

4 New Learning Outcome (Program-level) Item
Providing Department: BS in Health & Physical Education Teaching
Learning Outcome Description:
4) Candidates select and implement appropriate assessments to monitor learners' progress, guide decision making related to instruction and learning, and engage learners in their own growth in health and physical education.

5 New Learning Outcome (Program-level) Item
Providing Department: BS in Health & Physical Education Teaching
Learning Outcome Description: 5) Candidates implement effective instruction in health and physical education.
MS in Health & Physical Education Teaching

1 New Learning Outcome (Program-level) Item

Providing Department: MS in Health & Physical Education Teaching
Learning Outcome Description:
1) Candidates demonstrate acquisition of functional health content and proficiency in health-related skills for the purpose of enhancing healthy behaviors in learners.

2 New Learning Outcome (Program-level) Item

Providing Department: MS in Health & Physical Education Teaching
Learning Outcome Description:
Candidates demonstrate an understanding of common and specialized-content, physical education curriculum models, comprehensive school physical activity programming, and scientific foundations for the delivery of an effective physical education program that interconnects with other subject areas.

3 New Learning Outcome (Program-level) Item

Providing Department: MS in Health & Physical Education Teaching
Learning Outcome Description:
Candidates plan for effective instruction in health and physical education.

4 New Learning Outcome (Program-level) Item

Providing Department: MS in Health & Physical Education Teaching
Learning Outcome Description:
Candidates select and implement appropriate assessments to monitor learners’ progress, guide decision making related to instruction and learning, and engage learners in their own growth in health and physical education.

5 New Learning Outcome (Program-level) Item

Providing Department: MS in Health & Physical Education Teaching
Learning Outcome Description: Candidates implement effective instruction in health and physical education.

BS in Education in Health Education

1 Learning Outcome 1

Providing Department: BS in Education in Health Education
Learning Outcome Description:
Upon completion of the methods class, students will be able to demonstrate the ability to assess the health needs of a specific population using valid, reliable and bias free instruments.

2 Learning Outcome 2

Providing Department: BS in Education in Health Education
Learning Outcome Description:
Upon completion of the methods class, students will be able to effectively plan health education programs and interventions

3 Learning Outcome 3

Providing Department: BS in Education in Health Education
Learning Outcome Description:
Upon completion of the introductory class in community health, students will be able to assess the accuracy of information available to health consumers and serve as an advocate for health.

4 Learning Outcome 4

Providing Department: BS in Education in Health Education
Learning Outcome Description:
Upon completion of the degree program, students will be able to serve as an effective community health educator.

MS in Community Health

1 Learning Outcome 1

Providing Department: MS in Community Health
Learning Outcome Description:
Upon completion of the program planning class, students will be able to demonstrate the ability to assess the health needs of a specific population using valid, reliable and bias free instruments.

2 Learning Outcome 2

Providing Department: MS in Community Health

Learning Outcome Description:
Upon completion of the program planning class, students will be able to design research based programs to target health needs in specific populations.

3 Learning Outcome 3

Providing Department: MS in Community Health

Learning Outcome Description:
Upon completion of the evaluation class, students will be able to evaluate programs designed to increase the health of specific populations.

4 Learning Outcome 4

Providing Department: MS in Community Health

Learning Outcome Description:
Upon completion of the degree, students will be able to serve as a health education resource person.

MS in Athletic Training

1 Examination, Assessment and Diagnosis

Providing Department: MS in Athletic Training

Learning Outcome Description:
Implement systematic, evidence-based examinations and assessments to formulate valid clinical diagnosis and determine patient’s plan of care.

1 Examination, Assessment and Diagnosis

Providing Department: MS in Athletic Training

Learning Outcome Description:
Implement systematic, evidence-based examinations and assessments to formulate valid clinical diagnosis and determine patient’s plan of care.

2 Immediate and Emergency Care

Providing Department: MS in Athletic Training

Learning Outcome Description:
Integrate best practices when providing immediate and emergency care for sports related injury and/or illness.

2 Immediate and Emergency Care

Providing Department: MS in Athletic Training

Learning Outcome Description:
Integrate best practices when providing immediate and emergency care for sports related injury and/or illness.

3 Therapeutic Intervention

Providing Department: MS in Athletic Training

Learning Outcome Description:
Rehabilitate and recondition musculoskeletal injuries, illness and general medical conditions with the goal of achieving optimal activity level base on core concepts using the applications of therapeutic exercise, modality devices and manual techniques.

4 Professional Responsibility

Providing Department: MS in Athletic Training

Learning Outcome Description:
Demonstrate professional communication and collaboration as a member of the essential healthcare team.
Demonstrate professional communication and collaboration as a member of the essential healthcare team

5 Evidence-Based Practice
Providing Department: MS in Athletic Training
Learning Outcome Description: Identify, interpret and appraise research literature to facilitate the development of evidence-based practitioners who incorporate the best available evidence, their clinical skills, and the needs of the patient to maximize patient outcomes.

6 Injury Prevention and Risk Reduction
Providing Department: MS in Athletic Training
Learning Outcome Description: LO6. Implements measures to prevent or mitigate risk of injury and/or illness and/or disability and supports patient-centered outcomes and performance goals.

7 BOC Exam Results
Providing Department: MS in Athletic Training
Learning Outcome Description: Cohorts will achieve an 80% first time pass rate for the BOC exam upon degree completion.

BS in Sports Management

1 Learning Outcome #1: Interpret Research
Providing Department: BS in Sports Management
Learning Outcome Description: Students will effectively interpret and analyze current research in the sport management industry.

2 Learning Outcome #2: Management Functions
Providing Department: BS in Sports Management
Learning Outcome Description: Students will recognize the organizational and managerial functions in sport management.

3 Learning Outcome #3: Effective Communication
Providing Department: BS in Sports Management
Learning Outcome Description: Students will demonstrate effective sport industry communication strategies.

4 Learning Outcome #4: Sociocultural & Ethical Impact
Providing Department: BS in Sports Management
Learning Outcome Description: Students will identify and address ethical and social justice issues in sport administration in order to make critical decisions accordingly.

5 Learning Outcome #5: Professional Readiness
Providing Department: BS in Sports Management
Learning Outcome Description: Students will demonstrate professional readiness and their ability to practically apply sport-industry specific competencies.

MA in Sports Administration

1 Learning Outcome #1: Administration Function
Providing Department: MA in Sports Administration
Learning Outcome Description: Students will employ sound principles of sport administration, including risk, financial, and staff management, strategic planning, and evaluation in sport settings.

2 Learning Outcome #2: Professional Ethics
Providing Department: MA in Sports Administration
Learning Outcome Description: Students will demonstrate an understanding of the ethical, legal, and sociocultural factors as they related to sports industry managerial decision-making.

3 Learning Outcome #3: Effective Communication
Providing Department: MA in Sports Administration
Learning Outcome Description:
Students will employ a fundamental knowledge and practical understanding of sport marketing, communication, and event management principles.

4 Learning Outcome #4: Information Literacy
Providing Department: MA in Sports Administration
Learning Outcome Description:
Students will demonstrate sport-specific information literacy, including the ability to critically analyze a source and interpret sport-industry research.

5 Learning Outcome #5: Professional Readiness
Providing Department: MA in Sports Administration
Learning Outcome Description:
Students will demonstrate professional readiness and the ability to practically apply sport-industry specific competencies to real-world settings.

BA in Education in Elementary Education

1 Professional Dispositions
Providing Department: BA in Education in Elementary Education
Learning Outcome Description:
The student will display identified dispositions of an effective educator: responsibility for learning, collaborative interpersonal skills, professionalism, strong communication skills, and higher-level thinking.

LO1 Learner Development
Providing Department: BA in Education in Elementary Education
Learning Outcome Description:
The teacher certification candidates will be able to describe, in a teaching and learning statement, research-driven based theories of how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

LO2 Learner Differences
Providing Department: BA in Education in Elementary Education
Learning Outcome Description:
Learning Differences: The teacher certification candidates will be able to describe in a teaching and learning statement how they utilize knowledge and understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

LO3 Content Knowledge
Providing Department: BA in Education in Elementary Education
Learning Outcome Description:
Content Knowledge: The teacher certification candidates will be able to communicate in a teaching and learning statement how they utilize the understanding central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

LO4 Application of Content
Providing Department: BA in Education in Elementary Education
Learning Outcome Description:
The candidate plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

BA in Education in Secondary Education

LO1 Learner Development
Providing Department: BA in Education in Secondary Education
Learning Outcome Description:
The teacher certification candidates will be able to describe, in a teaching and learning statement, research-driven based theories of
how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the
cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging
learning experiences.

LO2 Learning Differences
Providing Department: BA in Education in Secondary Education
Learning Outcome Description: The teacher certification candidates will be able to describe in a teaching and learning statement how they utilize knowledge and understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards

LO3 Content Knowledge
Providing Department: BA in Education in Secondary Education
Learning Outcome Description: The teacher certification candidates will be able to communicate in a teaching and learning statement how they utilize the understanding central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

LO4 Professional Responsibilities
Providing Department: BA in Education in Secondary Education
Learning Outcome Description: The candidate plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Bridge GC in Bilingual Education

LO1 Learning Outcome 1
Providing Department: Bridge GC in Bilingual Education
Learning Outcome Description: LO1. Students will move through the teaching and learning cycle of instructional decision-making process based on current research on learning and language development as it relates to bilingual education.

LO2 Learning Outcome 2
Providing Department: Bridge GC in Bilingual Education
Learning Outcome Description: LO2. The student will utilize knowledge of second language acquisition theories in lesson planning.

LO3 Learning Outcome 3
Providing Department: Bridge GC in Bilingual Education
Learning Outcome Description: LO3. Students will analyze how culture and cultural identity affect language teaching and learning.

LO4 Learning Outcome 4
Providing Department: Bridge GC in Bilingual Education
Learning Outcome Description: LO4. Students will illustrate pedagogical implications for teachers of language learners based on major linguistic elements of the English language and a target second language.

LO5 Learning Outcome 5
Providing Department: Bridge GC in Bilingual Education
Learning Outcome Description: LO5. Students will apply their understanding of critical issues in American language education as they establish and advance their language learner advocacy roles.

Bridge GC in English as a Second Language

LO1 LO1
Providing Department: Bridge GC in English as a Second Language
Learning Outcome Description: Students will move through the teaching and learning cycle of instructional decision-making based on current research on learning and language development.
LO2 LO2
Providing Department: Bridge GC in English as a Second Language
Learning Outcome Description: Students will utilize knowledge of second language acquisition theories in lesson planning.

LO3 LO3
Providing Department: Bridge GC in English as a Second Language
Learning Outcome Description: Students will analyze how culture and cultural identity affect language teaching and learning.

LO4 LO4
Providing Department: Bridge GC in English as a Second Language
Learning Outcome Description: Students will illustrate pedagogical implications for teachers of language learners based on major linguistic elements of the English language.

LO5 LO5
Providing Department: Bridge GC in English as a Second Language
Learning Outcome Description: Students will apply their understanding of critical issues in language education as they develop their language learner advocacy roles.

BS in Education in Elementary Education

1 Professional Dispositions
Providing Department: BS in Education in Elementary Education
Learning Outcome Description: The student will display identified dispositions of an effective educator: responsibility for learning, collaborative interpersonal skills, professionalism, strong communication skills, and higher-level thinking.

4 Lesson Planning
Providing Department: BS in Education in Elementary Education
Learning Outcome Description: Lesson Plan The data source is a Lesson Plan across all initial certification program areas with data collected three times in each student's program. A common set of assignment guidelines and the rubric are used at each data collection point, with data collected on some rubric items at the beginning of the program, more data collected on more rubric items at the middle of the program, and data collected on all rubric items during student teaching (at the end of the program). Rubric items are color-coded to help make data collection clear to all stakeholders. Students have access to the guidelines and rubric at the beginning of each semester in every data collection point course. At the beginning of each student's program (Block 1), data is collected in one of the following courses as per the student's program/plan of work: AED 5000 KIN 5210 MED 3510 TED 6020 At the mid-point of each student's program (Block 2), data is collected in one of the following courses as per the student's plan of work: AED 5100 LED 6520 CTE 5404 MED 4560 EED 5200 SCE 5060 HE 6430 SSE 6710 KIN 5240 At the end of the program (Block 3), during student teaching, data is collected a final time in the following courses as per the student's plan of work: HE 5780 KIN 5780 MED 4570 TED 5780 TED 5790 The assessment is scored by the individual faculty member teaching one of the above listed courses. These faculty have completed IRR training, which is repeated on a scheduled basis for recalibration purposes. Data are gathered by the College's Data Manager via Qualtrics at the end of each semester in every section whenever these courses are offered (Fall, Winter, and Spring/Summer). Rubric items are grouped under 4 criteria: learners and learning environment; outcomes; assessment; instructional practice; and professional responsibility. The evaluation scale is as follows: 1 (expected level in Block 1, beginning) 2 (expected level in Block 2, middle) 3 (expected level in Block 3, end) 4 – distinguished The criteria for acceptable performance is 85% of students scoring at expected levels or higher at each data collection point. A data report reflecting all data collected specific to the lesson plan in the academic year is generated by the College's data manager and is reviewed/analyzed by all faculty on an annual basis at the end of the academic year at a data retreat. Attached Files LP_Rubric_2017_2018 Lesson plan guidelines (1) Results: All course-embedded data collected during the 2017-18 academic year was reviewed by faculty during a division-wide retreat in September 2018. Results at all three data collection points largely met target levels of performance although when it came to the area of differentiation of instruction only 64.3% of students seeking an elementary teaching certificate were ultimately on target. A summary of scores is included in the attached data report, which contains no student identifiers Attached Files Data Dive 2018 Program Action Plan: After reviewing the data, elementary and secondary faculty determined a curricular improvement theme for the 2018-19 academic year: improved student understanding and designing of inclusive instruction. Elementary and secondary panel directors will assure follow through of improvement initiatives with faculty providing support. Program coordinators will support panel initiatives involving program area courses. In BBE 5000 and in SED 5010, instruction will incorporate focus on designing learning spaces and students will be asked to submit a plan for the physical arrangement of a learning space as well as a critical observation of the physical environment with recommendations for equitable accessibility. Curriculum in ELE 6120 will include building student abilities to
provide access to equitable, active engagement in literacy practices that respect diversity of all learners and the children’s literature course will support students as they select culturally relevant texts to represent diversity of all learners and cultural dialects. In all secondary content methodology courses serving as data collection points (See Block 2, assessment method), instruction will incorporate curricular focus on UDL and will work with clinical coaches in student teaching in learning more about Universal Design for Learning (UDL). Timeline for Action Plan Implementation: Dec. 2018 - Elementary and Secondary Panel Directors will provide a formal divisional update on the plan. Program coordinators will have provided the panel directors an update on specific course changes before then. Currently the lesson plan assignment and rubric are posted on the website for all stakeholders to access. When data is reviewed and an action plan is put in place, it will be made available to all stakeholders on the Information for Stakeholders dashboard on the Teacher Education Division’s website. Additionally, updates on the process, results, and action plan will be shared with the CAEP Accreditation Administrative Stakeholder’s Board. Board members are administrators in local school districts that host WSU student teachers and hire WSU certified graduates. The process, results, and action plan will also be reported to the national initial certification accrediting body, CAEP, as part of the program area’s annual report.

LO1 Learner Development

Providing Department: BS in Education in Elementary Education

Learning Outcome Description:
The teacher certification candidates will be able to describe, in a teaching and learning statement, research-driven based theories of how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

LO2 Learning Differences

Providing Department: BS in Education in Elementary Education

Learning Outcome Description:
The teacher certification candidates will be able to describe in a teaching and learning statement how they utilize knowledge and understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

LO3 Content Knowledge

Providing Department: BS in Education in Elementary Education

Learning Outcome Description:
The teacher certification candidates will be able to communicate in a teaching and learning statement how they utilize the understanding central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

BS in Education in Secondary Education

LO1 Learner Development

Providing Department: BS in Education in Secondary Education

Learning Outcome Description:
The teacher certification candidates will be able to describe, in a teaching and learning statement, research-driven based theories of how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

LO2 Learner Differences

Providing Department: BS in Education in Secondary Education

Learning Outcome Description:
The teacher certification candidates will be able to describe in a teaching and learning statement how they utilize knowledge and understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards.

LO3 Content Knowledge

Providing Department: BS in Education in Secondary Education

Learning Outcome Description:
The teacher certification candidates will be able to communicate in a teaching and learning statement how they utilize the understanding central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.
LO4 Professional Responsibilities
Providing Department: BS in Education in Secondary Education
Learning Outcome Description:
The candidate plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

Ed Spec Cert in Curriculum and Instruction

LO1 Issues in Urban Education
Providing Department: Ed Spec Cert in Curriculum and Instruction
Learning Outcome Description: Students will evaluate the role of culture in student achievement.

LO2 Critical Thinking Skills
Providing Department: Ed Spec Cert in Curriculum and Instruction
Learning Outcome Description: Students will articulate on critical issues in education (especially specific to their topic of study) as they develop professionally.

LO3 Learner and Learning
Providing Department: Ed Spec Cert in Curriculum and Instruction
Learning Outcome Description: Students will articulate on the relationship among the learner, the learning, and the learning environment and the consequences this relationship has for educational theory, policy, and practice.

LO4 Literature Review
Providing Department: Ed Spec Cert in Curriculum and Instruction
Learning Outcome Description: Students will identify the strengths and weaknesses of the existing literature related to their topic of study.

Ed Spec Cert in Reading

LO1 LO1: Critique Theories of Literacy
Providing Department: Ed Spec Cert in Reading
Learning Outcome Description:
There is no single set educational standards for this certificate. For those students whose goal is attainment of the K-12 Reading Specialist Endorsement, the Michigan Department of Education standards for the K-12 Reading Specialist Endorsement (BR) and the International Reading Association Standards for Reading Professionals apply. For those whose goal is to enter the Ed.D. in RLL program, the IRA Standards for Reading Professionals and the NCTE Standards for the English Language Arts are used. Therefore, outcomes for students in this program are not the same depending on their individual goals. However, all students take two courses at the doctoral level; so general outcomes for those courses are used here. Outcome 1: Summarize, critique and compare/contrast various theories of literacy in formal written formats.

LO2 LO2: Critique Research in Literacy
Providing Department: Ed Spec Cert in Reading
Learning Outcome Description:
Summarize, critique, and compare/contrast the research that supports various theories of literacy in formal written formats.

LO3 LO3: Connect Theory to Practice
Providing Department: Ed Spec Cert in Reading
Learning Outcome Description:
Apply various theories of literacy to practice (e.g., teaching, curriculum development, etc.) in written formats.

LO4 LO4: Consider theory and research in relation to career and/or career goals.
Providing Department: Ed Spec Cert in Reading
Learning Outcome Description:
Apply and/or reflect on theory and research in literacy in relation to implications for current literacy career and/or career goals. For example, implications of theory and research in the role of literacy coach, reading specialist, or curriculum supervisor.

EdD in Curriculum and Instruction
LO1 Synthesis of Curriculum Theory  
Providing Department: EdD in Curriculum and Instruction  
Learning Outcome Description: Students will be able to synthesize curriculum theory.

LO2 Research methodology  
Providing Department: EdD in Curriculum and Instruction  
Learning Outcome Description: Students will demonstrate ability to critically evaluate research in education.

LO3 Learner and Learning  
Providing Department: EdD in Curriculum and Instruction  
Learning Outcome Description: Students will articulate on the relationship among the learner, the learning, and the learning environment and the consequences this approach has for educational theory, policy, and practice.

LO4 Literature Review  
Providing Department: EdD in Curriculum and Instruction  
Learning Outcome Description: Students will identify the strengths and weaknesses of the existing literature related to their topic of study.

**GC in Elementary Mathematics Specialist: Advanced**

LO1 Curriculum Evaluation  
Providing Department: GC in Elementary Mathematics Specialist: Advanced  
Learning Outcome Description: Elementary math specialists evaluate various mathematics curricula

LO2 Professional Development Design  
Providing Department: GC in Elementary Mathematics Specialist: Advanced  
Learning Outcome Description: Elementary math specialists design professional development programs of teacher learning in schools

LO3 Professional Development Analysis  
Providing Department: GC in Elementary Mathematics Specialist: Advanced  
Learning Outcome Description: Elementary math specialists analyze professional development programs of teacher learning in schools

LO4 Leading Professional Development  
Providing Department: GC in Elementary Mathematics Specialist: Advanced  
Learning Outcome Description: Elementary math specialists lead professional development programs of teacher learning in schools

**GC in Elementary Mathematics Specialist: Intro**

LO1 Curriculum Evaluation  
Providing Department: GC in Elementary Mathematics Specialist: Intro  
Learning Outcome Description: Elementary math specialists evaluate various mathematics curricula.

LO2 Professional Development Design  
Providing Department: GC in Elementary Mathematics Specialist: Intro  
Learning Outcome Description: Elementary math specialists develop professional development programs of teacher learning in schools

LO3 Analysis of Professional Development  
Providing Department: GC in Elementary Mathematics Specialist: Intro  
Learning Outcome Description: Elementary math specialists analyze professional development programs of teacher learning in schools

LO4 Professional Development Assist  
Providing Department: GC in Elementary Mathematics Specialist: Intro
LO 2 Learner Differences

Providing Department: MA in Teaching in Elementary Education

Learning Outcome Description:
A comprehensive system for assessing candidate development of professional dispositions, which is required by the program area’s accrediting body, was piloted across the 2017-18 academic year and, as part of the program area’s action plan, and was fully operational during the 2018-19 academic year. In Spring 2017, faculty selected a valid and reliable instrument for assessing student dispositions: The Professional Performance Student Self-Assessment and Review (PPSSR; Hillman, Rothermel & Scarano, 2006). Without affecting their admission status, students complete this self-assessment as part of the application process. During Cornerstone Welcome, a student orientation celebration, students participate in a group interview, facilitated by faculty and advisors. During this interview, students convey information about themselves, discuss social issues, collaborate in a group activity, and provide feedback to an interviewing peer (Byrnes, Kiger & Shechtman, 2003). After the interview, the interviewing team of faculty and advisors reviews each interviewee's completed self-assessment (the PPSSR survey), along with notes taken during the interview, and provides a global measure of dispositions at the beginning of the students’ program. Faculty teaching professional core courses, taken by students in the middle of their program (after being admitted to the program but before student teaching), piloted a disposition review survey for all enrolled students to extend monitoring of candidate dispositional development. In Fall 2018, each student in student teaching (at the end of the program) will re-do the PPSSR, which will then be reviewed by the assigned clinical faculty member, who is supervising the student in the field (the K-12 classroom). Data are being collected, archived and systematically reviewed for all students to assure responsiveness to identified candidates needing targeted support; to celebrate examples of exemplary candidate dispositions; and to deliberately determine opportunities across our programs to better support candidate dispositional development. If there are instances when data indicates a student needs additional, structured support, the program has a process in place to help that student create an action plan specific to his or her difficulty, schedule progress checks, and follow through with re-evaluation to ensure effectiveness of instruction; this data will also be collected, reviewed, and used for program improvement purposes as part of the comprehensive system. Byrnes, D., Kiger, G., & Shechtman, Z. (2003). Evaluating the use of group interviews to select students into teacher-education programs. Journal of Teacher Education, 54(2), 163-173. Hillman, S.J., Rothermel, D., Hotchkiss Sarano, G. (2006). The assessment of preservice teachers’ dispositions. The Teacher Educator, 41(4), 234-250. Summary of the comprehensive assessment process Data Sources: PPSSR – Student self-assessment survey completed by students at admissions and during student teaching at the end of their program; the completed PPSSR is reviewed by the interviewing team (post interview) at admissions and by clinical instructional coaches (faculty assigned to mentor student teachers) during student teaching at the end of the program. (PPSSR is attached) Group Interview – notes taken by interviewing team during admissions interview are reviewed and archived. (Group Interview is attached as is Winter 2018’s cornerstone Welcome Staff Handbook) Disposition Review Survey – completed by all instructors of professional core courses (courses taken after admission to the program but before student teaching Action Plans – pursued when a student is identified as needing extra support for developing professional dispositions. Administrative team is led by Assistant Dean – no plans generated to date as all admitted students have met benchmark expectations. How Data is Gathered: Data is gathered via Qualtrics Surveys sent out by the College’s Data manager to applicants, interviewing teams, faculty, and students as appropriate to the process. Data Collection happens every semester; and (as of Fall 2018) during Student Teaching. Who evaluates/scores data: The PPSSR is reviewed/responded to by the interviewing team at the beginning of the program and by the student’s assigned faculty supervisor at the end of the program (see the attached instrument). All dispositional data is reviewed by the program area’s Accreditation Core Team, comprised of administrators, faculty, and a student representative, and is then reviewed by all program area faculty to identify strengths and gaps within the program area. In instances of concern, data is reviewed by the assistant dean and an appropriate administrative team before meeting with the student to develop collaboratively an action plan. Criteria used for scoring: All rubrics (the PPSSR with its review; the interview rubric; and the faculty dispositional review) use common criteria specific to student dispositions: • Accepting responsibility for their learning • Being collaborative and respectful of others • Exhibiting professionalism • Displaying integrity • Communicating with others in an effective and appropriate fashion • Undertaking earnest reflection • Demonstrating higher level thinking skills Evaluation Scale: The PPSSR uses the following scale: Usually/Occasionally/Rarely/N/A All faculty-generated data scores student dispositional criteria as exceptional, satisfactory, or Concerning Action plans are individualized parts of the monitoring system, created as needed. Criteria for acceptable performance: Professional dispositions across all criteria are deemed satisfactory when demonstrated 80% of the time. Practicality: A comprehensive system for monitoring and supporting dispositional development in initial teacher certification students is mandated by the program area’s accrediting body. The PPSSR has been added without difficulty into the application process and the interview component has successfully expanded the already established orientation process. The interview has provided additional benefit as it provides an early relationship-building opportunity between new students and faculty, and it provides a backdrop for collaboration between faculty and advisors, who work together on interviewing teams. The survey completed by faculty at the end of the professional core courses has received positive feedback by piloting instructors, who note its ease of use and short format.
The teacher certification candidates will be able to describe in a teaching and learning statement how they utilize knowledge and understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards

LO 3 Content Knowledge
Providing Department: MA in Teaching in Elementary Education
Learning Outcome Description:
The teacher certification candidates will be able to communicate in a teaching and learning statement how they utilize the understanding central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

LO 4b Application of Content
Providing Department: MA in Teaching in Elementary Education
Learning Outcome Description:
The candidate plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

LO1 Learner Development
Providing Department: MA in Teaching in Elementary Education
Learning Outcome Description:
The teacher certification candidates will be able to describe, in a teaching and learning statement, research-driven based theories of how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

LO4 Professional Responsibility
Providing Department: MA in Teaching in Elementary Education
Learning Outcome Description:
The student engages in ongoing professional learning and uses evidence to continually evaluate his/her practice, particularly the effect of his/her choices and actions on others (learners, families, other professionals, and the community), and adapts practice to meet the needs of each learner.

MA in Teaching in Secondary Education

LO1 Learner Development
Providing Department: MA in Teaching in Secondary Education
Learning Outcome Description:
The teacher certification candidates will be able to describe, in a teaching and learning statement, research-driven based theories of how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

LO2 Learner Differences
Providing Department: MA in Teaching in Secondary Education
Learning Outcome Description:
The teacher certification candidates will be able to describe in a teaching and learning statement how they utilize knowledge and understanding of individual differences and diverse cultures and communities to ensure inclusive learning environments that enable each learner to meet high standards

LO3 Content Knowledge
Providing Department: MA in Teaching in Secondary Education
Learning Outcome Description:
The teacher certification candidates will be able to communicate in a teaching and learning statement how they utilize the understanding central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

LO4 Professional Responsibilities
Providing Department: MA in Teaching in Secondary Education
Learning Outcome Description:
The candidate plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

**MEd in Art Education**

**LO5 Art Therapy LO5**
*Providing Department:* MEd in Art Education  
*Learning Outcome Description:* Employ research for professional development

**LO 1 Art Therapy LO1**
*Providing Department:* MEd in Art Education  
*Learning Outcome Description:* Art therapy students will be able to explain art therapy history and theories.

**LO 1.0 VAE M.Ed LO 1.0_Acquisition and Application of Knowledge**
*Providing Department:* MEd in Art Education  
*Learning Outcome Description:* Learners will be able to acquire and apply new knowledge of major trends and methodologies of art and education.

**LO 2.1 VAE M.Ed LO 2.0_Goals and Curriculum**
*Providing Department:* MEd in Art Education  
*Learning Outcome Description:* Learners will be able to apply knowledge to create and implement meaningful and measurable learning targets, outcomes and goals to support an inquiry-based curriculum.

**LO 3 Art Therapy LO3**
*Providing Department:* MEd in Art Education  
*Learning Outcome Description:* Art therapy students will practice the professional dispositions of a competent art therapist

**LO4 Art Therapy LO4**
*Providing Department:* MEd in Art Education  
*Learning Outcome Description:* Art therapy students will apply appropriate theoretical frameworks in the facilitation of art therapy.

**MEd in English Education**

**LO1 Relation between theory and pedagogy**
*Providing Department:* MEd in English Education  
*Learning Outcome Description:* Demonstrate an understanding of the relation between relevant theory in the field of English Education and effective classroom pedagogy in the teaching of English 7-12.

**LO2 Recognize the Relationship Between Language, Culture and Identity**
*Providing Department:* MEd in English Education  
*Learning Outcome Description:* Students will begin to recognize the interconnections among language, culture and identity and its significance and application for teaching and learning in English language arts.

**LO3 Create lesson plans and activities**
*Providing Department:* MEd in English Education  
*Learning Outcome Description:* Students will demonstrate the ability to create lessons and activities that promote engaged learning and understanding of content.

**LO4 Write in APA format**
*Providing Department:* MEd in English Education  
*Learning Outcome Description:* Students will be able to write in a professional style in accordance with the regulations of the American Psychological Association.

**MEd in Reading**
LO1 Educ Theories and Instructional Practices  
**Providing Department:** MEd in Reading  
**Learning Outcome Description:** Summarize and/or apply (lessons, strategy presentations, etc.) an understanding of reading specific educational theories and instructional strategies (Evidenced in RLL 7100, 7200, 7300).

LO2 Examine Literacy Research  
**Providing Department:** MEd in Reading  
**Learning Outcome Description:** Critically examine educational research in reading and literacy and connect it to practice (Evidence: RLL 7500 and/or RLL 7200).

LO3 Conduct Research  
**Providing Department:** MEd in Reading  
**Learning Outcome Description:** Students conduct action research to systematically collect, reflect and act upon evidence to improve educational practices in Reading (Evidence in RLL 7400 or other evidence-based projects).

LO4 Reflective Practice  
**Providing Department:** MEd in Reading  
**Learning Outcome Description:** Students engage in reflective practice as they implement inquiry into teaching (e.g., RLL 7300 cross-curricular unit).

**MEd in Teaching and Learning**

LO 1 Synthesis of the Literature  
**Providing Department:** MEd in Teaching and Learning  
**Learning Outcome Description:** Synthesize the literature related to your chosen focus of study following APA format.

LO 2 Research Methodology  
**Providing Department:** MEd in Teaching and Learning  
**Learning Outcome Description:** Design an investigation, examining some aspect of your practice, using appropriate methodology.

LO 3 Theoretical Foundations  
**Providing Department:** MEd in Teaching and Learning  
**Learning Outcome Description:** Identify the theoretical foundations of various approaches to teaching and learning and reflect on them in relation to your personal philosophy of teaching and learning.

LO 4 Inclusive Education  
**Providing Department:** MEd in Teaching and Learning  
**Learning Outcome Description:** Identify barriers to inclusive education, curriculum, and pedagogy as a foundation to create inclusive teaching and learning.

LO 5 Application of Theory  
**Providing Department:** MEd in Teaching and Learning  
**Learning Outcome Description:** Apply theoretical foundations specific to your concentration area in your professional development.

**PhD in Curriculum and Instruction**

LO1 Analysis of Theory  
**Providing Department:** PhD in Curriculum and Instruction  
**Learning Outcome Description:** Students will demonstrate the ability to critique influential theory related to curriculum development and design.

LO2 Research Methodology  
**Providing Department:** PhD in Curriculum and Instruction  
**Learning Outcome Description:** Students will demonstrate the ability to design research in education.
LO3 Learner and Learning
Providing Department: PhD in Curriculum and Instruction
Learning Outcome Description: Students will articulate on the relationship among the learner, the learning, and the learning environment and the consequences this approach has for educational theory, policy, and practice.

LO4 Literature Review
Providing Department: PhD in Curriculum and Instruction
Learning Outcome Description: Students will identify the strengths and weaknesses of the existing literature related to their topic of study.

PhD in Educational Studies

1.0 PHD EDUCATIONA STUDIES_LO 1.0_SUMMARIZING KEY TOPICS
Providing Department: PhD in Educational Studies
Learning Outcome Description: Identify and summarize key findings of research studies relevant to their research interests.

2.0 PHD EDUCATIONAL STUDIES_LO 2.0_THEORY & RESEARCH CRITIQUE
Providing Department: PhD in Educational Studies
Learning Outcome Description: Critique theory and research relevant to their research interests.

3.0 PHD EDUCATIONA STUDIES_LO 3.0_LITERATURE SYNTHESIS
Providing Department: PhD in Educational Studies
Learning Outcome Description: Synthesize research and theory to address a central question and articulate an evidence-supported argument.

4.0 PHD EDUCATIONAL STUDIES_LO 4.0_RESEARCH DESIGN
Providing Department: PhD in Educational Studies
Learning Outcome Description: Design an original study grounded firmly in the relevant literature and with a design appropriate to the research question(s).

5.0 PHD EDUCATIONAL STUDIES_LO 5.0_RESEARCH IMPLEMENTATION
Providing Department: PhD in Educational Studies
Learning Outcome Description: Implement an independent research project.

Post-Bachelor Teacher Certification Program

LO1 Learner Development
Providing Department: Post-Bachelor Teacher Certification Program
Learning Outcome Description: The teacher certification candidates will be able to describe, in a teaching and learning statement, research-driven based theories of how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

LO2 Learning Differences
Providing Department: Post-Bachelor Teacher Certification Program
Learning Outcome Description: The teacher certification candidates will be able to describe, in a teaching and learning statement, research-driven based theories of how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.

LO3 Content Knowledge
Providing Department: Post-Bachelor Teacher Certification Program
Learning Outcome Description: The teacher certification candidates will be able to communicate in a teaching and learning statement how they utilize the understanding central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and creates learning experiences.
experiences that make these aspects of the discipline accessible and meaningful for learners to assure mastery of the content.

**LO4 Professional Responsibilities**

**Providing Department:** Post-Bachelor Teacher Certification Program

**Learning Outcome Description:**
The candidate plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.

## Ed Spec Cert in Counseling

1. **Learning Outcome 1 Supervision**
   **Providing Department:** Ed Spec Cert in Counseling
   **Learning Outcome Description:**
   1. Students will demonstrate supervision skills with counselor trainees in a laboratory settings. Student Supervisors will use at least three supervision techniques with each counselor trainee.

2. **Learning Outcome 2 Career Development**
   **Providing Department:** Ed Spec Cert in Counseling
   **Learning Outcome Description:**
   2. Students will become proficient in supervising counselor trainees in locating, evaluating and using career information systems. Counselor trainees will demonstrating mastery of at least two career information systems.

3. **Learning outcome three :Identify ethical violations**
   **Providing Department:** Ed Spec Cert in Counseling
   **Learning Outcome Description:** Pass test on ethical issues in counseling.

4. **Learning Outcome 4 Plan substance abuse intervention**
   **Providing Department:** Ed Spec Cert in Counseling
   **Learning Outcome Description:** Plan a substance abuse intervention that can be used in a small group setting.

## EdD in Counseling

1. **Learning Outcome 1: General Advanced Knowledge**
   **Providing Department:** EdD in Counseling
   **Learning Outcome Description:**
   Students will be able to demonstrate advanced knowledge of the theoretical, philosophical and evidenced based research assumptions of counseling processes and techniques.

2. **Learning Outcome 2: Skills**
   **Providing Department:** EdD in Counseling
   **Learning Outcome Description:**
   Students will be able to utilize varying methods (supervision, teaching, counseling and advocacy) to translate theories of counseling and evidenced based strategies into effective practices in a culturally diverse society. Supervision: demonstrate the ability to effectively implement theories of supervision as well as utilize and receive feedback. Teaching: demonstrate the ability to effectively train and prepare students in the necessary roles, responsibilities and activities related to becoming counselor educators. Counseling: demonstrate the ability to effectively utilize theories and techniques of counseling. Advocacy: demonstrate the ability to effectively demonstrate an understanding of multicultural issues as they relate to social change and advocacy.

3. **Learning Outcome 3: Research**
   **Providing Department:** EdD in Counseling
   **Learning Outcome Description:**
   Students will be able to demonstrate an understanding/implementation of methods of statistics and research design.

4. **Learning Outcome 4: Professional Dispositions**
   **Providing Department:**
EdD in Counseling

Learning Outcome Description:
Students will be able to demonstrate the ability to adhere to ethical standards, promote advocacy and social justice, challenge personal beliefs and biases in the best interest of others and gain self-awareness.

GC in Advanced Graduate Studies in School Psychology

1 Learning Outcome 1: Knowledge
Providing Department: GC in Advanced Graduate Studies in School Psychology
Learning Outcome Description:
Students will display sufficient knowledge of School Psychology practice within all ten domains as outlined by our national association--The National Association of School Psychologists.

2 Learning Outcome 2: Student performance on case studies
Providing Department: GC in Advanced Graduate Studies in School Psychology
Learning Outcome Description:
Students will display sufficient integration of knowledge and apply them to academic and behavioral case studies.

3 Learning Outcome 3: Applied skills during internship
Providing Department: GC in Advanced Graduate Studies in School Psychology
Learning Outcome Description:
Students will display sufficient applied skills in the field of School Psychology practice, including assessment, consultation, and intervention.

4 Learning Outcome 4: Professional dispositions
Providing Department: GC in Advanced Graduate Studies in School Psychology
Learning Outcome Description:
Students will display sufficient professional dispositions necessary for successful School Psychology practice as outlined by our national association--The National Association of School Psychologists.

GC in Applied Behavioral Analysis

1 Learning Outcome 1: Knowledge of ABA Foundations
Providing Department: GC in Applied Behavioral Analysis
Learning Outcome Description: Students will display sufficient knowledge of ABA foundations.

2 Learning Outcome 2: Knowledge of Assessment Methods
Providing Department: GC in Applied Behavioral Analysis
Learning Outcome Description: Students will display sufficient knowledge of ABA methods of assessment.

3 Learning Outcome 3: Knowledge of Intervention Techniques
Providing Department: GC in Applied Behavioral Analysis
Learning Outcome Description: Students will display sufficient knowledge of ABA Foundations.

4 Learning Outcome 4: Application of Skills
Providing Department: GC in Applied Behavioral Analysis
Learning Outcome Description:
Students will display sufficient professional skills necessary for successful Applied Behavior Analysis practice as outlined by our national association—the Behavior Analytic Certification Board (BACB).

MA in Counseling

1 Learning Outcome 1: Counseling Knowledge
Providing Department: MA in Counseling
Learning Outcome Description:
Students will be able to demonstrate knowledge of the theoretical, philosophical and evidenced based research assumptions of counseling processes and techniques in clinical mental health counseling and school counseling.
2 Learning Outcome 2: Professional Dispositions
Providing Department: MA in Counseling
Learning Outcome Description:
Students will be able to demonstrate the ability to adhere to ethical standards, promote advocacy and social justice, challenge personal beliefs and biases in the best interest of others and gain self-awareness.

3 Learning Outcome 3: Ethics
Providing Department: MA in Counseling
Learning Outcome Description:
Students will understand legal, ethical and professional issues that impact clinical mental health and school counseling practice.

4 Learning outcome 4: Counseling Skills
Providing Department: MA in Counseling
Learning Outcome Description:
Students will be able to translate theories and evidenced based strategies into effective practices in a culturally diverse society.

MA in Counseling Psychology

1.0 CP Learning Outcome 1: Content Knowledge
Providing Department: MA in Counseling Psychology
Learning Outcome Description:
Content knowledge is assessed on an ongoing basis by examining performance in courses, with formal evaluation conducted by program faculty on a semester by semester basis. (students are required to have no more than one grade less than B- to remain in the program

2.0 CP Outcome 2: Psychological Assessments
Providing Department: MA in Counseling Psychology
Learning Outcome Description:
Students will be proficient in the administration and interpretation of psychological and cognitive assessments for the purposes of assessing cognitive functioning, vocational development, diagnostic estimates, and psychological functioning for youth and adults.

3.0 CP Outcome 3: Theory and Skills in Psychotherapy
Providing Department: MA in Counseling Psychology
Learning Outcome Description:
Students will be able to work with youth and adults experiencing clinically distressing symptoms or adjustment issues using a psychotherapy approach.

4.0 CP Outcome 4: Professional disposition, ethics, cultural sensitivity
Providing Department: MA in Counseling Psychology
Learning Outcome Description:
Students will learn professional dispositions, applications of ethical practice, and cultural competency and sensitivity with diverse populations.

MA in School and Community Psychology

1 SCP Learning Outcome 1: Knowledge in coursework
Providing Department: MA in School and Community Psychology
Learning Outcome Description:
Students will display sufficient knowledge of School Psychology practice within all ten domains as outlined by our national association--The National Association of School Psychologists.

2 SCP Learning Outcome 2: Knowledge on national exam
Providing Department: MA in School and Community Psychology
Learning Outcome Description:
Students will demonstrate knowledge of all school psychology concepts delineated by our national organization (National Association of School Psychologists) and earn passing scores on the national ETS Praxis exam.

3 SCP Learning Outcome 3: Applied Skills
Providing Department: MA in School and Community Psychology
Learning Outcome Description:
Students will display sufficient applied skills in the field of School Psychology practice, including assessment, consultation, and intervention.

4 SCP Learning Outcome 4: Professional Dispositions
Providing Department: MA in School and Community Psychology
Learning Outcome Description:
Students will display sufficient professional dispositions necessary for successful School Psychology practice as outlined by our national association--The National Association of School Psychologists.

MEd in Counseling

1 Learning outcome 1: Guidance activities
Providing Department: MEd in Counseling
Learning Outcome Description:
Students will be able to identify and describe guidance activities within the umbrellas of Counseling, Consulting and Coordination within Clinical Mental Health and school settings.

2 Learning outcome 2: Classroom management
Providing Department: MEd in Counseling
Learning Outcome Description:
Students will be able to define and give examples of application of psychological and classroom management principles in working with clients in a clinical mental health and/or classroom setting.

3 Learning outcome 3: Career guidance
Providing Department: MEd in Counseling
Learning Outcome Description:
Students will be able to demonstrate competencies in career guidance techniques and counseling techniques when working with youth facing career choices.

4 Learning outcome 4: General counseling concepts
Providing Department: MEd in Counseling
Learning Outcome Description: Student will complete final project or paper in capstone class ED 7999.

MEd in Educational Psychology

1 Learning Outcome 1: Knowledge of human development
Providing Department: MEd in Educational Psychology
Learning Outcome Description:
Students will learn about and be able to apply theories and research about human development. Topics included are ones on physical, cognitive, social, and emotional development. Additional topics include attachment theory, temperament, development of intelligence, and adolescent social behavior and risk taking.

2 Learning Outcome 2: Knowledge and application of behavior change models
Providing Department: MEd in Educational Psychology
Learning Outcome Description:
Learning outcomes for this goal include knowledge and understanding of learning theories such as classical, operant, cognitive, cognitive-behavioral and social learning theories to a variety of applied situations. Students will learn to understand the world around them and to implement behavior changes as appropriate to their work environments.

3 Learning Outcome 3: Knowledge of evaluation and measurement
Providing Department: MEd in Educational Psychology
Learning Outcome Description:
Students will demonstrate through course performance passing knowledge of statistical measurement and evaluation concepts.

4 Learning Outcome 4: Knowledge of Educational Psychology Foundations
Providing Department: MEd in Educational Psychology
Learning Outcome Description:
Learning outcomes for this goal include knowledge and understanding of foundational educational psychology concepts such as motivation, attribution theory, intelligence, information processing models of memory, classroom assessment and grading, and classroom instruction approaches.

MS in Applied Behavior Analysis

1 ABA Learning Outcome 1: Knowledge in coursework
Providing Department: MS in Applied Behavior Analysis
Learning Outcome Description:
Students will display sufficient knowledge of ABA practice within all domains as outlined by our national organization—the Behavior Analytic Certification Board.

2 ABA Learning Outcome 2: Knowledge on national exam
Providing Department: MS in Applied Behavior Analysis
Learning Outcome Description:
Students will demonstrate knowledge of all behavior analytic concepts delineated by our national organization (Behavior Analytic Certification Board) and earn passing scores on the national BCBA exam.

3 ABA Learning Outcome 3: Applied Skills
Providing Department: MS in Applied Behavior Analysis
Learning Outcome Description:
Students will display sufficient applied skills in the field of Applied Behavior Analysis practice, including assessment, intervention, and ethical standards.

4 ABA Learning Outcome 4: Professional Dispositions
Providing Department: MS in Applied Behavior Analysis
Learning Outcome Description:
Students will display sufficient professional dispositions necessary for successful Applied Behavior Analysis practice (respect for human diversity, communication skills, effective interpersonal relations, ethical responsibility, initiative and dependability, adaptability).

PhD in Counseling

1 Learning Outcome 1: General Advanced Knowledge
Providing Department: PhD in Counseling
Learning Outcome Description:
1. Students will be able to demonstrate advanced knowledge of the theoretical, philosophical and evidenced based research assumptions of counseling processes and techniques.

2 Learning Outcome 2: Skills
Providing Department: PhD in Counseling
Learning Outcome Description:
Students will be able to utilize varying methods (supervision, teaching, counseling and advocacy) to translate theories of counseling and evidenced based strategies into effective practices in a culturally diverse society. Supervision: demonstrate the ability to effectively implement theories of supervision as well as utilize and receive feedback. Teaching: demonstrate the ability to effectively train and prepare students in the necessary roles, responsibilities and activities related to becoming counselor educators. Counseling: demonstrate the ability to effectively utilize theories and techniques of counseling. Advocacy: demonstrate the ability to effectively demonstrate an understanding of multicultural issues as they relate to social change and advocacy.

3 Learning Outcome 3: Research
Providing Department: PhD in Counseling
Learning Outcome Description:
Students will be able to demonstrate an understanding/implementation of methods of statistics and research and design.

4 Learning Outcome 4: Professional dispositions
Providing Department: PhD in Counseling
Learning Outcome Description:
Students will be able to demonstrate the ability to adhere to ethical standards, promote advocacy and social justice, challenge
personal beliefs and biases in the best interest of others and gain self-awareness.

**PhD in Counseling Psychology**

1 PhD in CP Learning Outcome 1: Knowledge in Coursework

*Providing Department:* PhD in Counseling Psychology

*Learning Outcome Description:*

PhD in CP Learning Outcome 1: Knowledge in Coursework Students will display sufficient knowledge of Counseling Psychology practice within all domains as outlined by our national association—The American Psychological Association.

2 PhD in CP Learning Outcome 2: National Exam Performance

*Providing Department:* PhD in Counseling Psychology

*Learning Outcome Description:*

PhD in CP Learning Outcome 2: National Exam Performance Students will demonstrate knowledge of all counseling psychology concepts delineated by our national organization (APA) and earn passing scores on the national EPPP exam.

3 PhD in CP Learning Outcome 3: Applied Skills

*Providing Department:* PhD in Counseling Psychology

*Learning Outcome Description:*

PhD in CP Learning Outcome 3: Applied Skills Students will display sufficient applied skills in the field of Counseling Psychology practice, including diagnosis, assessment, and treatment/intervention.

4 PhD in CP Learning Outcome 4: Dispositions

*Providing Department:* PhD in Counseling Psychology

*Learning Outcome Description:*

PhD in CP Learning Outcome 4: Dispositions Students will display sufficient professional dispositions necessary for successful Counseling Psychology practice (respect for human diversity, communication skills, interpersonal relations, initiative and dependability, ethical practice, adaptability)

**PhD in Educational Psychology**

1 EDP Doctoral Learning Outcome 1

*Providing Department:* PhD in Educational Psychology

*Learning Outcome Description:*

Students will demonstrate understanding of theories and scientific literature in the areas of psychology, especially different aspects of human development, motivation, learning processes, therapeutic approaches, and human diversity.

2 EDP Doctoral Learning Outcome 2

*Providing Department:* PhD in Educational Psychology

*Learning Outcome Description:*

Students will demonstrate knowledge and skills in the areas of research design, methodology, and statistical analyses.

3 EDP Doctoral Learning Outcome 3

*Providing Department:* PhD in Educational Psychology

*Learning Outcome Description:* Student will apply their knowledge and skills into their practice and/or research

4 EDP Doctoral Learning Outcome 4

*Providing Department:* PhD in Educational Psychology

*Learning Outcome Description:*

The Students will demonstrate the appropriate knowledge related to the ethical standards for conducting Human Research. This involves successfully completing the CITI program on the ethical standards for conducting human research.

**UGC in Applied Behavior Analysis**

1 Learning Outcome 1: Knowledge of ABA Foundations

*Providing Department:* UGC in Applied Behavior Analysis

*Learning Outcome Description:* Students will display sufficient knowledge of ABA foundations.
2 Learning Outcome 2: Knowledge of ABA Techniques  
Providing Department: UGC in Applied Behavior Analysis  
Learning Outcome Description: Students will display sufficient knowledge of ABA methods of assessment.

3 Learning Outcome 3: Demonstration of ABA Foundational Skills  
Providing Department: UGC in Applied Behavior Analysis  
Learning Outcome Description: Students will display sufficient knowledge of ABA methods of assessment and treatment planning.

4 Learning Outcome 4: Demonstration of ABA Techniques  
Providing Department: UGC in Applied Behavior Analysis  
Learning Outcome Description: Students will display sufficient professional skills necessary for successful Applied Behavior Analysis practice as outlined by our national association—the Behavior Analytic Certification Board (BACB).

**GC in Alternative Energy Technology**

1 Comprehend the engineering fundamentals of various types of fuel cell systems, hydrogen reforming and storage strategy, system design and integration issues, and system evaluation and economic analysis.  
Providing Department: GC in Alternative Energy Technology  
Learning Outcome Description: Comprehend the engineering fundamentals of various types of fuel cell systems, hydrogen reforming and storage strategy, system design and integration issues, and system evaluation and economic analysis.

2 Apply the energy system fundamentals and analyses to address the key issues in design and integration of various AET systems, in particular solar heating and photovoltaic, wind turbine, biomass conversion and fuel cells.  
Providing Department: GC in Alternative Energy Technology  
Learning Outcome Description: Apply the energy system fundamentals and analyses to address the key issues in design and integration of various AET systems, in particular solar heating and photovoltaic, wind turbine, biomass conversion and fuel cells.

3 Gain knowledge and skill to apply systematic and structured methodology to economically implement AE systems.  
Providing Department: GC in Alternative Energy Technology  
Learning Outcome Description: Gain knowledge and skill to apply systematic and structured methodology to economically implement AE systems.

4 Equipped with the knowledge and skills to provide engineering services in planning, designing and constructing hydrogen infrastructure components and systems.  
Providing Department: GC in Alternative Energy Technology  
Learning Outcome Description: Equipped with the knowledge and skills to provide engineering services in planning, designing and constructing hydrogen infrastructure components and systems.

**MS in Alternative Energy Technology**

1 Comprehend the engineering fundamentals of various types of fuel cell systems, hydrogen reforming and storage strategy, system design and integration issues, and system evaluation and economic analysis.  
Providing Department: MS in Alternative Energy Technology  
Learning Outcome Description: Comprehend the engineering fundamentals of various types of fuel cell systems, hydrogen reforming and storage strategy, system design and integration issues, and system evaluation and economic analysis.

2 Apply the energy system fundamentals and analyses to address the key issues in design and integration of various AET systems, in particular solar heating and photovoltaic, wind turbine, biomass conversion and fuel cells.  
Providing Department: MS in Alternative Energy Technology  
Learning Outcome Description:
Apply the energy system fundamentals and analyses to address the key issues in design and integration of various AET systems, in particular solar heating and photovoltaic, wind turbine, biomass conversion and fuel cells.

3 Gain knowledge and skill to apply systematic and structured methodology to economically implement AE systems.

**Providing Department:** MS in Alternative Energy Technology

**Learning Outcome Description:**
Gain knowledge and skill to apply systematic and structured methodology to economically implement AE systems.

4 Equipped with the knowledge and skills to provide engineering services in planning, designing and constructing hydrogen infrastructure components and systems.

**Providing Department:** MS in Alternative Energy Technology

**Learning Outcome Description:**
Equipped with the knowledge and skills to provide engineering services in planning, designing and constructing hydrogen infrastructure components and systems.

### Bridge GC in Injury Biomechanics

1 **LO1:** Students will be able to demonstrate an ability to apply knowledge of mathematics, science, and engineering to solve problems in injury biomechanics

**Providing Department:** Bridge GC in Injury Biomechanics

**Learning Outcome Description:**
LO1: Students will be able to demonstrate an ability to apply knowledge of mathematics, science, and engineering to solve problems in injury biomechanics

2 **LO2:** Students will be able to demonstrate an ability to design a biomedical engineering system, component, or process to address injury biomechanics issues.

**Providing Department:** Bridge GC in Injury Biomechanics

**Learning Outcome Description:**
Students will be able to demonstrate an ability to design a biomedical engineering system, component, or process to address injury biomechanics issues.

3 **LO3:** Students will be able to demonstrate an ability to use the techniques, skills, and modern engineering tools necessary for injury biomechanics practice.

**Providing Department:** Bridge GC in Injury Biomechanics

**Learning Outcome Description:**
Students will be able to demonstrate an ability to use the techniques, skills, and modern engineering tools necessary for injury biomechanics practice.

4 **LO4:** Students will be able to demonstrate an ability to design and conduct injury biomechanics experiments, as well as to collect, analyze and interpret biomechanics data.

**Providing Department:** Bridge GC in Injury Biomechanics

**Learning Outcome Description:**
Students will be able to demonstrate an ability to design and conduct injury biomechanics experiments, as well as to collect, analyze and interpret biomechanics data.

### BS in Biomedical Engineering

**BS-BME1** Apply life science, physical science, math (incl difeq and statistics), and engineering

**Providing Department:** BS in Biomedical Engineering

**Learning Outcome Description:**
Apply life science, physical science, math (incl difeq and statistics), and engineering

**BS-a** Apply knowledge of math, science, and engineering

**Providing Department:** BS in Biomedical Engineering

**Learning Outcome Description:**
ABET A.) Students will demonstrate an ability to apply knowledge of mathematics, science, and engineering

**BS-b** Ability to design and conduct experiments, analyze and interpret data

**Providing Department:** BS in Biomedical Engineering
Learning Outcome Description:

**BS-c** Design a system, component, or process to meet desired needs within realistic constraints  
**Providing Department:** BS in Biomedical Engineering  
**Learning Outcome Description:** Students will be able to design a system, component, or process to meet desired needs within realistic constraints.

**BS-d** Function on multidisciplinary teams  
**Providing Department:** BS in Biomedical Engineering  
**Learning Outcome Description:** Students will be able to function on multidisciplinary teams.

**BS-e** Identify, formulate, and solve engineering problems  
**Providing Department:** BS in Biomedical Engineering  
**Learning Outcome Description:** Students will be able to identify, formulate, and solve engineering problems.

**BS-f** Understanding of professional ethical responsibility  
**Providing Department:** BS in Biomedical Engineering  
**Learning Outcome Description:** Students will be able to function on multidisciplinary teams.

**BS-g** Communicate effectively  
**Providing Department:** BS in Biomedical Engineering  
**Learning Outcome Description:** Students will be able to communicate effectively.

**BS-h** Understand the impact of engineering solutions in a global, economic, environmental, and societal context  
**Providing Department:** BS in Biomedical Engineering  
**Learning Outcome Description:** Students will understand the impact of engineering solutions in a global, economic, environmental, and societal context.

**BS-i** Recognize the need for and ability to engage in lifelong learning  
**Providing Department:** BS in Biomedical Engineering  
**Learning Outcome Description:** Students will recognize the need for and have the ability to engage in lifelong learning.

**BS-j** Demonstrate a knowledge of contemporary issues  
**Providing Department:** BS in Biomedical Engineering  
**Learning Outcome Description:** Students will be able to demonstrate a knowledge of contemporary issues.

**BS-k** Ability to use techniques, skills, and modern engineering tools necessary for engineering practice  
**Providing Department:** BS in Biomedical Engineering  
**Learning Outcome Description:** Students will demonstrate the ability to use techniques, skills, and modern engineering tools necessary for engineering practice.

**Dual Title in Biomedical Imaging**

**LO1** Good comprehension of theory and research in biological and medical imaging.  
**Providing Department:** Dual Title in Biomedical Imaging  
**Learning Outcome Description:** Students demonstrate good comprehension of theory and research in biological and medical imaging, and their corresponding medical applications in anatomy and physiology in healthy and diseased states.

**LO2** Application of theory and research in biomedical imaging area  
**Providing Department:** Dual Title in Biomedical Imaging  
**Learning Outcome Description:**
Students demonstrate the ability to apply theory and research in the biological and medical imaging area, including research design, data analysis, and interpretation.

**LO3 Ability to design and conduct scientific experiments**

**Providing Department:** Dual Title in Biomedical Imaging

**Learning Outcome Description:**
Students demonstrate the ability to apply math, science and physics concepts to identify, formulate and solve problems in biomedical imaging, design and conduct scientific experiments and analyze and interpret the resulting data.

**LO4 Ability to effectively communicate research-related results**

**Providing Department:** Dual Title in Biomedical Imaging

**Learning Outcome Description:**
Students demonstrate the ability to effectively communicate the results of their research to audiences with a broad range of technical knowledge.

**MS in Biomedical Engineering**

**MS-1 Apply math, science and engineering concepts to identify and solve problems in biology and medicine.**

**Providing Department:** MS in Biomedical Engineering

**Learning Outcome Description:**
Students will be able to apply math, science and engineering concepts to identify and solve problems in biology and medicine.

**MS-2 Obtain sufficient understanding of the mathematical, physical and biological sciences for comprehension of literature in these and related fields.**

**Providing Department:** MS in Biomedical Engineering

**Learning Outcome Description:**
Students will be able to obtain sufficient understanding of the mathematical, physical and biological sciences for comprehension of literature in these and related fields.

**MS-3 Use the techniques, skills, and modern science and engineering tools in biomedical engineering.**

**Providing Department:** MS in Biomedical Engineering

**Learning Outcome Description:**
Students will be able to use the techniques, skills and modern science and engineering tools in biomedical engineering.

**MS-4 Engage in life-long learning on recent advances in the field of biomedical engineering**

**Providing Department:** MS in Biomedical Engineering

**Learning Outcome Description:**
Students will be able to engage in life-long learning on recent advances in the field of biomedical engineering.

**PhD in Biomedical Engineering**

**PhD-1 Apply math, science and engineering concepts to identify, formulate and solve problems in biology and medicine, design and conduct scientific experiments and analyze and interpret the resulting data.**

**Providing Department:** PhD in Biomedical Engineering

**Learning Outcome Description:**
Students will be able to apply math, science and engineering concepts to identify, formulate and solve problems in biology and medicine, design and conduct scientific experiments and analyze and interpret the resulting data.

**PhD-2 The graduates will be able to plan and conduct independent research which leads to the development of new knowledge, new approaches, solutions and/or instruments for biology and medicine.**

**Providing Department:** PhD in Biomedical Engineering

**Learning Outcome Description:**
Students will be able to plan and conduct independent research which leads to the development of new knowledge, new approaches, solutions and/or instruments for biology and medicine.

**PhD-3 Effectively communicate scientific and engineering concepts to audiences with a broad range of technical knowledge.**

**Providing Department:** PhD in Biomedical Engineering
Learning Outcome Description:
Students will be able to effectively communicate scientific and engineering concepts to audiences with a broad range of technical knowledge.

PhD-4 Obtain sufficient understanding of the mathematical, physical and biological sciences for comprehension of literature in these and related fields.

Providing Department: PhD in Biomedical Engineering
Learning Outcome Description:
Students will be able to obtain sufficient understanding of the mathematical, physical and biological sciences for comprehension of literature in these and related fields.

BS in Chemical Engineering
1 An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

Providing Department: BS in Chemical Engineering
Learning Outcome Description:
Students will be able to demonstrate an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

2 An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

Providing Department: BS in Chemical Engineering
Learning Outcome Description:
Students will be able to demonstrate an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

3 An ability to communicate effectively with a range of audiences

Providing Department: BS in Chemical Engineering
Learning Outcome Description:
Students will be able to demonstrate an ability to communicate effectively with a range of audiences.

4 An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

Providing Department: BS in Chemical Engineering
Learning Outcome Description:
Students will be able to demonstrate an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5 An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

Providing Department: BS in Chemical Engineering
Learning Outcome Description:
Students will be able to demonstrate an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

6 An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

Providing Department: BS in Chemical Engineering
Learning Outcome Description:
Students will be able to demonstrate an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7 An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

Providing Department: BS in Chemical Engineering
Learning Outcome Description:
Students will be able to demonstrate an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.
strategies.

**GC in Polymer Engineering**

1 Demonstrate mastery of advanced subject material [GC PE]
   
   **Providing Department:** GC in Polymer Engineering
   **Learning Outcome Description:** Students will demonstrate mastery of advanced subject material in Polymer Science and Engineering

2 An ability to identify, formulate, and solve problems in Polymer Science and Engineering
   
   **Providing Department:** GC in Polymer Engineering
   **Learning Outcome Description:** Students will demonstrate an ability to identify, formulate, and solve problems in Polymer Science and Engineering

3 Know about emerging and frontier knowledge in Polymer Science and Engineering
   
   **Providing Department:** GC in Polymer Engineering
   **Learning Outcome Description:** Student will know about emerging and frontier knowledge in Polymer Science and Engineering

4 An ability to communicate effectively in the field of Polymer Science and Engineering
   
   **Providing Department:** GC in Polymer Engineering
   **Learning Outcome Description:** Students will demonstrate an ability to communicate effectively in the field of Polymer Science and Engineering

**MS in Chemical Engineering**

1 Learning Outcome 1
   
   **Providing Department:** MS in Chemical Engineering
   **Learning Outcome Description:** Students will be able to demonstrate mastery of advanced subject material in Chemical Engineering.

2 Learning Outcome 2
   
   **Providing Department:** MS in Chemical Engineering
   **Learning Outcome Description:** Students will be able to conduct scholarly activities in an ethical manner

3 Learning Outcome 3
   
   **Providing Department:** MS in Chemical Engineering
   **Learning Outcome Description:** Students will be able to demonstrate communication skills.

4 Learning Outcome 4
   
   **Providing Department:** MS in Chemical Engineering
   **Learning Outcome Description:** Student will be able to develop career skills through life-long learning.

**MS in Materials Science and Engineering**

1 Learning Outcome 1
   
   **Providing Department:** MS in Materials Science and Engineering
   **Learning Outcome Description:** Building upon an appropriate background in engineering and/or physical sciences at the baccalaureate level, students will be able to demonstrate mastery of advanced subject material in Materials Science

2 Learning Outcome 2
   
   **Providing Department:** MS in Materials Science and Engineering
   **Learning Outcome Description:** Students will be able to conduct scholarly activities in an ethical manner.

3 Learning Outcome 3
   
   **Providing Department:** MS in Materials Science and Engineering
   **Learning Outcome Description:** Students will be able to demonstrate communication skills.

4 Learning Outcome 4
   
   **Providing Department:** MS in Materials Science and Engineering
Learning Outcome Description: Student will be able to develop career skills through life-long learning.

**PhD in Chemical Engineering**

1 Learning Outcome 1  
**Providing Department:** PhD in Chemical Engineering  
**Learning Outcome Description:** Students will be able to produce and defend an original contribution to knowledge

2 Learning Outcome 2  
**Providing Department:** PhD in Chemical Engineering  
**Learning Outcome Description:** Students will be able to demonstrate mastery of advanced subject material in Chemical Engineering

3 Learning Outcome 3  
**Providing Department:** PhD in Chemical Engineering  
**Learning Outcome Description:** Students will be able to conduct scholarly activities in an ethical manner

4 Learning Outcome 4  
**Providing Department:** PhD in Chemical Engineering  
**Learning Outcome Description:** Further develop career skills through life-long learning

5 Learning Outcome 5  
**Providing Department:** PhD in Chemical Engineering  
**Learning Outcome Description:** Students will be able to demonstrate communication skills.

**PhD in Materials Science and Engineering**

1 Learning Outcome 1  
**Providing Department:** PhD in Materials Science and Engineering  
**Learning Outcome Description:** Students will be able to produce and defend an original contribution to Materials Science knowledge

2 Learning Outcome 2  
**Providing Department:** PhD in Materials Science and Engineering  
**Learning Outcome Description:** Students will be able to demonstrate mastery of advanced subject material in Chemical Engineering

3 Learning Outcome 3  
**Providing Department:** PhD in Materials Science and Engineering  
**Learning Outcome Description:** Students will be able to conduct scholarly & professional activities in the field of Materials Science in an ethical manner.

4 Learning Outcome 4  
**Providing Department:** PhD in Materials Science and Engineering  
**Learning Outcome Description:** Further develop career skills through life-long learning

5 Learning Outcome 5  
**Providing Department:** PhD in Materials Science and Engineering  
**Learning Outcome Description:** Students will be able to demonstrate communication skills.

**Sustainable Engineering Certificate**

1 LO 1 - Student will demonstrate a deep understanding of sustainability principles  
**Providing Department:** Sustainable Engineering Certificate  
**Learning Outcome Description:** Students will demonstrate a deep understanding of sustainability principles

2 LO 2 - Student will demonstrate the ability to conduct sustainability assessment and life-cycle analysis  
**Providing Department:** Sustainable Engineering Certificate  
**Learning Outcome Description:**
LO (b): student will demonstrate the ability to conduct sustainability assessment and life-cycle analysis

3 LO 3 - An ability to implement sustainability principles in the engineering analysis and design of a system, component, or process.

Providing Department: Sustainable Engineering Certificate
Learning Outcome Description:
LO (c): an ability to implement sustainability principles in the engineering analysis and design of a system, component, or process.

4 LO 4 - Students will be able to apply sustainability principles to inform professional and ethical responsibility in a global, economic, environmental, and societal context

Providing Department: Sustainable Engineering Certificate
Learning Outcome Description:
LO (d): students will be able to apply sustainability principles to inform professional and ethical responsibility in a global, economic, environmental, and societal context

BS in Civil Engineering

a The ability to apply knowledge of mathematics, science and engineering within the framework of solving civil engineering problems, including...

Providing Department: BS in Civil Engineering
Learning Outcome Description:
Students will be able to demonstrate the ability to apply knowledge of mathematics, science and engineering within the framework of solving civil engineering problems, including the analysis and design of structures, transportation systems, water treatment and supply systems, wastewater collection and treatment systems, as well as the geotechnical aspects of each.

b The ability to design and conduct experiments, as well as collect and interpret experimental data, pertaining to civil engineering systems.

Providing Department: BS in Civil Engineering
Learning Outcome Description:
Students will be able to demonstrate the ability to design and conduct experiments, as well as collect and interpret experimental data, pertaining to civil engineering systems.

c The ability to design a civil engineering system, system component or process which meets specific needs.

Providing Department: BS in Civil Engineering
Learning Outcome Description:
Students will be able to demonstrate the ability to design a civil engineering system, system component or process which meets specific needs.

d The ability to collaborate, communicate and work effectively with others on multi-disciplinary teams.

Providing Department: BS in Civil Engineering
Learning Outcome Description:
Students will be able to demonstrate the ability to collaborate, communicate and work effectively with others on multi-disciplinary teams.

e The ability to identify, formulate and solve a range of civil engineering problems.

Providing Department: BS in Civil Engineering
Learning Outcome Description:
Students will be able to demonstrate the ability to identify, formulate and solve a range of civil engineering problems.

f An understanding and appreciation of professional and ethical responsibility in the practice of civil engineering.

Providing Department: BS in Civil Engineering
Learning Outcome Description:
Students will be able to demonstrate an understanding and appreciation of professional and ethical responsibility in the practice of civil engineering.

g The ability to communicate effectively in both written and oral form.

Providing Department: BS in Civil Engineering
Learning Outcome Description:
Students will be able to demonstrate the ability to communicate effectively in both written and oral form.

h A broad educational background which addresses the importance of global and societal factors as they affect and are affected by civil engineering systems.

**Providing Department:** BS in Civil Engineering  
**Learning Outcome Description:**  
Students will be able to demonstrate a broad educational background which addresses the importance of global and societal factors as they affect and are affected by civil engineering systems.

i An understanding of the importance of life-long learning and continuing education

**Providing Department:** BS in Civil Engineering  
**Learning Outcome Description:**  
Students will be able to demonstrate an understanding of the importance of life-long learning and continuing education

j An understanding of important contemporary issues within and outside the civil engineering profession.

**Providing Department:** BS in Civil Engineering  
**Learning Outcome Description:**  
Students will be able to demonstrate an understanding of important contemporary issues within and outside the civil engineering profession.

k The ability to use the techniques, skills and modern engineering tools required for the practice of civil engineering.

**Providing Department:** BS in Civil Engineering  
**Learning Outcome Description:**  
Students will be able to demonstrate the ability to use the techniques, skills and modern engineering tools required for the practice of civil engineering.

l An understanding of civil engineering professional practice issues such as: procurement of work, bidding versus quality-based selection processes, addressing public safety concerns in project design, how design professionals interact with the construction

**Providing Department:** BS in Civil Engineering  
**Learning Outcome Description:**  
Students will be able to demonstrate the ability to use the techniques, skills and modern engineering tools required for the practice of civil engineering.

**MS in Civil Engineering**

1 Demonstrate the skills and competency to function in, and ultimately lead, project teams.

**Providing Department:** MS in Civil Engineering  
**Learning Outcome Description:**  
Students will be able to demonstrate the skills and competency to function in, and ultimately lead, project teams.

2 Analyze and solve complex and emerging engineering problems using newly developed approaches and methodologies.

**Providing Department:** MS in Civil Engineering  
**Learning Outcome Description:**  
Students will be able to analyze and solve complex and emerging engineering problems using newly developed approaches and methodologies.

3 Communicate technical information to a range of audiences both verbally and in writing.

**Providing Department:** MS in Civil Engineering  
**Learning Outcome Description:**  
Students will be able to communicate technical information to a range of audiences both verbally and in writing.

4 Demonstrate professionalism with a commitment to the highest standards of ethical principles.

**Providing Department:** MS in Civil Engineering  
**Learning Outcome Description:**  
Students will be able to demonstrate professionalism with a commitment to the highest standards of ethical principles.
PhD with a major in Civil Engineering

1 Design and complete original research in their specialty area.
Providing Department: PhD with a major in Civil Engineering
Learning Outcome Description: Students will be able to design and complete original research in their specialty area.

2 Demonstrate the ability to lead project teams.
Providing Department: PhD with a major in Civil Engineering
Learning Outcome Description: Students will be able to demonstrate the ability to lead project teams.

3 Evaluate complex and novel engineering problems and derive solutions using original (non-standard) approaches and methodologies.
Providing Department: PhD with a major in Civil Engineering
Learning Outcome Description: Students will be able to evaluate complex and novel engineering problems and derive solutions using original (non-standard) approaches and methodologies.

4 Communicate technical information to a range of audiences both verbally and in writing.
Providing Department: PhD with a major in Civil Engineering
Learning Outcome Description: Students will be able to communicate technical information to a range of audiences both verbally and in writing.

5 Demonstrate professionalism with a commitment to the highest standards of ethical principles.
Providing Department: PhD with a major in Civil Engineering
Learning Outcome Description: Students will be able to demonstrate professionalism with a commitment to the highest standards of ethical principles.

BS in Computer Science

LO1 BS Computer Science_LO 1_Apply Principles
Providing Department: BS in Computer Science
Learning Outcome Description: Students will be able to apply the principles of computer science, mathematics, and scientific investigation to solve real-world problems appropriate to the discipline.

LO2 BS Computer Science_LO 2_Lifelong Learning Skills
Providing Department: BS in Computer Science
Learning Outcome Description: Students will have lifelong learning skills, which will allow them to successfully adapt to evolving technologies throughout their professional careers.

LO3 BS Computer Science_LO 3_Prepared for Employment and Advanced Studies
Providing Department: BS in Computer Science
Learning Outcome Description: Students are sufficiently prepared for employment and advanced studies, and will have significant experiences with complex software development for real-world problems.

LO4 BS Computer Science_LO 4_Teamwork, Communication, and Interpersonal Skills
Providing Department: BS in Computer Science
Learning Outcome Description: Students will have sufficient teamwork, communication, and interpersonal skills to enable them to work with others effectively in their professional careers.

LO5 BS Computer Science_LO 5_Function Ethically and Responsibly
Providing Department: BS in Computer Science
Learning Outcome Description: Students can function ethically and responsibly, and are conscious of ethical, social, global, legal, security and professional issues related to computing.
BS in Information Technology

LO1 BAIS Outcome 1_ develop programming skills
Providing Department: BS in Information Technology
Learning Outcome Description:
Students will learn to develop their programming skills in order to allow them to apply these learned techniques to analyze an information technology problem, evaluate possible solutions, and create a solution as part of an organizational development team.

LO2 BAIS Outcome 2_ lifelong learning skills
Providing Department: BS in Information Technology
Learning Outcome Description:
Students will have lifelong learning skills, which will allow them to successfully adapt to evolving technologies throughout their professional careers.

LO3 BAIS Outcome 3_ sufficiently prepared for employment
Providing Department: BS in Information Technology
Learning Outcome Description:
Students are sufficiently prepared for employment and will have significant experiences with complex software development for real-world problems.

LO4 BAIS Outcome 4_ sufficient teamwork, communication, and interpersonal skills
Providing Department: BS in Information Technology
Learning Outcome Description:
Students will have sufficient teamwork, communication, and interpersonal skills to enable them to work with others effectively in their professional careers.

LO5 BAIS Outcome 5_ Function ethically and responsibly
Providing Department: BS in Information Technology
Learning Outcome Description:
Students can function ethically and responsibly, and are conscious of ethical, social, global, legal, security and professional issues related to computing.

GC in Mobility

PL04 Domain-Specific CPS Topics
Providing Department: GC in Mobility
Learning Outcome Description: Students will be able to apply the fundamental principles and techniques of cyber-physical systems.

PLO1 CPS Principles & Techniques
Providing Department: GC in Mobility
Learning Outcome Description: Understanding of fundamental principles and techniques of CPS, including sensing and HMI, embedded computing and networking, control and robotics, security, data analytics, and systems integration.

PLO2 CPS Practice & Research
Providing Department: GC in Mobility
Learning Outcome Description: Capability of applying CPS principles and techniques in practice (e.g., in different CPS application domains) and pushing the frontiers of CPS knowledge and practice.

PLO3 Teamwork and Collaboration
Providing Department: GC in Mobility
Learning Outcome Description: Students will be able to work effectively in a team toward the successful completion of a project.

MS with a Major in Computer Science

LO1 MS Computer Science_LO1_Analyze and produce solution
Providing Department: MS with a Major in Computer Science
Learning Outcome Description:
An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution, and produce a corresponding implementation.

LO2 MS Computer Science_LO2_Questions and Research
Providing Department: MS with a Major in Computer Science
Learning Outcome Description:
An ability to understand the fundamental questions relevant to state of research in a selected sub-discipline as presented in CSC 7000 level courses

LO3 MS Computer Science_LO3_Advance the Field
Providing Department: MS with a Major in Computer Science
Learning Outcome Description:
An ability to advance the field in the core subject areas through the production of new software, algorithms, and models as documented in peer reviewed publications in the field.

LO4 MS Computer Science_LO4_Lifelong Learning Activities
Providing Department: MS with a Major in Computer Science
Learning Outcome Description:
The ability to pursue lifelong learning activities, which will allow them to successfully adapt to evolving technologies throughout their professional careers.

PhD with a Major in Computer Science

LO1 PhD Computer Science_LO1_Advanced Study and Research
Providing Department: PhD with a Major in Computer Science
Learning Outcome Description: Students must demonstrate the ability to engage in advanced study and research.

LO2 PhD Computer Science_LO2_Understand Research and Tools
Providing Department: PhD with a Major in Computer Science
Learning Outcome Description:
Students must demonstrate the ability to understand the major research questions and fundamental tools needed to solve problems in a given sub-field of Computer Science.

LO3 PhD Computer Science_LO3_Original and Scholarly Research
Providing Department: PhD with a Major in Computer Science
Learning Outcome Description:
Students must produce original and scholarly research that contributes to one or more of the sub-fields of Computer Science.

LO4 PhD Computer Science_LO4_Research Contribution
Providing Department: PhD with a Major in Computer Science
Learning Outcome Description:
Students are expected to have made a significant contribution to research in their sub-field and as a result have become integrated into their various professional communities. They will then be in a position to address large scale issues of both national and global concern.

BS in Electrical Engineering

ABET 1 An ability to apply knowledge of mathematics, science, and engineering.
Providing Department: BS in Electrical Engineering
Learning Outcome Description:
an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

ABET 2 an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors
Providing Department: BS in Electrical Engineering
Learning Outcome Description:
Students will demonstrate an ability to design and conduct experiments, as well as to analyze and interpret data.

ABET 3 An ability to design a system, component or process to meet desired needs.
Providing Department: BS in Electrical Engineering
Learning Outcome Description: an ability to communicate effectively with a range of audiences

ABET 4 an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts
Providing Department: BS in Electrical Engineering
Learning Outcome Description: Students will demonstrate an ability to function on multidisciplinary teams.

ABET 5 an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
Providing Department: BS in Electrical Engineering
Learning Outcome Description: Students will demonstrate an ability to identify, formulate, and solve engineering problems.

ABET 6 An understanding of professional and ethical responsibility.
Providing Department: BS in Electrical Engineering
Learning Outcome Description: an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

ABET 7 An ability to communicate effectively.
Providing Department: BS in Electrical Engineering
Learning Outcome Description: an ability to acquire and apply new knowledge as needed, using appropriate learning strategies

MS in Computer Engineering

1 Learning Outcome 1: Students will be able to tackle complex and challenging computer engineering problems using contemporary approaches and methodologies.
Providing Department: MS in Computer Engineering
Learning Outcome Description: Students will be able to tackle complex and challenging computer engineering problems using contemporary approaches and methodologies.

2 Learning Outcome 2: Students will be able to use techniques, skills, and modern engineering tools necessary for computer engineering practice.
Providing Department: MS in Computer Engineering
Learning Outcome Description: Students will be able to use techniques, skills, and modern engineering tools necessary for computer engineering practice.

3 Learning Outcome 3: Students will be able to demonstrate comprehension of contemporary literature in the computer engineering area.
Providing Department: MS in Computer Engineering
Learning Outcome Description: Students will be able to demonstrate comprehension of contemporary literature in the computer engineering area.

4 Learning Outcome 4: Students will be able to effectively communicate, both verbally and in writing, scientific and engineering concepts to audiences with a broad range of technical knowledge.
Providing Department: MS in Computer Engineering
Learning Outcome Description: Students will be able to effectively communicate, both verbally and in writing, scientific and engineering concepts to audiences with a broad range of technical knowledge.

MS in Electrical Engineering
1 Learning Outcome 1: Students will be able to tackle complex and challenging electrical engineering problems using contemporary approaches and methodologies.

**Providing Department:** MS in Electrical Engineering  
**Learning Outcome Description:** Students will be able to tackle complex and challenging electrical engineering problems using contemporary approaches and methodologies.

2 Learning Outcome 2: Students will be able to use techniques, skills, and modern engineering tools necessary for electrical engineering practice.

**Providing Department:** MS in Electrical Engineering  
**Learning Outcome Description:** Students will be able to use techniques, skills, and modern engineering tools necessary for electrical engineering practice.

3 Learning Outcome 3: Students will be able to demonstrate comprehension of contemporary literature in the electrical engineering area.

**Providing Department:** MS in Electrical Engineering  
**Learning Outcome Description:** Students will be able to demonstrate comprehension of contemporary literature in the electrical engineering area.

4 Learning Outcome 4: Students will be able to effectively communicate, both verbally and in writing, scientific and engineering concepts to audiences with a broad range of technical knowledge.

**Providing Department:** MS in Electrical Engineering  
**Learning Outcome Description:** Students will be able to effectively communicate, both verbally and in writing, scientific and engineering concepts to audiences with a broad range of technical knowledge.

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**PhD in Computer Engineering**

1 Learning Outcome 1: Students will be able to demonstrate mastery of advanced principles pertaining to the computer engineering research path of the Ph.D. candidate.

**Providing Department:** PhD in Computer Engineering  
**Learning Outcome Description:** Students will be able to demonstrate mastery of advanced principles pertaining to the computer engineering research path of the Ph.D. candidate.

2 Learning Outcome 2: Students will be able to plan and conduct independent research which leads to the development of new knowledge, approaches and solutions for computer engineering problems.

**Providing Department:** PhD in Computer Engineering  
**Learning Outcome Description:** Students will be able to plan and conduct independent research which leads to the development of new knowledge, approaches and solutions for computer engineering problems.

3 Learning Outcome 3: Students will be able to demonstrate comprehension of contemporary literature in the computer engineering area.

**Providing Department:** PhD in Computer Engineering  
**Learning Outcome Description:** Students will be able to demonstrate comprehension of contemporary literature in the computer engineering area.

4 Learning Outcome 4: Students will be able to demonstrate comprehension of contemporary literature in the computer engineering area.

**Providing Department:** PhD in Computer Engineering  
**Learning Outcome Description:** Students will be able to demonstrate comprehension of contemporary literature in the computer engineering area.

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**PhD in Electrical Engineering**
1 Learning Outcome 1: Students will be able to demonstrate mastery of advanced principles pertaining to the electrical engineering research path of the Ph.D. candidate.

Providing Department: PhD in Electrical Engineering
Learning Outcome Description:
Students will be able to demonstrate mastery of advanced principles pertaining to the electrical engineering research path of the Ph.D. candidate.

2 Learning Outcome 2: Students will be able to plan and conduct independent research which leads to the development of new knowledge, approaches and solutions for electrical engineering problems.

Providing Department: PhD in Electrical Engineering
Learning Outcome Description:
Students will be able to plan and conduct independent research which leads to the development of new knowledge, approaches and solutions for electrical engineering problems.

3 Learning Outcome 3: Students will be able to demonstrate comprehension of contemporary literature in the electrical engineering area.

Providing Department: PhD in Electrical Engineering
Learning Outcome Description:
Students will be able to demonstrate comprehension of contemporary literature in the electrical engineering area.

4 Learning Outcome 4: Students will be able to effectively communicate, both verbally and in writing, scientific and engineering concepts to audiences with a broad range of technical knowledge.

Providing Department: PhD in Electrical Engineering
Learning Outcome Description:
Students will be able to effectively communicate, both verbally and in writing, scientific and engineering concepts to audiences with a broad range of technical knowledge.

GC in Electric-drive Vehicle Engineering

1 An ability to select and apply a knowledge of mathematics, science, and engineering to identify and solve problems in ground vehicle electrification and hybridization and related general engineering areas.

Providing Department: GC in Electric-drive Vehicle Engineering
Learning Outcome Description:
An ability to select and apply a knowledge of mathematics, science, and engineering to identify and solve problems in ground vehicle electrification and hybridization and related general engineering areas.

2 An ability to apply the methodologies, skills, and modern science and engineering tools in vehicle electrification and hybridization engineering design, research, development, and applications.

Providing Department: GC in Electric-drive Vehicle Engineering
Learning Outcome Description:
An ability to apply the methodologies, skills, and modern science and engineering tools in vehicle electrification and hybridization engineering design, research, development, and applications.

3 An ability to design sub-systems, components, or processes for broadly-defined electric-drive or alternative energy vehicle problems appropriate to program educational objectives.

Providing Department: GC in Electric-drive Vehicle Engineering
Learning Outcome Description:
An ability to design sub-systems, components, or processes for broadly-defined electric-drive or alternative energy vehicle problems appropriate to program educational objectives.

4 An ability to identify, analyze, and solve broadly-defined electric-drive and alternative energy vehicle problems.

Providing Department: GC in Electric-drive Vehicle Engineering
Learning Outcome Description:
An ability to identify, analyze, and solve broadly-defined vehicle electrification and hybridization problems.

MS in Electric-drive Vehicle Engineering
1 An ability to select and apply a knowledge of mathematics, science, and engineering to identify and solve problems in ground vehicle electrification and hybridization and related general engineering areas.

Providing Department: MS in Electric-drive Vehicle Engineering
Learning Outcome Description:
An ability to select and apply a knowledge of mathematics, science, and engineering to identify and solve problems in ground vehicle electrification and hybridization and related general engineering areas.

2 An ability to apply the methodologies, skills, and modern science and engineering tools in vehicle electrification and hybridization engineering design, research, development, and applications.

Providing Department: MS in Electric-drive Vehicle Engineering
Learning Outcome Description:
An ability to apply the methodologies, skills, and modern science and engineering tools in vehicle electrification and hybridization engineering design, research, development, and applications.

3 An ability to design sub-systems, components, or processes for broadly-defined electric-drive or alternative energy vehicle problems appropriate to program educational objectives.

Providing Department: MS in Electric-drive Vehicle Engineering
Learning Outcome Description:
An ability to design sub-systems, components, or processes for broadly-defined electric-drive or alternative energy vehicle problems appropriate to program educational objectives.

4 An ability to identify, analyze, and solve broadly-defined electric-drive and alternative energy vehicle problems.

Providing Department: MS in Electric-drive Vehicle Engineering
Learning Outcome Description:
An ability to identify, analyze, and solve broadly-defined vehicle electrification and hybridization problems.

BS in Computer Technology

1SO1-a,b,f Apply knowledge, skills and modern tools

Providing Department: BS in Computer Technology
Learning Outcome Description:
An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;

2SO2-d Design systems, components

Providing Department: BS in Computer Technology
Learning Outcome Description:
An ability to design systems, components, or processes meeting specific needs for broadly-defined engineering problems appropriate to the discipline.

3SO3-g Written, oral communication

Providing Department: BS in Computer Technology
Learning Outcome Description:
An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate.

4SO4 Conduct Standard Tests

Providing Department: BS in Computer Technology
Learning Outcome Description:
An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes;

BS in Construction Management

1 Ability to recognize and resolve issues and problems arising in construction

Providing Department: BS in Construction Management
Learning Outcome Description:
Students will be able to demonstrate an ability to recognize and resolve issues and problems arising in construction.
1SO1-1-CMT Problems arising in construction
Providing Department: BS in Construction Management
Learning Outcome Description: Ability to recognize and resolve issues and problems arising in construction.

1SO1 Green Construction
Providing Department: BS in Construction Management
Learning Outcome Description: An ability to apply knowledge, techniques, and skills in green construct

1SO1-2-CMT Planning and coordination
Providing Department: BS in Construction Management
Learning Outcome Description: Knowledge and techniques for overall planning, coordination, and control of a project.

1SO1-3-CMT Key components
Providing Department: BS in Construction Management
Learning Outcome Description: Understanding of equipment key components and usage.

1SO1-4-CMT Estimation
Providing Department: BS in Construction Management
Learning Outcome Description: Knowledge of advanced construction estimation quantities.

1SO1-5-CMT Communicates
Providing Department: BS in Construction Management
Learning Outcome Description: Communicates effectively.

1SO2 Methods and material in construction
Providing Department: BS in Construction Management
Learning Outcome Description: An ability to apply methods and material in construction.

1SO3 Estimates
Providing Department: BS in Construction Management
Learning Outcome Description: An ability to implement quantity estimates in residential and commercial construction.

1SO4 Legal and environmental process
Providing Department: BS in Construction Management
Learning Outcome Description: An ability to understand the legal and environmental difficulties in the land development process.

2.a Knowledge of and techniques for: a. Construction materials and building systems
Providing Department: BS in Construction Management
Learning Outcome Description: Students will be able to demonstrate a knowledge of and techniques for construction materials and building systems

2.b Knowledge of and techniques for: b. Estimating, scheduling, and project administration
Providing Department: BS in Construction Management
Learning Outcome Description: Students will be able to demonstrate knowledge of and techniques for estimating, scheduling, and project administration

2.c Knowledge of and techniques for: c. On-site safety programs and quality assurance
Providing Department: BS in Construction Management
Learning Outcome Description: Students will be able to demonstrate a knowledge of and techniques for on-site safety programs and quality assurance

2.d Knowledge of and techniques for: d. On-site material delivery, storage and handling
Providing Department: BS in Construction Management
Learning Outcome Description: Students will be able to demonstrate a knowledge of and techniques for on-site material delivery, storage and handling

2.e Knowledge of and techniques for: e. State-of-the-art construction equipment and methods

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Providing Department: BS in Construction Management
Learning Outcome Description:
Students will be able to demonstrate a knowledge of and techniques for state-of-the-art construction equipment and methods

2.f Knowledge of and techniques for: f. Mechanical and electrical components and systems

Providing Department: BS in Construction Management
Learning Outcome Description:
Students will be able to demonstrate a knowledge of and techniques for mechanical and electrical components and systems

2.g Knowledge of and techniques for: g. Land development

Providing Department: BS in Construction Management
Learning Outcome Description:
Students will be able to demonstrate a knowledge of and techniques for land development

2.h Knowledge of and techniques for: h. Green construction and sustainability

Providing Department: BS in Construction Management
Learning Outcome Description:
Students will be able to demonstrate a knowledge of and techniques for green construction and sustainability

2.i Knowledge of and techniques for: i. Relevant standards and codes

Providing Department: BS in Construction Management
Learning Outcome Description:
Students will be able to demonstrate knowledge of and techniques for relevant standards and codes

3 Understanding of contract law and ethical principles

Providing Department: BS in Construction Management
Learning Outcome Description:
Students will be able to demonstrate an understanding of contract law and ethical principles

4 Knowledge of advanced construction management software

Providing Department: BS in Construction Management
Learning Outcome Description:

5 Communicate effectively

Providing Department: BS in Construction Management
Learning Outcome Description:
Students will be able to demonstrate the ability to communicate effectively

BS in Electric Transportation Technology

a an ability to select and apply the knowledge, techniques, skills, and modern tools of their disciplines to broadly-defined electrified and alternative energy vehicle activities.

Providing Department: BS in Electric Transportation Technology
Learning Outcome Description:
an ability to select and apply the knowledge, techniques, skills, and modern tools of their disciplines to broadly-defined electrified and alternative energy vehicle activities.

b an ability to select and apply a knowledge of mathematics, science, engineering, and technology to vehicle electrification and alternative energy vehicle problems that require the application of principles and applied procedures or methodologies.

Providing Department: BS in Electric Transportation Technology
Learning Outcome Description:
an ability to select and apply a knowledge of mathematics, science, engineering, and technology to vehicle electrification and alternative energy vehicle problems that require the application of principles and applied procedures or methodologies.

d an ability to design sub-systems, components, or processes for broadly-defined electric-drive or alternative energy vehicle problems appropriate to program educational objectives.

Providing Department: BS in Electric Transportation Technology
Learning Outcome Description:
an ability to design sub-systems, components, or processes for broadly-defined electric-drive or alternative energy vehicle problems appropriate to program educational objectives.
an ability to identify, analyze, and solve broadly-defined electric-drive and alternative energy vehicle problems.

**Providing Department:** BS in Electric Transportation Technology

**Learning Outcome Description:**
an ability to identify, analyze, and solve broadly-defined electric-drive and alternative energy vehicle problems.

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**BS in Electrical/Electronic Engineering Technology**

**1SO1** Apply knowledge, skills and modern tools

**Providing Department:** BS in Electrical/Electronic Engineering Technology

**Learning Outcome Description:**
An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;

**2SO2-d** Design systems, components

**Providing Department:** BS in Electrical/Electronic Engineering Technology

**Learning Outcome Description:**
An ability to design systems, components, or processes meeting specific needs for broadly-defined engineering problems appropriate to the discipline;

**3SO3-g** Written, oral communication

**Providing Department:** BS in Electrical/Electronic Engineering Technology

**Learning Outcome Description:**
An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;

**4SO4-c** Conduct standard tests

**Providing Department:** BS in Electrical/Electronic Engineering Technology

**Learning Outcome Description:**
An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes;

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**BS in Electromechanical Engineering Technology**

**1SO1-a,b,f** Apply knowledge, skills and modern tools

**Providing Department:** BS in Electromechanical Engineering Technology

**Learning Outcome Description:**
An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.

**2SO2-d** Design systems, components

**Providing Department:** BS in Electromechanical Engineering Technology

**Learning Outcome Description:**
An ability to design systems, components, or processes meeting specific needs for broadly-defined engineering problems appropriate to the discipline.

**3SO3-g** Written, oral communication

**Providing Department:** BS in Electromechanical Engineering Technology

**Learning Outcome Description:**
An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature.

**4SO4** Conduct Standard Tests

**Providing Department:** BS in Electromechanical Engineering Technology

**Learning Outcome Description:**
An ability to function effectively as a member or leader on a technical team.
An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and

**BS in Mechanical Engineering Technology**

15SO1 Apply knowledge, skills and modern tools

Providing Department: BS in Mechanical Engineering Technology

Learning Outcome Description:
An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline.

2SO2 Design systems, components

Providing Department: BS in Mechanical Engineering Technology

Learning Outcome Description:
An ability to design systems, components, or processes meeting specific needs for broadly-defined engineering problems appropriate to the discipline.

3SO3 Written, oral communication

Providing Department: BS in Mechanical Engineering Technology

Learning Outcome Description:
An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;

4SO4 Conduct Standard Tests

Providing Department: BS in Mechanical Engineering Technology

Learning Outcome Description:
An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes;

**MS in Engineering Technology**

1 Upon graduation, MSET students shall possess the abilities to: formulate and solve advanced engineering problems

Providing Department: MS in Engineering Technology

Learning Outcome Description:
Upon graduation, MSET students shall possess the abilities to: formulate and solve advanced engineering problems

2 Upon graduation, MSET students shall possess the abilities to: apply knowledge and cutting edge technology in a specialized area of their discipline

Providing Department: MS in Engineering Technology

Learning Outcome Description:
Upon graduation, MSET students shall possess the abilities to: apply knowledge and cutting edge technology in a specialized area of their discipline

3 Upon graduation, MSET students shall possess the abilities to: design and conduct applied research project projects independently

Providing Department: MS in Engineering Technology

Learning Outcome Description: design and conduct applied research project projects independently

4 Upon graduation, MSET students shall possess the abilities to: demonstrate the understanding of the role, ethics and social responsibility of the profession in the society

Providing Department: MS in Engineering Technology

Learning Outcome Description:
Upon graduation, MSET students shall possess the abilities to: demonstrate the understanding of the role, ethics and social responsibility of the profession in the society

**UGC in Advanced Energy Storage Systems**

An ability to select and apply the knowledge, techniques, skills, and modern tools of their disciplines to broadly-defined electrified and alternative energy vehicle activities.
Providing Department: UGC in Advanced Energy Storage Systems
Learning Outcome Description:
an ability to select and apply the knowledge, techniques, skills, and modern tools of their disciplines to broadly-defined electrified and alternative energy vehicle activities.

b an ability to select and apply a knowledge of mathematics, science, engineering, and technology to vehicle electrification and alternative energy vehicle problems that require the application of principles and applied procedures or methodologies.

Providing Department: UGC in Advanced Energy Storage Systems
Learning Outcome Description:
an ability to select and apply a knowledge of mathematics, science, engineering, and technology to vehicle electrification and alternative energy vehicle problems that require the application of principles and applied procedures or methodologies.

d an ability to design sub-systems, components, or processes for broadly-defined electric-drive or alternative energy vehicle problems appropriate to program educational objectives.

Providing Department: UGC in Advanced Energy Storage Systems
Learning Outcome Description:
an ability to design sub-systems, components, or processes for broadly-defined electric-drive or alternative energy vehicle problems appropriate to program educational objectives.

f an ability to identify, analyze, and solve broadly-defined electric-drive and alternative energy vehicle problems.

Providing Department: UGC in Advanced Energy Storage Systems
Learning Outcome Description:
an ability to identify, analyze, and solve broadly-defined electric-drive and alternative energy vehicle problems.

BS in Industrial Engineering

1 ABET (1) An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

Providing Department: BS in Industrial Engineering
Learning Outcome Description: Students will be able to demonstrate an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

2 ABET (2) An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

Providing Department: BS in Industrial Engineering
Learning Outcome Description: Students will be able to demonstrate an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

3 ABET (3) An ability to communicate effectively with a range of audiences

Providing Department: BS in Industrial Engineering
Learning Outcome Description: Students will be able to demonstrate an ability to communicate effectively with a range of audiences.

4 ABET (4) An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

Providing Department: BS in Industrial Engineering
Learning Outcome Description: Students will be able to demonstrate an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5 ABET (5) An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives
Providing Department: BS in Industrial Engineering

Learning Outcome Description:
Students will be able to demonstrate an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

6 ABET (6) An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

Providing Department: BS in Industrial Engineering

Learning Outcome Description:
Students will be able to demonstrate an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7 ABET (7) An ability to acquire and apply new knowledge as needed, using appropriate learning strategies

Providing Department: BS in Industrial Engineering

Learning Outcome Description:
Students will be able to demonstrate an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

All Student Outcomes: Prepare graduates to attain the program educational objectives.

Providing Department: BS in Industrial Engineering

Learning Outcome Description:
See more at ABET Site (https://www.abet.org/accreditation/accreditation-criteria/criteria-for-accrediting-engineering-programs-2019-2020/#GC3) 1- An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics. 2- An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors. 3- An ability to communicate effectively with a range of audiences, 4- An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts, 5- An ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives, 6- An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions, 7- An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

GC in Systems Engineering

1 SE Graduate Certificate LO1 - Scholarship

Providing Department: GC in Systems Engineering

Learning Outcome Description:
Outcome 1: Scholarship Develop the ability to use computers to simulate, design, test and build automated systems, manage cost in the product development cycle and also control and monitor quality during production.

2 SE Graduate Certificate LO2 - Mastery

Providing Department: GC in Systems Engineering

Learning Outcome Description:
Outcome 2: Mastery of Subject Material The student will be able to think critically and creatively to address technical problems in the fields of Engineering Management.

3 SE Graduate Certificate LO3 - Communication

Providing Department: GC in Systems Engineering

Learning Outcome Description:
Outcome 3: Communication The student will be able to synthesize and explain the relevance and application of new, advanced technical knowledge in both technical and non-technical terms.

4 SE Graduate Certificate LO4 - Ethics

Providing Department: GC in Systems Engineering

Learning Outcome Description:
Outcome 4: Ethical Conduct Student will be educated in ethical and responsible conduct in research and professional activities.

MS in Engineering Management

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1 Knowledge & Scholarship
Providing Department: MS in Engineering Management
Learning Outcome Description:
Outcome 1: Knowledge and Scholarship The student will be able to identify and conduct original research, scholarship, or creative endeavors in the field of Engineering Management.

2 Analytical Thinking and Problem Solving
Providing Department: MS in Engineering Management
Learning Outcome Description:
Outcome 2: Analytical Thinking and Problem Solving Students will be able to think analytically, creatively, and solve problems in the field and industry of Engineering Management.

3 Communication
Providing Department: MS in Engineering Management
Learning Outcome Description:
Outcome 3: Communication The student will be able to effectively communicate and lead in the field of Engineering Management.

4 Ethical Conduct
Providing Department: MS in Engineering Management
Learning Outcome Description:
Outcome 4: Ethical Conduct Students will be able to conduct research in an ethical and responsible manner and have a basic understanding of their ethical responsibilities as future engineers and industry leaders.

5 Professional Development
Providing Department: MS in Engineering Management
Learning Outcome Description:
Outcome 5: Professional Development Students will be able to demonstrate attributes of professional development consistent with expectations within the field of Engineering Management and within industry.

MS in Industrial Engineering

1 Knowledge & Scholarship (LO1)
Providing Department: MS in Industrial Engineering
Learning Outcome Description:
Outcome 1: Knowledge and Scholarship Understand and apply the principles and tools of industrial engineering to optimize systems and processes involving industry-relevant problems.

2 Analytical Thinking and Problem Solving (LO2)
Providing Department: MS in Industrial Engineering
Learning Outcome Description:
Outcome 2: Mastery of Subject Material The student will be able to think critically and creatively to address technical problems in the fields spanned by Industrial & Systems Engineering.

3 Communication (LO3)
Providing Department: MS in Industrial Engineering
Learning Outcome Description:
Outcome 3: Communication The student will be able to synthesize and explain the relevance and application of new, advanced technical knowledge in both technical and non-technical terms.

4 Ethical Conduct (LO4)
Providing Department: MS in Industrial Engineering
Learning Outcome Description:
Outcome 4: Ethical Conduct Student will be educated in ethical and responsible conduct in research and professional activities.

MS in Manufacturing Engineering
1 Knowledge & Scholarship (LO1)
Providing Department: MS in Manufacturing Engineering
Learning Outcome Description:
Outcome 1: Knowledge and Scholarship Develop the ability to use computers to simulate, design, test and build automated systems, manage cost in the product development cycle and also control and monitor quality during production.

2 Analytical Thinking and Problem Solving (LO2)
Providing Department: MS in Manufacturing Engineering
Learning Outcome Description:
Outcome 2: Analytical Thinking and Problem Solving The student will be able to think critically and creatively to address technical problems in the field of Manufacturing Engineering.

3 Communication (LO3)
Providing Department: MS in Manufacturing Engineering
Learning Outcome Description:
Outcome 3: Communication The student will be able to synthesize and explain the relevance and application of new, advanced technical knowledge in both technical and non-technical terms.

4 Ethical Conduct (LO4)
Providing Department: MS in Manufacturing Engineering
Learning Outcome Description:
Outcome 4: Ethical Conduct Student will be educated in ethical and responsible conduct in research and professional activities in the field of Manufacturing Engineering.

PhD in Industrial Engineering
1 Learning Outcomes - Knowledge
Providing Department: PhD in Industrial Engineering
Learning Outcome Description:
Outcome 1: Knowledge The student will be able to identify complex engineering or business problems. Then be able to select solutions using key industrial & systems engineering principles and practices.

2 Learning Outcomes - Comprehension
Providing Department: PhD in Industrial Engineering
Learning Outcome Description:
Outcome 2: Comprehension Students will be able to draw solutions to a complex engineering or business problem using principles or practices of industrial & systems engineering.

3 Learning Outcomes - Application
Providing Department: PhD in Industrial Engineering
Learning Outcome Description:
Outcome 3: Application The student will be able to effectively illustrate a complex engineering or business problem. Then students will solve the problem using industrial & systems engineering principles or practices.

4 Learning Outcomes - Analysis
Providing Department: PhD in Industrial Engineering
Learning Outcome Description:
Outcome 4: Analysis Students will explore extensive research in a specific discipline of Industrial & Systems Engineering to identify the scope of a problem or knowledge gap. Students will then be able to develop a method of study and infer projected results.

5 Learning Outcomes - Synthesis & Evaluation
Providing Department: PhD in Industrial Engineering
Learning Outcome Description:
Outcome 5: Professional Development Students will be able to compose a dissertation or research publication with an original focus on a discipline within industrial & systems engineering.

BS in Mechanical Engineering
1 an ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics

Providing Department: BS in Mechanical Engineering
Learning Outcome Description: Students will be able to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

2 an ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors

Providing Department: BS in Mechanical Engineering
Learning Outcome Description: Students will be able to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

3 an ability to communicate effectively with a range of audiences

Providing Department: BS in Mechanical Engineering
Learning Outcome Description: Students will be able to communicate effectively with a range of audiences.

4 an ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts

Providing Department: BS in Mechanical Engineering
Learning Outcome Description: Students will be able to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

5 an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives

Providing Department: BS in Mechanical Engineering
Learning Outcome Description: Students will be able to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

6 an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

Providing Department: BS in Mechanical Engineering
Learning Outcome Description: Students will be able to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

7 an ability to acquire and apply new knowledge as needed, using appropriate learning strategies.

Providing Department: BS in Mechanical Engineering
Learning Outcome Description: Students will be able to acquire and apply new knowledge as needed, using appropriate learning strategies.

**MS in Mechanical Engineering**

LO1-MS Apply knowledge of mathematics, science, and engineering to identify, formulate and solve mechanical engineering problems.

Providing Department: MS in Mechanical Engineering
Learning Outcome Description: Students will be able to apply knowledge of mathematics, science, and engineering to identify, formulate and solve mechanical engineering problems.

LO2-MS Apply engineering principles to tackle open-ended mechanical engineering problems.

Providing Department: MS in Mechanical Engineering
Learning Outcome Description: Students will be able to apply engineering principles to tackle open-ended mechanical engineering problems.
LO3-MS Use techniques, skills, and modern engineering tools necessary for mechanical engineering practice.

**Providing Department:** MS in Mechanical Engineering

**Learning Outcome Description:**
Students will be able to use techniques, skills, and modern engineering tools necessary for mechanical engineering practice.

LO4-MS Engage in lifelong learning

**Providing Department:** MS in Mechanical Engineering

**Learning Outcome Description:**
Students will be able to seek out knowledge on their own and become self-learners. This will enable them to engage in lifelong learning.

**PhD in Mechanical Engineering**

LO1-PhD Contribute to the advancement of scientific and engineering knowledge.

**Providing Department:** PhD in Mechanical Engineering

**Learning Outcome Description:** Students will be able to contribute to the advancement of scientific and engineering knowledge.

LO2-PhD Demonstrate mastery of advanced principles pertaining to the selected research path of the Ph.D. candidate.

**Providing Department:** PhD in Mechanical Engineering

**Learning Outcome Description:** Students will be able to demonstrate mastery of advanced principles pertaining to the selected research path of the Ph.D. candidate.

LO3-PhD Ability to conduct independent research work in mechanical engineering and related fields

**Providing Department:** PhD in Mechanical Engineering

**Learning Outcome Description:** Students will have the ability to conduct independent research work in mechanical engineering and related fields.

LO4-PhD Ability to identify and tackle unresolved issues pertaining to emerging mechanical engineering problems.

**Providing Department:** PhD in Mechanical Engineering

**Learning Outcome Description:** Students will have the ability to identify and tackle unresolved issues pertaining to emerging mechanical engineering problems.

**UGC in Nanoengineering**

1.0 scale down engineering

**Providing Department:** UGC in Nanoengineering

**Learning Outcome Description:** Students link more familiar bulk materials and phenomena with less familiar nanoscale phenomena.

2.0 nano utilization

**Providing Department:** UGC in Nanoengineering

**Learning Outcome Description:** Students utilize engineered materials, processes, and devices at the nanoscale.

3.0 nano synthesis

**Providing Department:** UGC in Nanoengineering

**Learning Outcome Description:** Students synthesize nanoparticles.

4 Nano research

**Providing Department:** UGC in Nanoengineering

**Learning Outcome Description:** Students present their research according to the norms of the field.

**BA in Communication Studies**

#1 Communication: BA in Communication Studies Learning Outcome #1

**Providing Department:** BA in Communication Studies

**Learning Outcome Description:**

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Students will be able to apply the appropriate research methods to gather and analyze data about communication or communication-related issues.

#2 Communication: BA in Communication Studies Learning Outcome #2
Providing Department: BA in Communication Studies
Learning Outcome Description: Students will develop critical communication skills that enable them to evaluate and effectively formulate arguments.

#3 Communication: BA in Communication Studies Learning Outcome #3
Providing Department: BA in Communication Studies
Learning Outcome Description: Students will be able to write in a manner appropriately adapted to the topic, audience, occasion, and purpose.

#4 Communication: BA in Communication Studies Learning Outcome #4
Providing Department: BA in Communication Studies
Learning Outcome Description: Students will be able to communicate orally and/or visually in a manner appropriately adapted to the topic, audience, occasion and purpose.

#5 Communication: BA in Communication Studies Learning Outcome #5
Providing Department: BA in Communication Studies
Learning Outcome Description: Students will be able to utilize communication theory as a tool to understand how messages function across multiple contexts.

**BA in Film**

#1 Communication: BA in Film Learning Outcome #1
Providing Department: BA in Film
Learning Outcome Description: Students should be able to demonstrate knowledge of film history.

#2 Communication: BA in Film Learning Outcome #2
Providing Department: BA in Film
Learning Outcome Description: Students should be able to apply film and media theory to the analysis and production of cinematic works and other media content.

#3 Communication: BA in Film Learning Outcome #3
Providing Department: BA in Film
Learning Outcome Description: Students should be able to tell engaging stories in a variety of genres and modes.

#4 Communication: BA in Film Learning Outcome #4
Providing Department: BA in Film
Learning Outcome Description: Students should be able to shoot and edit effective narratives.

#5 Communication: BA in Film Learning Outcome #5
Providing Department: BA in Film
Learning Outcome Description: Students should be able to manage the resources and logistics inherent in producing film.

**BA in Journalism**

#1 Communication: BA in Journalism Learning Outcome #1
Providing Department: BA in Journalism
Learning Outcome Description: Gather information through a variety of techniques used in the field using different media platforms.

#2 Communication: BA in Journalism Learning Outcome #2
Providing Department: BA in Journalism
Learning Outcome Description: Present information in accurate, concise, and grammatically correct written ways through different media.
#3 Communication: BA in Journalism Learning Outcome #3

Providing Department: BA in Journalism

Learning Outcome Description: Use the profession's accepted “best practices” in both gathering and presenting the news.

#4 Communication: BA in Journalism Learning Outcome #4

Providing Department: BA in Journalism

Learning Outcome Description:

Show an awareness through an Exit Interview that the profession is continuing and will continue to evolve, both in terms of ever-changing technology and in the structure of the workplace.

#5 Communication: BA in Journalism Learning Outcome #5

Providing Department: BA in Journalism

Learning Outcome Description: Make informed assessments as to the quality of information gathered using critical thinking skills

**BA in Media Arts and Studies**

#1 Communication: BA in Media Arts and Studies Learning Outcome #1

Providing Department: BA in Media Arts and Studies

Learning Outcome Description: Students should be able to demonstrate knowledge of media history.

#2 Communication: BA in Media Arts and Studies Learning Outcome #2

Providing Department: BA in Media Arts and Studies

Learning Outcome Description: Students should be able to apply media theory to the analysis and production of media content.

#3 Communication: BA in Media Arts and Studies Learning Outcome #3

Providing Department: BA in Media Arts and Studies

Learning Outcome Description: Students should be able to successfully process information from various sources through research, evaluation and synthesis.

#4 Communication: BA in Media Arts and Studies Learning Outcome #4

Providing Department: BA in Media Arts and Studies

Learning Outcome Description: Students should be able to communicate effectively in various forms of media (e.g. print, film, digital media).

#5 Communication: BA in Media Arts and Studies Learning Outcome #5

Providing Department: BA in Media Arts and Studies

Learning Outcome Description: Students should be able to produce creative and innovative media content.

**BA in Public Relations**

#1 Communication: BA in Public Relations Learning Outcome #1

Providing Department: BA in Public Relations

Learning Outcome Description: Public relations majors should have an understanding of how the history of public relations has influenced the development of ethical codes of conduct in the practice of public relations.

#2 Communication: BA in Public Relations Learning Outcome #2

Providing Department: BA in Public Relations

Learning Outcome Description: Public relations majors should be able to use research methods and tools to develop public relations strategies.

#3 Communication: BA in Public Relations Learning Outcome #3

Providing Department: BA in Public Relations

Learning Outcome Description: Public relations majors should be able to use communication theories in the practice of public relations.

#4 Communication: BA in Public Relations Learning Outcome #4
Providing Department: BA in Public Relations
Learning Outcome Description: Public relations majors should be able to prepare appropriate communication materials for use in all media (print and digital).

#5 Communication: BA in Public Relations Learning Outcome #5
Providing Department: BA in Public Relations
Learning Outcome Description: Public relations majors should understand all the management functions of public relations.

GC in Communication and New Media

1 Communication: Graduate Certificate in Communication and New Media Learning Outcome #1
Providing Department: GC in Communication and New Media
Learning Outcome Description: Evaluate communication theory and research relevant to the chosen certificate.

2 Communication: Graduate Certificate in Communication and New Media Learning Outcome #2
Providing Department: GC in Communication and New Media
Learning Outcome Description: Apply communication theory and research to analyze communication practices relevant to the chosen certificate.

3 Communication: Graduate Certificate in Communication and New Media Learning Outcome #3
Providing Department: GC in Communication and New Media
Learning Outcome Description: Produce scholarly or creative work as relevant to the chosen concentration.

4 Communication: Graduate Certificate in Communication and New Media Learning Outcome #4
Providing Department: GC in Communication and New Media
Learning Outcome Description: Adhere to professional guidelines for work in the profession.

GC in Dispute Resolution

#1 Communication: GC in Dispute Resolution LO #1 (Cultural Frameworks)
Providing Department: GC in Dispute Resolution
Learning Outcome Description: Identify relevant cultural frameworks when working with social conflict situations.

#2 Communication: GC in Dispute Resolution LO #2 (Negotiation Skills)
Providing Department: GC in Dispute Resolution
Learning Outcome Description: Negotiate effectively drawing upon knowledge of negotiation theory and best practice.

#3 Communication: GC in Dispute Resolution LO #3 (DR Strategy Options)
Providing Department: GC in Dispute Resolution
Learning Outcome Description: Recommend an appropriate conflict engagement strategy when given a dispute fact pattern.

#4 Communication: GC in Dispute Resolution LO #4 (Articulate Possible Conflict Engagement Roles)
Providing Department: GC in Dispute Resolution
Learning Outcome Description: Students are able to articulate roles for conflict engagement specialists in the organizations and communities they are part of, cognizant of current methods, opportunities and constraints in the field.

GC in Health Communication

1 Communication: Graduate Certificate in Health Communication Learning Outcome #1
Providing Department: GC in Health Communication
Learning Outcome Description: Evaluate communication theory and research relevant to the chosen certificate.

2 Communication: Graduate Certificate in Health Communication Learning Outcome #2
Providing Department: GC in Health Communication
Learning Outcome Description: Apply communication theory and research to analyze communication practices relevant to the chosen certificate.
3 Communication: Graduate Certificate in Health Communication Learning Outcome #3
Providing Department: GC in Health Communication
Learning Outcome Description: Produce scholarly or creative work as relevant to the chosen concentration.

4 Communication: Graduate Certificate in Health Communication Learning Outcome #4
Providing Department: GC in Health Communication
Learning Outcome Description: Adhere to ethical guidelines for work in the profession.

MA in Communication

1 Communication: MA in Communication Learning Outcome #1
Providing Department: MA in Communication
Learning Outcome Description: Evaluate communication theory and research in the chosen concentration.

2 Communication: MA in Communication Learning Outcome #2
Providing Department: MA in Communication
Learning Outcome Description: Apply communication theory and research to analyze communication practices relevant to the chosen concentration.

3 Communication: MA in Communication Learning Outcome #3
Providing Department: MA in Communication
Learning Outcome Description: Produce scholarly or creative work as relevant to the chosen concentration.

4 Communication: MA in Communication Learning Outcome #4
Providing Department: MA in Communication
Learning Outcome Description: Present one's own and other's scholarly or creative work in a public setting.

5 Communication: MA in Communication Learning Outcome #5
Providing Department: MA in Communication
Learning Outcome Description: Adhere to professional guidelines for work in the profession.

MA in Dispute Resolution

#1 Communication: MA in Dispute Resolution LO #1 (Cultural Frameworks)
Providing Department: MA in Dispute Resolution
Learning Outcome Description: Apply relevant cultural frameworks when working with social conflict situations.

#2 Communication: MA in Dispute Resolution LO #2 (Negotiation Skills)
Providing Department: MA in Dispute Resolution
Learning Outcome Description: Negotiate effectively drawing upon knowledge of negotiation theory and best practice.

#3 Communication: MA in Dispute Resolution LO #3 (Conflict Situation Assessment)
Providing Department: MA in Dispute Resolution
Learning Outcome Description: Conduct appropriate analyses of a given situation when recommending conflict engagement strategies.

#4 Communication: MA in Dispute Resolution LO #4 (Ability to Mediate)
Providing Department: MA in Dispute Resolution
Learning Outcome Description: Mediate interpersonal or group conflicts using best practice approaches.

#5 Communication: MA in Dispute Resolution LO #5 (Articulate Professional Identity in Field)
Providing Department: MA in Dispute Resolution
Learning Outcome Description: Articulate own professional identity as a conflict engagement specialist, cognizant of current methods, opportunities and constraints in the field.

PhD in Communication
1 Communication: PhD in Communication Learning Outcome #1
Providing Department: PhD in Communication
Learning Outcome Description: Review literature in the communication field to identify new research questions.

2 Communication: PhD in Communication Learning Outcome #2
Providing Department: PhD in Communication
Learning Outcome Description: Conduct a study using appropriate methodology to answer a research question.

3 Communication: PhD in Communication Learning Outcome #3
Providing Department: PhD in Communication
Learning Outcome Description: Communicate one's own and other's research in a public setting.

4 Communication: PhD in Communication Learning Outcome #4
Providing Department: PhD in Communication
Learning Outcome Description: Adhere to ethical guidelines for work in the discipline.

BA in Music

1 BA Learning Outcome 1
Providing Department: BA in Music
Learning Outcome Description: Develop proficiency with and accuracy of musical elements, control of his or her instrument with musical intent, and the ability to be expressive.

2 BA Learning Outcome 2
Providing Department: BA in Music
Learning Outcome Description: Apply analytical tools to fundamental music theory analysis of standard repertoire.

3 BA Learning Outcome 3
Providing Department: BA in Music
Learning Outcome Description: Identify musical intervals, rhythms, and pitches aurally.

4 BA Learning Outcome 4
Providing Department: BA in Music
Learning Outcome Description: Interpret and critique historical Western musical styles, American vernacular styles, and the music of World Cultures.

5 BA Learning Outcome 5
Providing Department: BA in Music
Learning Outcome Description: Demonstrate functional keyboard skills.

6 BA Learning Outcome 6
Providing Department: BA in Music
Learning Outcome Description: Examine music within the context of Liberal Arts.

BMus in Music

1 BM Learning Outcome 1
Providing Department: BMus in Music
Learning Outcome Description: Develop proficiency with and accuracy of musical elements, control of his or her instrument with musical intent, and the ability to be expressive.

2 BM Learning Outcome 2
Providing Department: BMus in Music
Learning Outcome Description: Apply analytical tools to fundamental music theory analysis of standard repertoire.

3 BM Learning Outcome 3
Providing Department: BMus in Music
Learning Outcome Description: Identify musical intervals, rhythms, and pitches aurally.

4 BM Learning Outcome 4
Providing Department: BMus in Music
Learning Outcome Description: Interpret and critique historical Western musical styles, American vernacular styles, and the music of World Cultures.

5 BM Learning Outcome 5
Providing Department: BMus in Music
Learning Outcome Description: Demonstrate functional keyboard skills.

MA in Music

1 MA Learning Outcome 1
Providing Department: MA in Music
Learning Outcome Description: Describe and synthesize scholarly peer-reviewed journal articles through an oral presentation.

2 MA Learning Outcome 2
Providing Department: MA in Music
Learning Outcome Description: Develop a research paper utilizing a variety of appropriate print and electronic sources which are cited appropriately, is well developed with sufficient and relevant evidence, and correctly uses standard American English.

3 MA Learning Outcome 3
Providing Department: MA in Music
Learning Outcome Description: Present significant original research with appropriate format and documentation.

4 MA Learning Outcome 4
Providing Department: MA in Music
Learning Outcome Description: Apply analytical tools to Music Theory Analysis of standard repertoire.

MMus in Music

1 MM Learning Outcome 1
Providing Department: MMus in Music
Learning Outcome Description: Describe and synthesize scholarly peer-reviewed journal articles through an oral presentation.

2 MM Learning Outcome 2
Providing Department: MMus in Music
Learning Outcome Description: Present significant original creative activity with appropriate format and documentation.

3 MM Learning Outcome 3
Providing Department: MMus in Music
Learning Outcome Description: Develop a research paper utilizing a variety of appropriate print and electronic sources which are cited appropriately, is well developed with sufficient and relevant evidence, and correctly uses standard American English.

4 MM Learning Outcome 4
Providing Department: MMus in Music
Learning Outcome Description: Apply analytical tools to Music Theory Analysis of standard repertoire.

James Pearson Duffy Department of Art and Art History

1 All Student Learning Outcomes in the Department
Providing Department: James Pearson Duffy Department of Art and Art History
Learning Outcome Description:
BA in Art

1 Base of Knowledge - SLO 1

Learning Outcomes for All Degrees in the Department of Art and Art History September 18, 2014 List of Degrees: BA-Art; BA-Art History; BA-Design and Merchandising; BFA-Art; BS-Design and Merchandising; MA-Art; MA-Art History; MA-Design and Merchandising; MFA - Art

BA - Art Learning Outcome 1: Base of knowledge Demonstrate an effective knowledge of the essential materials and techniques appropriate to a variety of art and design applications. Learning Outcome 2: Understanding Demonstrate an effective knowledge of the historical, contemporary, and emergent practices appropriate to a variety of art and design applications. Learning Outcome 3: Critical thinking Demonstrate the ability to reflect on and articulate the effective application of materials, techniques, concepts and practices appropriate to artistic work. Learning Outcome 4: Synthesis Produce several art/design works that effectively integrate media, techniques, subject matter, and critical awareness to express a coherent intent.

BA - Art History Learning Outcome 1: Base of Knowledge Demonstrate an effective knowledge of art historical vocabulary; recognize basic techniques and materials used in making art; know major movements, monuments, artists, and styles. Learning Outcome 2: Understanding Analyze specific works of art and architecture in relationship to a variety of interpretive methods. Learning Outcome 3: Critical thinking Demonstrate analytical skills in interpreting works of art both as formal structures and in relation to social and cultural contexts. Learning Outcome 4: Synthesis Research a topic and establish a thesis by synthesizing sources in a clearly organized and persuasive essay.

BA - Design and Merchandising Learning Outcome 1: Base of Knowledge Demonstrate an essential knowledge of the styles, materials, principles and practices of the design and production of apparel and merchandising of products. Learning Outcome 2: Understanding Develop an understanding of styles, creative designs, diverse construction methods, and merchandising practices in relation to individual, societal, cultural, commercial and global environments. Learning Outcome 3: Critical thinking Demonstrate analytical and creative skills in producing conceptual and marketable designs and applying merchandising concepts and strategies for effective positive outcomes in a variety of contexts.

BA - Art History Learning Outcome 1: Base of Knowledge Demonstrate thorough knowledge of the materials and techniques appropriate to the selected area of concentration. Learning Outcome 2: Understanding Demonstrate an effective knowledge of the historical, contemporary, and emergent practices appropriate to the selected area of concentration. Learning Outcome 3: Critical thinking Demonstrate the ability to reflect on and articulate the effective application of materials, techniques, concepts and practices appropriate to artistic work produced in the selected area of concentration. Learning Outcome 4: Synthesis Produce a body of work that effectively integrates media, techniques, subject matter, and critical awareness to express a coherent intent.

BS - Design and Merchandising Learning Outcome 1: Base of Knowledge Demonstrate an essential knowledge of the styles, materials, principles and practices of the design and production of apparel and merchandising of products. Learning Outcome 2: Understanding Develop an understanding of styles, creative designs, diverse construction methods, and merchandising practices in relation to individual, societal, cultural, commercial and global environments. Learning Outcome 3: Critical thinking Demonstrate analytical and creative skills in producing conceptual and marketable designs and applying merchandising concepts and strategies for effective positive outcomes in a variety of contexts.

Learning Outcome 4: Synthesis Demonstrate the ability to research, produce a fashion collection and/or research study by synthesizing sources, methods and practices in a clear and cohesive essay and presentation.

MA – Art History Learning Outcome 1: Base of Knowledge Demonstrate an advanced knowledge of art historical concepts and issues and in-depth knowledge of select areas of inquiry. Learning Outcome 2: Understanding Demonstrate an advanced ability to analyze specific works of art and architecture in relationship to a variety of interpretive methods. Learning Outcome 3: Critical thinking Demonstrate mastery of analytical skills in interpreting works of art both as formal structures and in relation to social and cultural contexts. Learning Outcome 4: Synthesis Establish a thesis about a research topic and substantiate the position with evidence and by synthesizing sources; present the position in a clearly organized and persuasive essay.

MA – Art Learning Outcome 1: Base of Knowledge Demonstrate thorough knowledge of the materials and techniques appropriate to the selected area of concentration. Learning Outcome 2: Understanding Demonstrate an advanced understanding of the historical, contemporary and emergent practices appropriate to the selected area of concentration. Learning Outcome 3: Critical thinking Demonstrate the ability to analyze and interpret artistic practices and critical theses in relation to social and cultural context.

Learning Outcome 4: Synthesis Produce and exhibit a body of art that synthesizes media and techniques, subject matters and critical awareness that reflects a coherent intent.
Providing Department: BA in Art
Learning Outcome Description:
Demonstrate an effective knowledge of essential materials and techniques appropriate to a variety of art and design applications.

2 Understanding - SLO2
Providing Department: BA in Art
Learning Outcome Description:
Demonstrate an effective knowledge of the historical, contemporary, and emergent practices appropriate to a variety of art and design applications.

3 Critical Thinking - SLO3
Providing Department: BA in Art
Learning Outcome Description:
Demonstrate the ability to reflect on and articulate the effective application of materials, techniques, concepts, and practices appropriate to artistic work.

4 Synthesis - SLO4
Providing Department: BA in Art
Learning Outcome Description:
Produce several art/design works that effectively integrate media, techniques, subject matter, and critical awareness to express a coherent intent.

BA in Art History

1 Base of Knowledge - SLO1
Providing Department: BA in Art History
Learning Outcome Description:
Demonstrate an effective knowledge of art historical vocabulary; recognize basic techniques and materials used in making art; know major movements, monuments, artists, and styles.

2 Understanding - SLO2
Providing Department: BA in Art History
Learning Outcome Description: Analyze specific works of art and architecture in relationship to a variety of interpretive methods.

3 Critical Thinking - SLO3
Providing Department: BA in Art History
Learning Outcome Description:
Demonstrate analytical skills in interpreting works of art both as formal structures and in relation to social and cultural contexts.

4 Synthesis - SLO4
Providing Department: BA in Art History
Learning Outcome Description:
Research a topic and establish a thesis by synthesizing sources in a clearly organized and persuasive essay.

BA in Fashion Design and Merchandising

1 Base of Knowledge - SLO1
Providing Department: BA in Fashion Design and Merchandising
Learning Outcome Description:
Learning Outcome 1: Base of Knowledge Demonstrate an essential knowledge of the styles, materials, principles and practices of the design and production of apparel and merchandising of products.

2 Understanding - SLO2
Providing Department: BA in Fashion Design and Merchandising
Learning Outcome Description:
Learning Outcome 2: Understanding Develop an understanding of styles, creative designs, diverse construction methods, and merchandising practices in relation to individual, societal, cultural, commercial and global environments.
3 Critical Thinking - SLO3

Providing Department: BA in Fashion Design and Merchandising

Learning Outcome Description:
Learning Outcome 3: Critical Thinking Demonstrate analytical and creative skills in producing conceptual and marketable designs, and applying merchandising concepts and strategies for effective positive outcomes in a variety of contexts.

4 Synthesis - SLO4

Providing Department: BA in Fashion Design and Merchandising

Learning Outcome Description:
Learning Outcome 4: Synthesis Demonstrate the ability to research, produce a fashion collection and/or research study by synthesizing sources, methods and practices in a clear and cohesive essay and presentation

BFA in Art

1 Base of Knowledge - SLO1

Providing Department: BFA in Art

Learning Outcome Description:
Learning Outcome 1: Base of knowledge Demonstrate an effective knowledge of the essential materials and techniques appropriate to the selected area of concentration.

2 Understanding - SLO2

Providing Department: BFA in Art

Learning Outcome Description:
Learning Outcome 2: Understanding Demonstrate an effective knowledge of the historical, contemporary, and emergent practices appropriate to the selected area of concentration.

3 Critical Thinking - SLO 3

Providing Department: BFA in Art

Learning Outcome Description:
Learning Outcome 3: Critical thinking Demonstrate the ability to reflect on and articulate the effective application of materials, techniques, concepts and practices appropriate to artistic work produced in the selected area of concentration.

4 Synthesis - SLO4

Providing Department: BFA in Art

Learning Outcome Description:
Learning Outcome 4: Synthesis Produce a body of work that effectively integrates media, techniques, subject matter, and critical awareness to express a coherent intent.

BFA in Design

BFA in Design - SLO1 Base of Knowledge

Providing Department: BFA in Design

Learning Outcome Description:
Produce designs that effectively use essential design tools: concepts, formal design principles/structures, and skills.

BFA in Design - SLO2 Understanding

Providing Department: BFA in Design

Learning Outcome Description: Incorporate historical and contemporary practices into the design process.

BFA in Design - SLO3 Critical Thinking

Providing Department: BFA in Design

Learning Outcome Description:
Articulate the relationship between form, content, and social/cultural contexts that have impacted the choice of essential design tools.

BFA in Design - SLO4 Synthesis

Providing Department: BFA in Design

Learning Outcome Description:
Create designs that synthesize a variety of conceptual approaches, processes, technical knowledge, and research methods in response to complex situations and scenarios.

**BS in Fashion Design and Merchandising**

1 Base of Knowledge - SLO1  
**Providing Department:** BS in Fashion Design and Merchandising  
**Learning Outcome Description:**  
Learning Outcome 1: Base of Knowledge  
Demonstrate an essential knowledge of the styles, materials, principles and practices of the design and production of apparel and merchandising of products.

2 Understanding - SLO2  
**Providing Department:** BS in Fashion Design and Merchandising  
**Learning Outcome Description:**  
Learning Outcome 2: Understanding  
Develop an understanding of styles, creative designs, diverse construction methods, and merchandising practices in relation to individual, societal, cultural, commercial and global environments.

3 Critical Thinking - SLO3  
**Providing Department:** BS in Fashion Design and Merchandising  
**Learning Outcome Description:**  
Learning Outcome 3: Critical Thinking  
Demonstrate analytical and creative skills in producing conceptual and marketable designs, and applying merchandising concepts and strategies for effective positive outcomes in a variety of contexts.

4 Synthesis - SLO4  
**Providing Department:** BS in Fashion Design and Merchandising  
**Learning Outcome Description:**  
Learning Outcome 4: Synthesis  
Demonstrate the ability to research, produce a fashion collection and/or research study by synthesizing sources, methods and practices in a clear and cohesive essay and presentation.

**MA in Art**

1 Base of Knowledge - SLO1  
**Providing Department:** MA in Art  
**Learning Outcome Description:**  
Learning Outcome 1: Base of Knowledge  
Demonstrate thorough knowledge of the materials and techniques appropriate to the selected area of concentration.

2 Understanding - SLO2  
**Providing Department:** MA in Art  
**Learning Outcome Description:**  
Learning Outcome 2: Understanding  
Demonstrate an advanced understanding of the historical, contemporary and emergent practices appropriate to the selected area of concentration.

3 Critical Thinking - SLO3  
**Providing Department:** MA in Art  
**Learning Outcome Description:**  
Learning Outcome 3: Critical Thinking  
Demonstrate the ability to analyze and interpret artistic practices and critical theses in relation to social and cultural context.

4 Synthesis - SLO4  
**Providing Department:** MA in Art  
**Learning Outcome Description:**  
Learning Outcome 4: Synthesis  
Produce and exhibit a body of art that synthesizes media and techniques, subject matters and critical awareness that reflects a coherent intent.

**MA in Art History**

1 Base of Knowledge - SLO1
Providing Department: MA in Art History
Learning Outcome Description:
   Learning Outcome 1: Base of Knowledge  Demonstrate an advanced knowledge of art historical concepts and issues and in-depth knowledge of select areas of inquiry.

2 Understanding - SLO2
Providing Department: MA in Art History
Learning Outcome Description:
   Learning Outcome 2: Understanding  Demonstrate an advanced ability to analyze specific works of art and architecture in relationship to a variety of interpretive methods.

3 Critical Thinking - SLO3
Providing Department: MA in Art History
Learning Outcome Description:
   Learning Outcome 3: Critical Thinking  Demonstrate mastery of analytical skills in interpreting works of art both as formal structures and in relation to social and cultural contexts.

4 Synthesis - SLO4
Providing Department: MA in Art History
Learning Outcome Description:
   Learning Outcome 4: Synthesis  Establish a thesis about a research topic and substantiate the position with evidence and by synthesizing sources; present the position in a clearly organized and persuasive essay.

MFA in Art

1 Base of Knowledge - SLO1
Providing Department: MFA in Art
Learning Outcome Description:
   Learning Outcome 1: Base of Knowledge  Demonstrate thorough knowledge of the materials and techniques appropriate to the selected area of concentration.

2 Understanding - SLO2
Providing Department: MFA in Art
Learning Outcome Description:
   Learning Outcome 2: Understanding  Demonstrate an advanced understanding of the historical, contemporary and emergent practices appropriate to the selected area of concentration.

3 Critical Thinking - SLO3
Providing Department: MFA in Art
Learning Outcome Description:
   Learning Outcome 3: Critical Thinking  Demonstrate the ability to analyze and interpret artistic practices and critical theses in relation to a social and cultural context.

4 Synthesis - SLO4
Providing Department: MFA in Art
Learning Outcome Description:
   Learning Outcome 4: Synthesis  Produce and exhibit a body of art that synthesizes media and techniques, subject matters and critical awareness that reflects a coherent intent.

BA in Theatre

3 Knowledge of the Profession
Providing Department: BA in Theatre
Learning Outcome Description:
   Demonstrate knowledge of the fundamental organizational, managerial and entrepreneurial concepts and practices associated with the theatre profession.

4 Translational Knowledge
Providing Department:
BA in Theatre

Learning Outcome Description:
Demonstrate comprehension of how theatre arts knowledge, skills and practices can be translated into various professional settings.

Learning Outcome #1 Conceptual and Critical Thinking
Providing Department: BA in Theatre
Learning Outcome Description:
Graduates demonstrate the ability to think conceptually and critically about text, performance and production.

Learning Outcome #2 Performance and Production Competency
Providing Department: BA in Theatre
Learning Outcome Description:
Graduates demonstrate the ability to achieve intermediate to advanced competence in creation, performance or scholarship in the areas of acting, design/technology, applied theatre and scholarly aspects of theatre.

BFA in Dance

1 BFA in Dance: Proficiency in Modern Dance Technique
Providing Department: BFA in Dance
Learning Outcome Description: Graduates demonstrate proficiency in the technical and expressive aspects of modern dance.

2 BFA in Dance: Competence in Ballet Technique
Providing Department: BFA in Dance
Learning Outcome Description: Students perform at the Department’s Intermediate to Advanced level of Ballet Technique.

3 Kinesiology
Providing Department: BFA in Dance
Learning Outcome Description: Demonstrate a fundamental knowledge of the body and kinesiology as applicable to work in dance and related professions. Students complete somatic studies in dance kinesiology (DNC 3180) and Pilates mat (DNC 5110). Components of dance science, somatics, therapy, and body systems and approaches are included in DNC 1810 and DNC 4910.

4 Knowledge of the Profession
Providing Department: BFA in Dance
Learning Outcome Description: Demonstrate knowledge of the fundamental organizational, managerial and entrepreneurial concepts and practices associated with the dance profession.

BFA in Theatre

1 BFA in Theatre -Acting: Personal and Ensemble Acting Skills
Providing Department: BFA in Theatre
Learning Outcome Description:
Demonstrate personal & ensemble acting skills needed for creative rehearsals and for artistic performances.

2 BFA in Theatre - Acting: Ability to Create Characters
Providing Department: BFA in Theatre
Learning Outcome Description: Demonstrate ability to create characters from different styles, periods, and genres.

3 BFA in Theatre- Acting: Speech and Voice Development
Providing Department: BFA in Theatre
Learning Outcome Description: Demonstrate clear, articulate, and expressive speech; and a flexible, strong and controlled voice.

4 BFA in Theatre - Acting: Body Control and Stage Movement Skills
Providing Department: BFA in Theatre
Learning Outcome Description: Demonstrate a flexible, relaxed, and controlled body trained in basic stage movement disciplines.
5 BFA in Theatre - Acting: Comprehension of Business Procedures
Providing Department: BFA in Theatre
Learning Outcome Description: Demonstrate comprehension of the basic business procedures of the actor’s profession.

BS in Dance
1 BS in Dance: Knowledge and Skills as Competent Dancers
Providing Department: BS in Dance
Learning Outcome Description: Demonstrate knowledge and skills as competent dancers consistent with the objectives of the liberal arts degree program. Students complete a minimum of 12 semesters of modern dance, ballet, and jazz dance supplemented by electives in other dance styles: pointe, African 2, hip-hop. Students must successfully complete at least two semesters of technique at the 3000-level (proficiency). Proficiency is further demonstrated through successful auditions for faculty and guest repertory works and dance companies. Graduates are proficient in at least one dance style, supplemented by competency in other dance styles.

2 BS in Dance: Ability to Identify and Work Conceptually
Providing Department: BS in Dance
Learning Outcome Description: Graduates demonstrate the ability to identify and work conceptually with the elements of dance in diverse contexts. Students complete the required BS core curriculum of five courses (DNC 1810, DNC 3810, DNC 4910, DNC 5910, and DNC 5998) including an internship and capstone course in the senior year.

3 BS in Dance: Understanding of Processes, Properties and Values
Providing Department: BS in Dance
Learning Outcome Description: Demonstrate understanding of choreographic processes, aesthetic properties, production values and the ways these shape artistic, social and cultural ideas. DNC 2000, DNC 2310, DNC 2400, DNC 2460, and DNC 2500 each include aspects of choreographic processes and aesthetics; DNC 1330, DNC 2410, and DNC 3310 include components of production.

4 BS in Dance: Familiarity with Repertory, Eras, Genres and Practices
Providing Department: BS in Dance
Learning Outcome Description: Develop familiarity with a wide range of repertory, principal eras, genres, and cultural and community practices in dance. Students complete a minimum of two performance courses earned through participation in dance companies (DNC 5610), touring (DNC 5000), and repertory (DNC 5800). Study of eras, genres and practices is included in DNC 2000, DNC 2310, DNC 3810, and DNC 4910.

5 BS in Dance: Ability to Develop and Defend Critical Evaluations
Providing Department: BS in Dance
Learning Outcome Description: Demonstrate the ability to develop and defend critical evaluations. The University General Education program requires that students must successfully complete writing assignments that demonstrate an ability to communicate effectively with specialized or professional audiences. This is formally accomplished under the Writing Intensive Course (DNC 5993) and honed through analytical discussion, writing assignments, and critique in other required dance courses (DNC 1810, DNC 2000, DNC 2310, DNC 3310, DNC 3810, and DNC 4910).

6 BS in Dance: Fundamental Knowledge of the Body and Kinesiology
Providing Department: BS in Dance
Learning Outcome Description: Demonstrate a fundamental knowledge of the body and kinesiology as applicable to work in dance and related professions. Students complete somatic studies in dance kinesiology (DNC 3180) and Pilates mat (DNC 5110). Components of dance science, somatics, therapy, and body systems and approaches are included in DNC 1810 and DNC 4910.

MA in Arts Administration
1 Leadership
Providing Department: MA in Arts Administration
Learning Outcome Description: Students will demonstrate awareness of a wide range of techniques of leadership in approaches to arts administration.
2 Management Skills
Providing Department: MA in Arts Administration
Learning Outcome Description:
Students will demonstrate awareness of a wide range of management skills to be utilized in arts administration contexts.

3 Innovation and Creativity
Providing Department: MA in Arts Administration
Learning Outcome Description:
Students will demonstrate awareness of a wide range of techniques to promote processes of innovation and creativity in the context of arts administration.

4 Networks
Providing Department: MA in Arts Administration
Learning Outcome Description:
Students will demonstrate awareness of a wide range of networks and sources of support to draw from in arts administration contexts.

MA in Theatre and Dance

1 Research Methods
Providing Department: MA in Theatre and Dance
Learning Outcome Description:
Students demonstrate competency in a range of research methods over the course of the degree program, culminating in a thesis or essay project in which one or more research methods are appropriately and effectively utilized.

2 Pedagogical Foundations
Providing Department: MA in Theatre and Dance
Learning Outcome Description:
Students demonstrate knowledge of pedagogical foundations of teaching artistry and can articulate, document and analyze how their personal practice as a teaching artist is informed by one or more educational philosophies.

3 Praxis
Providing Department: MA in Theatre and Dance
Learning Outcome Description:
Students can effectively document their practice, organize and analyze documentation, reflect on their practice in relation to the documentation and implement changes or modifications to their practice based on this reflection.

4 Professional Practice
Providing Department: MA in Theatre and Dance
Learning Outcome Description:
Demonstrate knowledge of the fundamental organizational, managerial and entrepreneurial concepts and practices associated with the teaching artist profession.

MFA in Theatre

1 MFA in Theatre - Acting: Personal & Ensemble Acting Skills
Providing Department: MFA in Theatre
Learning Outcome Description:
Demonstrate personal & ensemble acting skills needed for creative rehearsals and for artistic performances in a repertory season.

2 MFA in Theatre - Acting: Ability to Create Characters
Providing Department: MFA in Theatre
Learning Outcome Description: Demonstrate knowledge of and ability to create characters from different styles, periods, and genres.

3 MFA in Theatre - Acting: Speech and Voice Development
Providing Department: MFA in Theatre
Learning Outcome Description: Demonstrate clear, articulate, and expressive speech; and a flexible, strong and dynamic voice.
4 MFA in Theatre- Acting: Body Control and Stage Movement Skills

Providing Department: MFA in Theatre
Learning Outcome Description: Demonstrate a flexible, relaxed, and controlled body trained in intermediate and advanced stage movement disciplines.

5 MFA in Theatre - Acting: Comprehension of Business Procedures

Providing Department: MFA in Theatre
Learning Outcome Description: Demonstrate comprehension of the business procedures of the actor’s profession.

Honors

LO1 Define Problem

Providing Department: Honors
Learning Outcome Description: Students shall be able to: LO1: Define Problem Identify and articulate problems/issues in a way that facilitates critical analysis and takes into account relevant contextual factors, i.e., its historical, ethical, social, cultural and disciplinary dimensions.

LO2 Analyze Issues Critically and Comprehensively

Providing Department: Honors
Learning Outcome Description: LO2: Analyze Issues Critically and Comprehensively Efficiently gather and critically analyze information necessary to identify and/or develop actual and potential solutions to the problem.

LO3 Evaluate Proposed Solutions to Problems

Providing Department: Honors
Learning Outcome Description: LO3: Evaluate Proposed Solutions to Problems Develop and/or evaluate potential and actual solutions with detailed consideration given to relevant contextual factors, feasibility, and effects/impacts, and recommend or offer conclusions based on same.

LO4 Compose Effective Written Arguments

Providing Department: Honors
Learning Outcome Description: LO4: Compose Effective Written Arguments Compose written arguments that are responsive to the question, analytical (incorporates LO1, LO2, LO3), organized, substantiated and clear.

GC in Archival Administration

1 GCAA Student Learning Outcome 1

Providing Department: GC in Archival Administration
Learning Outcome Description: Describe the history, intent, challenges, and issues of archival management as a profession.

2 GCAA Student Learning Outcome 2

Providing Department: GC in Archival Administration
Learning Outcome Description: Develop the ability to preserve, organize and create access for the historic record.

3 GCAA Student Learning Outcome 3

Providing Department: GC in Archival Administration
Learning Outcome Description: Recognize professional processes to identify, conserve, store, and re-format various informational forms from historic to current.

4 GCAA Student Learning Outcome 4

Providing Department: GC in Archival Administration
Learning Outcome Description: Analyze the intellectual content of archival material to create optimal access (i.e., archival description) and designate long-term historic importance (i.e., archival appraisal).

5 GCAA Student Learning Outcome 5

Providing Department: GC in Archival Administration

https://wayne.campuslabs.com/planning/reports/view/18384/year/2670/unit/44855
Learning Outcome Description: Translate archival theory into professional engagement to better their communities.

6 GCAA Student Learning Outcome 6
Providing Department: GC in Archival Administration
Learning Outcome Description: Determine the best uses of technology for archives and their communities.

7 GCAA Student Learning Outcome 7
Providing Department: GC in Archival Administration
Learning Outcome Description: Support and respect a diverse user base through research, communication skills, and collections.

8 GCAA Student Learning Outcome 8
Providing Department: GC in Archival Administration
Learning Outcome Description: Recognize the importance of advocacy, outreach, education, ethics, and professional values for an archive.

9 GCAA Student Learning Outcome 9
Providing Department: GC in Archival Administration
Learning Outcome Description: Apply leadership and best practices to manage, budget, and implement projects.

GC in Information Management

1 GCIM Learning Outcome 1
Providing Department: GC in Information Management
Learning Outcome Description: Utilize and assess technologies for the creation, production, manipulation, modeling, mining, analysis, control, distribution, access, and use of information.

2 GCIM Learning Outcome 2
Providing Department: GC in Information Management
Learning Outcome Description: Leverage databases and large datasets to uncover and present insights that drive decision-making.

3 GCIM Learning Outcome 3
Providing Department: GC in Information Management
Learning Outcome Description: Collaborate with organizations to present their products and services to their users and customers in the most accessible and useful manner.

4 GCIM Learning Outcome 4
Providing Department: GC in Information Management
Learning Outcome Description: Apply usability principles and methods in assessing and designing information services and products for better user experiences.

5 GCIM Learning Outcome 5
Providing Department: GC in Information Management
Learning Outcome Description: Analyze how information policies affect information creation, production, control, protection, distribution, access, use and evaluation in different socio-technical contexts.

6 GCIM Learning Outcome 6
Providing Department: GC in Information Management
Learning Outcome Description: Develop independent learning skills and appreciate the need for lifelong learning of information technologies.

GC in Library and Information Science

1 LO
Providing Department: GC in Library and Information Science
Learning Outcome Description: Demonstrate competence in a specialized area of librarianship or information studies.
2 LO
Providing Department: GC in Library and Information Science
Learning Outcome Description: Demonstrate up-to-date knowledge in the rapidly-changing field of librarianship and information studies: chiefly the organization, storage, retrieval, and dissemination of the human record.

3 LO
Providing Department: GC in Library and Information Science
Learning Outcome Description: Use problem-solving and decision-making skills to plan, implement, and evaluate specialized library or information services.

4 LO
Providing Department: GC in Library and Information Science
Learning Outcome Description: Develop a specialized competence responsive to the changing economic, technological, or social climate.

GC in Public Library Services to Children and Young Adults

1 PLSC&YA Student Learning Outcome 1
Providing Department: GC in Public Library Services to Children and Young Adults
Learning Outcome Description: Develop effective programs and outreach services for children and young adults in public libraries.

2 PLSC&YA Student Learning Outcome 2
Providing Department: GC in Public Library Services to Children and Young Adults
Learning Outcome Description: Create appropriate collections, both print and electronic, for children and young adults in public libraries.

3 PLSC&YA Student Learning Outcome 3
Providing Department: GC in Public Library Services to Children and Young Adults
Learning Outcome Description: Collaborate with community agencies, such as schools, social services and health organizations, to provide needed instruction and support for children and young adults.

4 PLSC&YA Student Learning Outcome 4
Providing Department: GC in Public Library Services to Children and Young Adults
Learning Outcome Description: Apply leadership principles to creating environments for children and young adults that respond to diversity and cultural needs of the community.

Master of Library and Information Science

1 MLIS Learning Outcome 1
Providing Department: Master of Library and Information Science
Learning Outcome Description: Critically evaluate, synthesize, and disseminate information.

2 MLIS Learning Outcome 2
Providing Department: Master of Library and Information Science
Learning Outcome Description: Understand how complex interactions between diverse users, societal factors, and information environments affect professional situations.

3 MLIS Learning Outcome 3
Providing Department: Master of Library and Information Science
Learning Outcome Description: Facilitate access to, and use of, information resources between users and communities.

4 MLIS Learning Outcome 4
Providing Department: Master of Library and Information Science
Learning Outcome Description:
Apply multiple and emerging approaches to the organization of knowledge for varied literatures, records, and historical documents.

5 MLIS Learning Outcome 5  
**Providing Department:** Master of Library and Information Science  
**Learning Outcome Description:** Articulate and advocate for the foundations of the profession and its basic values and ethics such as intellectual freedom, information access and dissemination, and apply these principles to the advancement of the profession.

6 MLIS Learning Outcome 6  
**Providing Department:** Master of Library and Information Science  
**Learning Outcome Description:** Determine the significance of intellectual property, security, and privacy issues.

7 MLIS Learning Outcome 7  
**Providing Department:** Master of Library and Information Science  
**Learning Outcome Description:** Assess, adopt, and utilize the most relevant information technologies.

8 MLIS Learning Outcome 8  
**Providing Department:** Master of Library and Information Science  
**Learning Outcome Description:** Utilize current management and leadership theories and practices in the workplace.

9 MLIS Learning Outcome 9  
**Providing Department:** Master of Library and Information Science  
**Learning Outcome Description:** Evaluate and apply library and information science research to problems of professional practice by employing theories, best practices, and assessment strategies to the range of information functions.

10 MLIS Learning Outcome 10  
**Providing Department:** Master of Library and Information Science  
**Learning Outcome Description:** Practice professional engagement through leadership, service work, lifelong learning and community involvement.

**MS in Information Management**

1 MSIM Learning outcome 1  
**Providing Department:** MS in Information Management  
**Learning Outcome Description:** Utilize and assess technologies for the creation, production, manipulation, modeling, mining, analysis, control, distribution, access, and use of information.

2 MSIM Learning outcome 2  
**Providing Department:** MS in Information Management  
**Learning Outcome Description:** Leverage databases and datasets to uncover and present insights that drive decision-making.

3 MSIM Learning outcome 3  
**Providing Department:** MS in Information Management  
**Learning Outcome Description:** Apply principles and methods towards assessing and designing information services and products for better user experiences.

4 MSIM Learning outcome 4  
**Providing Department:** MS in Information Management  
**Learning Outcome Description:** Analyze how information policies affect information creation, production, control, protection, distribution, access, use and evaluation in different socio-technical contexts.

5 MSIM Learning Outcome 5  
**Providing Department:** MS in Information Management  
**Learning Outcome Description:** Develop independent learning skills and appreciate the need for lifelong learning of information technologies.
Specialist Certificate in Library and Information Science

1 Specialist Certificate: Learning Outcome 1
Providing Department: Specialist Certificate in Library and Information Science
Learning Outcome Description:
Demonstrate advanced or extended competence in areas of specialization in a particular area of librarianship or information studies begun during the first professional degree program (MLIS).

2 Specialist Certificate: Learning Outcome 2
Providing Department: Specialist Certificate in Library and Information Science
Learning Outcome Description:
Demonstrate up-to-date knowledge in the rapidly-changing field of librarianship and information management: the organization, storage, retrieval, and dissemination of the human record.

3 Specialist Certificate: Learning Outcome 3
Providing Department: Specialist Certificate in Library and Information Science
Learning Outcome Description:
Use investigative methods in problem-solving and in the planning and evaluation of library and information services.

4 Specialist Certificate: Learning Outcome 4
Providing Department: Specialist Certificate in Library and Information Science
Learning Outcome Description:
Develop a new specialized competence responsive to the changing economic, technological, or social climate or to changing conditions in the life of the individual information professional.

J.D.

1 Learning Outcome 1
Providing Department: J.D.
Learning Outcome Description:
Students will identify and apply the concepts, theories, and rules of law necessary to participate effectively and responsibly in the legal profession or related professions.

2 Learning Outcome 2
Providing Department: J.D.
Learning Outcome Description:
Students will develop and display knowledge, and an understanding, of relevant substantive and procedural law, including the requirements for ethical representation.

3 Learning Outcome 3
Providing Department: J.D.
Learning Outcome Description:
Students will identify and employ appropriate strategies in performing legal analysis, legal reasoning, and problem-solving.

4 Learning Outcome 4
Providing Department: J.D.
Learning Outcome Description:
Students will locate, organize, and evaluate relevant legal authority, distinguish between the types and relevance of legal authority, and use appropriate legal authority strategically and cost-effectively in professional legal practice.

5 Learning Outcome 5
Providing Department: J.D.
Learning Outcome Description:
Students will communicate in writing in ways that are effective and appropriate for different audiences in contexts relevant to professional legal practice.

6 Learning Outcome 6
Providing Department: J.D.
Learning Outcome Description:
Students will communicate orally in ways that are effective and appropriate for different audiences in contexts relevant to professional legal practice.

7 Learning Outcome 7
Providing Department: J.D.
Learning Outcome Description:
Students will display proficiency in the professional skills (such as interviewing and counseling, negotiation, planning and drafting, persuasion, public speaking, collaboration, and time management) that are integral to competent, effective, and ethical legal practice in the area(s) in which they choose to focus.

8 Learning Outcome 8
Providing Department: J.D.
Learning Outcome Description:
Students will integrate into their professional lives an understanding of and commitment to the professional and ethical obligations required of members of the legal profession.

LL.M. in Corporate & Finance Law

1 Learning outcome 1
Providing Department: LL.M. in Corporate & Finance Law
Learning Outcome Description:
Students will identify and apply the concepts, theories, and rules of law necessary to participate effectively and responsibly in the legal profession in areas related to business entities and finance

2 Learning outcome 2
Providing Department: LL.M. in Corporate & Finance Law
Learning Outcome Description: Students will understand and analyze key legal issues involved in regulating corporate behavior

3 Learning outcome 3
Providing Department: LL.M. in Corporate & Finance Law
Learning Outcome Description: Students will be able to communicate effectively with experienced corporate and tax lawyers on issues of vital concerns of clients.

4 Learning outcome 4
Providing Department: LL.M. in Corporate & Finance Law
Learning Outcome Description: Students will be able to recognize and apply proper professional rules and ethical principles that arise in connection with client representation in this field.

LL.M. in Labor & Employment Law

1 Learning outcome 1
Providing Department: LL.M. in Labor & Employment Law
Learning Outcome Description:
Students will identify and apply the concepts, theories, and rules of law necessary to participate effectively and responsibly in the legal profession in areas related to labor and employment relationships.

2 Learning outcome 2
Providing Department: LL.M. in Labor & Employment Law
Learning Outcome Description: Students will understand and analyze key legal issues involved in labor and employment relationships.

3 Learning outcome 3
Providing Department: LL.M. in Labor & Employment Law
Learning Outcome Description: Students will be able to communicate effectively with experienced labor and employment lawyers on issues of vital concerns of clients.
4 Learning Outcome 4
Providing Department: LL.M. in Labor & Employment Law
Learning Outcome Description: Students will be able to recognize and apply professional rules and ethical principles that arise in connection with client representation in this field.

LL.M. in Taxation

1 Learning outcome 1
Providing Department: LL.M. in Taxation
Learning Outcome Description: Students will identify and apply the concepts, theories, and rules of law necessary to participate effectively and responsibly in the legal profession in areas related to taxation.

2 Learning outcome 2
Providing Department: LL.M. in Taxation
Learning Outcome Description: Students will understand and analyze key legal issues involved in regulating taxation.

3 Learning outcome 3
Providing Department: LL.M. in Taxation
Learning Outcome Description: Students will be able to communicate effectively with experienced tax lawyers on issues of vital concerns of clients.

4 Learning outcome 4
Providing Department: LL.M. in Taxation
Learning Outcome Description: Students will be able to recognize and apply professional rules and ethical principles that arise in connection with client representation in this field.

LL.M. in United States Law

1 Learning outcome 1
Providing Department: LL.M. in United States Law
Learning Outcome Description: Students will identify and apply the concepts, theories, and rules of law necessary to participate effectively and responsibly in the legal profession or related professions interacting with U.S. law.

2 Learning outcome 2
Providing Department: LL.M. in United States Law
Learning Outcome Description: Students will understand and analyze key legal issues within the U.S. legal system.

3 Learning outcome 3
Providing Department: LL.M. in United States Law
Learning Outcome Description: Students will be able to communicate effectively with experienced U.S. lawyers on issues of vital concerns of clients.

4 Learning outcome 4
Providing Department: LL.M. in United States Law
Learning Outcome Description: Students will be able to recognize and apply professional rules and ethical principles that arise in connection with client representation in U.S. law.

Master of Studies in Law

Learning Outcome 1 MSL
Providing Department: Master of Studies in Law
Learning Outcome Description: Recognize legal issues as they arise in the workplace.
Learning Outcome 2 New Learning Outcome (Program-level) Item

Providing Department: Master of Studies in Law

Learning Outcome Description:
Determine how legal doctrine applies to the factual context presented in a workplace situation and evaluate whether the situation presents any substantial risk of legal liability

Learning Outcome 3 New Learning Outcome (Program-level) Item

Providing Department: Master of Studies in Law

Learning Outcome Description: Interact with lawyers and other legal professionals through use of a shared professional vocabulary

Learning Outcome 4 New Learning Outcome (Program-level) Item

Providing Department: Master of Studies in Law

Learning Outcome Description:
Use and comprehend the specialized language and presentation appearing in statutes, case law, and other legal materials

Learning Outcome 5 New Learning Outcome (Program-level) Item

Providing Department: Master of Studies in Law

Learning Outcome Description:
Explain legal matters to people with whom they interact in workplace situations who do not have a legal background

Learning Outcome 6 New Learning Outcome (Program-level) Item

Providing Department: Master of Studies in Law

Learning Outcome Description:
Express the outcome of an analysis of legal issues using language and formats that are standard among lawyers and other legal professionals.

BA in African American Studies

1 Learning Outcome

Providing Department: BA in African American Studies

Learning Outcome Description:
Students will be able to evaluate the social and political thought and strategies of Black leaders, organizations, and social movements.

2 Learning Outcome

Providing Department: BA in African American Studies

Learning Outcome Description:
Students will be able to breakdown keywords and selected concepts that are integral to the field of African American Studies.

3 Learning Outcome

Providing Department: BA in African American Studies

Learning Outcome Description:
Students will be able to compare and contrast the works and approaches of Black writers, filmmakers, artists, and cultural figures.

4 Learning Outcome

Providing Department: BA in African American Studies

Learning Outcome Description:
Students will be able to demonstrate research and writing skills by formulating arguments, using source materials as evidence, integrating their own ideas with those of others, and properly citing sources in formal, research papers.

BA in Anthropology

1 Cultivating Anthropological Knowledge

Providing Department: BA in Anthropology

Learning Outcome Description:
Anthropology majors will define and describe the four disciplinary sub-fields and will apply this understanding to theories, disciplinary history, and key concepts within these sub-fields.
2 Methods and Skill Building
Providing Department: BA in Anthropology
Learning Outcome Description:
Anthropology majors will identify and use anthropological methods, critical thinking, and discipline-specific modes of analysis.

3 Engagement and Practice
Providing Department: BA in Anthropology
Learning Outcome Description:
Anthropology majors will apply knowledge, skills, and perspectives gained inside the classroom to the local and global community outside the classroom.

4 Oral and Written Communication
Providing Department: BA in Anthropology
Learning Outcome Description:
Anthropology majors will integrate, practice, and demonstrate skills in oral and written communication.

5 Teamwork
Providing Department: BA in Anthropology
Learning Outcome Description: Anthropology majors will organize, prepare, and execute team-based projects.

MA in Anthropology

1 MA Outcome 1: Theories and Concepts
Providing Department: MA in Anthropology
Learning Outcome Description:
Demonstrate advanced written knowledge of key theories and concepts in the major subfields of anthropology, including the history of the discipline.

2 MA Outcome 2: Methods
Providing Department: MA in Anthropology
Learning Outcome Description: Exhibit high proficiency with the core methods of their subfield(s).

3 MA Outcome 3: Specific Area Mastery
Providing Department: MA in Anthropology
Learning Outcome Description:
Demonstrate written mastery of a specific area of study through intensive study and/or original research.

4 MA Outcome 4: Conferences
Providing Department: MA in Anthropology
Learning Outcome Description: Present scholarly material at an academic conference.

5 MA Outcome 5: Teaching
Providing Department: MA in Anthropology
Learning Outcome Description: Teach introductory anthropology across its multiple subdisciplines.

6 MA Outcome 6: Practicing Anthropology
Providing Department: MA in Anthropology
Learning Outcome Description: Practice anthropology in non-academic settings in a particular area of the discipline.

7 MA Outcome 7: Ethics
Providing Department: MA in Anthropology
Learning Outcome Description: Demonstrate knowledge of ethical practices when conducting research with human subjects research, engaging with community stakeholders, and presenting academic scholarship.

PhD in Anthropology

1 PhD Outcome 1: Theories and Concepts
Providing Department: PhD in Anthropology
Learning Outcome Description:
Demonstrate advanced written knowledge of key theories and concepts in the major subfields of anthropology, including the history of the discipline.

2 PhD Outcome 2: Topic Mastery
Providing Department: PhD in Anthropology
Learning Outcome Description:
Demonstrate written and oral mastery of a specific area of study through intensive study and qualifying exams.

3 PhD Outcome 3: Original Research
Providing Department: PhD in Anthropology
Learning Outcome Description:
Design and put into practice a well-designed original research project that addresses major theoretical issues in a particular area of anthropology.

4 PhD Outcome 4: Ethics
Providing Department: PhD in Anthropology
Learning Outcome Description:
Demonstrate knowledge of ethical practices when conducting research with human subjects research, engaging with community stakeholders, and presenting academic scholarship.

5 PhD Outcome 5: Publication
Providing Department: PhD in Anthropology
Learning Outcome Description:
Produce peer-reviewed journal articles and book chapters in anthropology and/or relevant allied disciplines.

6 PhD Outcome 6: Conferences
Providing Department: PhD in Anthropology
Learning Outcome Description:
Present scholarly material at peer-reviewed conferences in anthropology and/or in relevant allied disciplines.

7 PhD Outcome 7: Teaching
Providing Department: PhD in Anthropology
Learning Outcome Description:
Teach general anthropology across its multiple subdisciplines, as well as upper-division courses in a particular subfield.

8 PhD Outcome 8: Practicing Anthropology
Providing Department: PhD in Anthropology
Learning Outcome Description:
Exhibit practical knowledge and skills appropriate for non-academic career opportunities in their subfield.

BA in Biological Sciences

1 Learning Outcome 1 - Adequate progress
Providing Department: BA in Biological Sciences
Learning Outcome Description: Students should be able to progress through the curriculum and graduate in four to six years.

2 Learning Outcome 2 - Understanding of Evolution
Providing Department: BA in Biological Sciences
Learning Outcome Description: Students will demonstrate an understanding of the core concept of evolution.

3 Learning Outcome 3 - Mastery of Written Communication
Providing Department: BA in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of science communication through writing in the biological sciences.

4 Learning Outcome 4: Process of Science
Providing Department: BA in Biological Sciences
Learning Outcome Description:
Student completing their BA in Biological Sciences will have the ability to apply the process of science.

BS in Biological Sciences

1 Learning Outcome 1: Adequate Progress
Providing Department: BS in Biological Sciences
Learning Outcome Description:
Students will show adequate progress through the curriculum and graduate in four to six years and move on to employment or advanced study in an area related to the biological sciences.

2 Learning Outcome 2: Understanding of Evolution
Providing Department: BS in Biological Sciences
Learning Outcome Description: Students will demonstrate an understanding of the core concept of evolution.

3 Learning Outcome 3: Mastery of Written Communication
Providing Department: BS in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of written communication through writing in the biological sciences.

4 Learning Outcome 4: Process of Science
Providing Department: BS in Biological Sciences
Learning Outcome Description:
Student completing their BS in Biological Sciences will have the ability to apply the process of science.

MA in Biological Sciences

1 Learning Outcome 1 - Adequate Progress
Providing Department: MA in Biological Sciences
Learning Outcome Description:
Students will demonstrate adequate progress either by completing their MA program or entering another graduate or professional program at Wayne State or another institution in 10 semesters or fewer.

2 Learning Outcome 2 - Mastery of Current Biological Theory
Providing Department: MA in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of current biological theory in their chosen field evidenced by an ability to recall specific theory at the completion of the program.

3 Learning Outcome 3 - Mastery of Oral Communication
Providing Department: MA in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of oral communication evidenced by an ability to successfully lead group discussions of current biological theory.

4 Learning Outcome 4 - Mastery of Written Communication
Providing Department: MA in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of written communication through writing in the biological sciences.

MS in Biological Sciences

1 Learning outcome 1: Mastery of Field
Providing Department: MS in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of their biological field evidenced by broad understanding and connectivity of the broader field and by bringing new knowledge and insights.
2 Learning outcome 2: Mastery of Research Design and Methods
Providing Department: MS in Biological Sciences
Learning Outcome Description: Students will demonstrate mastery of research design and methods.

3 Learning outcome 3: Mastery of Communication
Providing Department: MS in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of communication evidenced by giving professional and compelling presentations and manuscripts.

4 Learning outcome 4: Mastery of Work
Providing Department: MS in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of their own research evidenced by an ability to answer questions skillfully, showing deep insight of their work, and projection of future directions in the field.

MS in Molecular Biotechnology

1 Learning outcome 1: Mastery of Field
Providing Department: MS in Molecular Biotechnology
Learning Outcome Description:
Students will demonstrate mastery of their biological field evidenced by broad understanding and connectivity of the broader field and by bringing new knowledge and insights.

2 Learning outcome 2: Mastery of Research Design and Methods
Providing Department: MS in Molecular Biotechnology
Learning Outcome Description: Students will demonstrate mastery of research design and methods.

3 Learning outcome 3: Mastery of Communication
Providing Department: MS in Molecular Biotechnology
Learning Outcome Description:
Students will demonstrate mastery of communication evidenced by giving professional and compelling presentations.

4 Learning outcome 4: Mastery of Work
Providing Department: MS in Molecular Biotechnology
Learning Outcome Description:
Students will demonstrate mastery of their own research evidenced by an ability to answer questions skillfully, showing deep insight of their work, and projection of future directions in the field.

PhD in Biological Sciences

1 Learning Outcome 1: Mastery of Field
Providing Department: PhD in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of their biological field evidenced by broad understanding and connectivity of the broader field and by bringing new knowledge and insights.

2 Learning outcome 2: Mastery of Research Design and Methods
Providing Department: PhD in Biological Sciences
Learning Outcome Description: Students will demonstrate mastery of research design and methods.

3 Learning outcome 3: Mastery of Communication
Providing Department: PhD in Biological Sciences
Learning Outcome Description:
Students will demonstrate mastery of communication evidenced by giving professional and compelling presentations and manuscripts.

4 Learning outcome 4: Mastery of Work
Providing Department: PhD in Biological Sciences

Learning Outcome Description:
Students will demonstrate mastery of their own research evidenced by an ability to answer questions skillfully, showing deep insight of their work, and projection of future directions in the field.

BA in Chemistry

1. Coursework

Providing Department: BA in Chemistry

Learning Outcome Description:
Graduates will show competence in the five areas of chemistry (organic, inorganic, analytical, physical and biological) by passing the final exam in each course. Each area will be assessed individually. One semester general chemistry (CHM 1220) Full year of organic chemistry (CHM 1240, 2220) Analytical chemistry (CHM 2280) Biochemistry, one semester (CHM 5600) Survey of Physical Chemistry (CHM 5400) Inorganic Chemistry (CHM 3020) One advanced elective in any area. The content areas encompass five of the traditional subdisciplines of chemistry: analytical, biochemistry, inorganic, organic, and physical, and include both small molecules and macromolecules. Student learning progresses from beginner to expert knowledge and comprises introductory, foundation, and in-depth experiences. Beyond the introductory chemistry experience, foundation experiences provide breadth of coverage across the traditional subdisciplines. Rigorous in-depth experiences build upon the foundation. Furthermore, because chemistry is an experimental science, substantial laboratory work is integral to these three levels of experience.

2. Oral Communication

Providing Department: BA in Chemistry

Learning Outcome Description:
Students will use prior knowledge and problem solving skills to create effective oral presentations in Chemistry. The oral presentation is required in the Physical Chemistry lab course (CHM 5550). Effective communication is vital to all professional chemists. Speech and English composition courses alone rarely give students sufficient experience in oral and written communication of technical information. The chemistry curriculum should include critically evaluated writing and speaking opportunities so students learn to present information in a clear and organized manner, write well-organized and concise reports in a scientifically appropriate style, and use relevant technology in their communications. Because chemistry is a global enterprise, knowledge of one or more foreign languages or an international experience can be a valuable asset to chemistry students and add greatly to a student's ability to communicate with other chemists worldwide.

3 Written Communication

Providing Department: BA in Chemistry

Learning Outcome Description:
Students will use prior knowledge and problem solving skills to create professional written reports in Chemistry. This will occur in the Physical Chemistry Lab course, CHM 5550. The prior knowledge they will use includes general chemistry concepts and following the scientific method as they learned in their prior laboratory courses. Effective communication is vital to all professional chemists. Speech and English composition courses alone rarely give students sufficient experience in oral and written communication of technical information. The chemistry curriculum should include critically evaluated writing and speaking opportunities so students learn to present information in a clear and organized manner, write well-organized and concise reports in a scientifically appropriate style, and use relevant technology in their communications. Because chemistry is a global enterprise, knowledge of one or more foreign languages or an international experience can be a valuable asset to chemistry students and add greatly to a student's ability to communicate with other chemists worldwide.

4 Laboratory Problem Solving

Providing Department: BA in Chemistry

Learning Outcome Description:
Students will develop problem solving skills in laboratory applications. This includes following the steps of the scientific method. An important goal of chemistry education is to provide students with the tools to solve problems. Students should be taught how to define problems clearly, develop testable hypotheses, design and execute experiments, analyze data using appropriate statistical methods, understand the fundamental uncertainties in experimental measurements, and draw appropriate conclusions. Throughout the curriculum, students should be challenged to apply their understanding of all chemistry subdisciplines and use appropriate laboratory skills and instrumentation to solve problems.

BS in Chemistry

1. Written Communication

Providing Department: BS in Chemistry

Learning Outcome Description:
Students will use prior knowledge, the chemical literature and problem solving skills to create professional written reports in Chemistry. This will occur in the Physical Chemistry Lab course, CHM 5550. The prior knowledge they will use includes general chemistry concepts and following the scientific method as they learned in their prior laboratory courses. Effective communication is vital to all professional chemists. Speech and English composition courses alone rarely give students sufficient experience in oral and written communication of technical information. The chemistry curriculum should include critically evaluated writing and speaking opportunities so students learn to present information in a clear and organized manner, write well-organized and concise reports in a scientifically appropriate style, and use relevant technology in their communications. Because chemistry is a global enterprise, knowledge of one or more foreign languages or an international experience can be a valuable asset to chemistry students and add greatly to a student's ability to communicate with other chemists worldwide.

2. Students will show competence in the five traditional areas of Chemistry via the capstone course of Advanced Inorganic Chemistry with a Physical Chemistry Pre-requisite

Providing Department: BS in Chemistry

Learning Outcome Description:
Graduates will show competence in the five areas of chemistry (organic, inorganic, analytical, physical and biological). Each area will be assessed individually One semester general chemistry (CHM 1220) Full year of organic chemistry (CHM 1240, 2220) Analytical chemistry (CHM 2280, 5160) Biochemistry, one semester (CHM 5600) Comprehensive Physical Chemistry (CHM 5420, 5440) Inorganic Chemistry (CHM 3020, 5020*) *CHM 5020 is our senior capstone course, with physical chemistry pre-requisite. The content areas encompass five of the traditional subdisciplines of chemistry: analytical, biochemistry, inorganic, organic, and physical, and include both small molecules and macromolecules. Student learning progresses from beginner to expert knowledge and comprises introductory, foundation, and in-depth experiences. Beyond the introductory chemistry experience, foundation experiences provide breadth of coverage across the traditional subdisciplines. Rigorous in-depth experiences build upon the foundation. Furthermore, because chemistry is an experimental science, substantial laboratory work is integral to these three levels of experience.

3. Independent Research

Providing Department: BS in Chemistry

Learning Outcome Description:
Students will use advanced laboratory skills and problem solving to carry out independent undergraduate research. At the end of the undergraduate research experience students will submit a research report to their research advisor to be graded.

4 Oral Communication

Providing Department: BS in Chemistry

Learning Outcome Description:
Students will use prior knowledge, the chemical literature and problem solving skills to create professional oral presentations in Chemistry. The oral presentation is required in the Physical Chemistry lab course (CHM 5550). Effective communication is vital to all professional chemists. Speech and English composition courses alone rarely give students sufficient experience in oral and written communication of technical information. The chemistry curriculum should include critically evaluated writing and speaking opportunities so students learn to present information in a clear and organized manner, write well-organized and concise reports in a scientifically appropriate style, and use relevant technology in their communications. Because chemistry is a global enterprise, knowledge of one or more foreign languages or an international experience can be a valuable asset to chemistry students and add greatly to a student’s ability to communicate with other chemists worldwide.

BS with a major in Biochemistry and Chemical Biology

1. Coursework

Providing Department: BS with a major in Biochemistry and Chemical Biology

Learning Outcome Description:
Graduates will show competence in the five areas of chemistry (biological, organic, inorganic, analytical and physical) with additional emphasis placed on Biochemistry. Each area will be assessed individually. One semester general chemistry (CHM 1220), Full year of organic chemistry (CHM 1240, 2220), Analytical Chemistry (CHM 2280, 5160), Biochemistry, two semesters with laboratory (CHM 6610, 6620, 6640), Biological Physical Chemistry (CHM 5400), Inorganic Chemistry (CHM 3020, 5020*) *CHM 5020 is our senior capstone course, with physical chemistry pre-requisites.

2. Research

Providing Department: BS with a major in Biochemistry and Chemical Biology

Learning Outcome Description:
Students will develop the analytical and problem solving skills necessary to carry out independent research. This will involve joining a research lab and writing a report at the end to submit before graduation.

3. Applications

Providing Department: BS with a major in Biochemistry and Chemical Biology
Learning Outcome Description:
Students will learn the applications of chemical concepts and technologies to biological problems. This will include concepts such as Cellular Respiration, Metabolism, Protein synthesis, etc.

4. Sub-speciality
Providing Department: BS with a major in Biochemistry and Chemical Biology
Learning Outcome Description:
Students will develop in depth understanding of one the four specialized areas- bioorganic, bioinorganic, bioanalytical and biophysical chemistry. This is based on the elective course students decide to take.

**BS with a major in Chemistry and a concentration in Biochemistry**

1. ACS Certification
Providing Department: BS with a major in Chemistry and a concentration in Biochemistry
Learning Outcome Description: Graduates will earn degrees certified by the Committee on Professional Training of the American Chemical Society.

2. Coursework
Providing Department: BS with a major in Chemistry and a concentration in Biochemistry
Learning Outcome Description: Graduates will show competence in the five areas of chemistry (organic, inorganic, analytical, physical and biological) with additional emphasis placed on Biochemistry. Each area will be assessed individually. One semester general chemistry (CHM 1220) Full year of organic chemistry (CHM 1240, 2220) Analytical chemistry (CHM 2280, 5160) Biochemistry, two semesters with laboratory (CHM 6610, 6620, 6640) Biological Physical Chemistry (CHM 5400) Inorganic Chemistry (CHM 3020, 5020) *CHM 5020 is our senior capstone course, with physical chemistry pre-requisite.

3. Research
Providing Department: BS with a major in Chemistry and a concentration in Biochemistry
Learning Outcome Description: Graduates will have experience in independent undergraduate research.

4. Written and Oral Communication
Providing Department: BS with a major in Chemistry and a concentration in Biochemistry
Learning Outcome Description: Students will create professional oral presentations and written reports in Chemistry.

**MA in Chemistry**

1. Goal 1
Providing Department: MA in Chemistry
Learning Outcome Description: Demonstrate advanced proficiency in diverse areas of chemical knowledge

2. Goal 2
Providing Department: MA in Chemistry
Learning Outcome Description: Effectively search primary and secondary chemical literature

3. Goal 3
Providing Department: MA in Chemistry
Learning Outcome Description: Apply chemical problem solving skills to day-to-day situations

4. Goal 4
Providing Department: MA in Chemistry
Learning Outcome Description: Effectively communicate with diverse audiences regarding chemical subjects

**MS in Chemistry**

1. Goal 1
Providing Department: MS in Chemistry
Learning Outcome Description: Develop advanced proficiency in diverse areas of chemical knowledge
2. Goal 2  
**Providing Department:** MS in Chemistry  
**Learning Outcome Description:** Familiarity with and the ability to understand the primary and secondary chemical literature

3. Goal 3  
**Providing Department:** MS in Chemistry  
**Learning Outcome Description:** Apply chemical problem solving skills to day-to-day situations

4. Goal 4  
**Providing Department:** MS in Chemistry  
**Learning Outcome Description:** Effectively communicate with diverse audiences regarding chemical subjects

5. Goal 5  
**Providing Department:** MS in Chemistry  
**Learning Outcome Description:** Knowledge of a specific research problem in their field and a measurable contribution to the creation of new chemical knowledge based on original experimental data collection.

**PhD in Chemistry**

1. Learning Outcome  
**Providing Department:** PhD in Chemistry  
**Learning Outcome Description:** Develop advanced proficiency in diverse areas of chemical knowledge and deep mastery of a sub-discipline based largely on advanced secondary chemical literature that is necessary to form a foundation for critically evaluating primary chemical literature.

2. Learning Outcome  
**Providing Department:** PhD in Chemistry  
**Learning Outcome Description:** Demonstrate proficiency in the teaching of chemistry to help perpetuate the discipline in the form of supervising students and leading discussions.

3. Learning Outcome  
**Providing Department:** PhD in Chemistry  
**Learning Outcome Description:** Effectively use the primary chemical literature to advance personal understanding of chemistry and to put this knowledge into context such that the limits of current knowledge can be effectively assessed

4. Learning Outcome  
**Providing Department:** PhD in Chemistry  
**Learning Outcome Description:** Learn to identify important societal problems that chemical knowledge can help to address and then tackle those problems through original research

5. Learning Outcome  
**Providing Department:** PhD in Chemistry  
**Learning Outcome Description:** To add to the body of chemical knowledge through original research

6. Learning Outcome  
**Providing Department:** PhD in Chemistry  
**Learning Outcome Description:** Effectively communicate using multiple modalities (written manuscripts, poster presentations, orally, using electronic media, etc) with diverse audiences regarding chemical subjects

7. Learning Outcome  
**Providing Department:** PhD in Chemistry  
**Learning Outcome Description:** Demonstrate participation in a culture of safety and responsible conduct of research necessary to be responsible stewards of the
chemistry discipline.

**BA Asian Studies**

1.0 BA Asian Studies Learning Outcome 1  
**Providing Department:** BA Asian Studies  
**Learning Outcome Description:**  
Following the ACTFL proficiency guidelines, our majors should reach an intermediate high level and minors an intermediate low level in all the four language skills in Chinese and/or Japanese languages.

2.0 BA; Asian Studies Learning Outcome 2  
**Providing Department:** BA Asian Studies  
**Learning Outcome Description:**  
Interpret the translated literary texts from China and Japan, and East Asia in general, within the socio-historical and cultural contexts and in a comparative method.

3.0 BA: Asian Studies Learning Outcome 3  
**Providing Department:** BA Asian Studies  
**Learning Outcome Description:**  
Students will be able to appreciate and recognize the values of translated literature works from China and Japan, as well as East Asia in general, from the critical thinking skills they have learned from our curriculum.

4.0 BA: Asian Studies Learning Outcome 4  
**Providing Department:** BA Asian Studies  
**Learning Outcome Description:**  
Students should be able to identify major cultural differences and similarities between American culture and East Asian culture and they should be able to critique East Asian culture-related phenomena in today's global society.

4.1 Improve students' cultural awareness of JPN and CHI  
**Providing Department:** BA Asian Studies  
**Learning Outcome Description:**  
We want to strengthen the focus of our graduates. In the past, student paid more attention to completing the credits, but now we want to see them with their own focus either in Chi or Jpn.

**BA Classics**

1.0 BA Classics Learning Outcome 1  
**Providing Department:** BA Classics  
**Learning Outcome Description:**  
At the completion of their studies, undergraduate students will demonstrate reading comprehension of either Latin or Ancient Greek.

2.0 BA Classics Learning Outcome 2  
**Providing Department:** BA Classics  
**Learning Outcome Description:**  
At the completion of their studies, undergraduate students will demonstrate translation skills in either Latin or Ancient Greek.

3.0 BA Classics Learning Outcome 3  
**Providing Department:** BA Classics  
**Learning Outcome Description:**  
At the completion of their studies, Classics Majors will demonstrate an understanding of the history of the Ancient World.

4.0 BA Classics Learning Outcome 4  
**Providing Department:** BA Classics  
**Learning Outcome Description:**  
At the completion of their studies, Classics Majors will demonstrate an understanding of Greek and/or Roman philosophy.

5.0 BA Classics Learning Outcome 5
Providing Department: BA Classics
Learning Outcome Description:
At the completion of their studies, Classics Majors will demonstrate an understanding of Greek and Roman material culture.

6.0 BA Classics Learning Outcome 6
Providing Department: BA Classics
Learning Outcome Description:
At the completion of their studies, Classics Majors will demonstrate an understanding of Greek and Roman literature.

7.0 BA Classics Learning Outcome 7
Providing Department: BA Classics
Learning Outcome Description:
At the completion of their studies, Classics Majors will demonstrate the practical skills needed to conduct research in Classics.

8.0 BA Classics Learning Outcome 8
Providing Department: BA Classics
Learning Outcome Description:
At the completion of their studies, Classics Majors will demonstrate the ability to present their research in written format.

BA German

1.0 BA German, LO1 Writing
Providing Department: BA German
Learning Outcome Description:
Students who receive a BA have completed a writing intensive research project, consisting of multiple stages and two drafts, that demonstrates their ability to: * formulate and support a thesis in extended and well organized formal written discourse * discern between primary secondary academic sources and assess and integrate information from those sources them into their own arguments * produce written German at the advanced ACTFL level or the B2-C1 level of the CEFR

2.0 BA German, LO2 Presentational Speaking
Providing Department: BA German
Learning Outcome Description:
Students who receive a BA in German will demonstrate the ability to deliver an organized presentation, prepared in multiple stages, that is appropriate to the audience about course-related academic or professional topics. In so doing, they will demonstrate a clear understanding of the differences between effective oral and written presentations. Their presentations will effectively summarize and analyze materials for a listening audience and make effective use of visual aids and technology. They will demonstrate the attainment of presentational speaking skills German at the advanced ACTFL level or the B2-C1 level of the CEFR.

3.0 BA German, LO 3 Interpersonal Communication
Providing Department: BA German
Learning Outcome Description:
Students receiving a BA in German with an average of B or better in the upper-level German courses (4000 and above) will be able to engage in interpersonal communication the Advanced Mid to Advanced High level according to ACTFL standards. This means that they can express themselves fully and largely fluently, with ease and mostly with lexical, syntactic and intercultural accuracy not only on familiar and concrete topics but also on most unfamiliar and complex issues within the realm of German cultural studies. Students can develop hypotheses, express opinions and develop arguments to support them. They can communicate in this manner both in one-on-one and group settings, such as discussions.

4.0 BA German, LO 4 Analysis of Primary and Secondary Sources
Providing Department: BA German
Learning Outcome Description:
Students receiving a BA in German with an average of B or better in the upper-level German courses (4000 and above) will be able to comprehend and analyze a wide range of authentic German sources. Their skills of reading and listening comprehension will be at the Advanced Mid to Advanced High level of the ACTFL scale. Primary sources include everyday discourse, such as newspapers, radio and television programs, literary texts published between the 18th and the 21st century, documentary and feature films released between the early 20th century and the present. Secondary sources include academic writing, both analyses of literary and filmic narratives and theory in literary, linguistic and cultural studies. In their analysis of primary sources students can analyze the narratives with regard to specific themes and topics. In their analysis of secondary sources, students can understand and summarize the thesis.
and argument. They can also incorporate appropriate ideas from secondary sources into their own analyses of primary sources, both in written (essay) and oral (presentation) format.

**BA Global Studies**

**LO1 LO1: Language Competency**
Providing Department: BA Global Studies
Learning Outcome Description:
LO1: Language Competency. Students must demonstrate intermediate-level competency in one language or basic-level competency in two languages.

**LO2 LO2: Intersections in Global Issues**
Providing Department: BA Global Studies
Learning Outcome Description:
Students will be able to demonstrate how global issues intersect with the individual and the social with respect to gender, sexuality, class, race, and/or ethnicity.

**LO3 LO3: Processes of Globalization.**
Providing Department: BA Global Studies
Learning Outcome Description:
Students will be able to analyze the processes of globalization from economic, political, environmental, historical, and cultural perspectives and how these processes impact social structures and people’s everyday lives.

**LO4 LO4: Global and Local**
Providing Department: BA Global Studies
Learning Outcome Description:
Students are able to discuss globalization and global issues as they relate to the local, the regional (as it relates to regional issues within nation states), and the national.

**BA Near Eastern Languages**

**LO1 LO1: ADVANCED WRITTEN COMMUNICATION**
Providing Department: BA Near Eastern Languages
Learning Outcome Description:
Write texts on different topics using the styles and genres appropriate for the purpose of writing (e.g. letters, articles, narratives, etc.)

**LO2 LO2: ADVANCED ORAL COMMUNICATION**
Providing Department: BA Near Eastern Languages
Learning Outcome Description:
Develop conversational skills to discuss topics of interest using a variety of language functions (e.g. clarification, description, comparison, reasoning, argumentation, supporting ideas with the appropriate evidence, etc.)

**LO3 LO3: CRITICAL ANALYSIS AND INTERPRETATION**
Providing Department: BA Near Eastern Languages
Learning Outcome Description:
Critically analyze information/concepts related to a subject area (e.g., linguistic principles, narrative style, regional cultures, literary and cultural history)

**LO4 LO4: GRAMMAR**
Providing Department: BA Near Eastern Languages
Learning Outcome Description: Recognize and use correct word, sentence and text level grammar in writing

**LO5 LO5: ADVANCED READING SKILLS**
Providing Department: BA Near Eastern Languages
Learning Outcome Description: Employ analytical reading and critical thinking skills to understand different types of texts

**LO6 LO6: Culture Awareness**
Providing Department: BA Near Eastern Languages
Learning Outcome Description:
Demonstrate awareness of cultural issues, such as ethnic, cultural, religious and linguistic plurality of the target language; and discuss different aspects of the target language culture.

BA Near Eastern Studies

1.0 BA NES LO1: Assessing Causal Relationships in NE Region
Providing Department: BA Near Eastern Studies
Learning Outcome Description:
Assess, discern and determine causal relationships in mapping social, historical, political economic and cultural processes in the Near East region.

2.0 BA NES LO2: Historical Developments, Contemporary Contexts
Providing Department: BA Near Eastern Studies
Learning Outcome Description:
Compare and contrast historical and sociological developments to contemporary contexts of Near East issues.

3.0 BA NES LO3: Develop Social History Research Skills
Providing Department: BA Near Eastern Studies
Learning Outcome Description:
Develop social history research skills through oral history and interview techniques, and construct narratives relevant to Near East region and communities.

4.0 BA NES LO4: Personal Narrative Methodology
Providing Department: BA Near Eastern Studies
Learning Outcome Description: Assess the role of personal narrative as a methodological device in Near East history and culture.

5.0 BA NES LO5: Analyze Scholarly Literature
Providing Department: BA Near Eastern Studies
Learning Outcome Description: Analyze relevant scholarly literature (i.e. secondary source material) in students’ areas of research.

6.0 BA NES LO6: Analyze Philosophical Source Material
Providing Department: BA Near Eastern Studies
Learning Outcome Description: Analyze source material of Western and Near East philosophical and ideological traditions and their relevance to contemporary social, political and historical debates.

BA Romance Languages

1.0 BA Romance Languages LO1_Oral Proficiency
Providing Department: BA Romance Languages
Learning Outcome Description: LO1: Students will be able to communicate orally at an advanced-intermediate level.

2.0 BA Romance Languages LO2_Academic Writing
Providing Department: BA Romance Languages
Learning Outcome Description: LO2: Students will be able to write in the target language at an advanced-intermediate level.

3.0 BA Romance Languages LO3_Literary Competency
Providing Department: BA Romance Languages
Learning Outcome Description: LO3: Students will be able to discuss major cultural or literary trends of the target language.

4.0 BA Romance Languages LO4_Critical Thinking
Providing Department: BA Romance Languages
Learning Outcome Description: LO4: Students will be able to analyze linguistic, cultural, or literary content from multiple perspectives.

5.0 BA Romance Languages LO5_Research Skills_Bibliography
Providing Department: BA Romance Languages
Learning Outcome Description: LO5: Students will be able to create a bibliography comprised of academic sources.

6.0 BA Romance Languages LO6_Research Skills_Argument

Providing Department: BA Romance Languages

Learning Outcome Description: LO6: Students will be able to apply knowledge from academic sources to support an argument.

BA Slavic Studies

1 Acquisition of Essentials of Polish Cultural Competency

Providing Department: BA Slavic Studies

Learning Outcome Description:

Cultural Competency  Level: RUS 2710 (Introduction to Russian Culture)Outcome Details: Students will be able to analyze a contemporary news article in a way that demonstrates cultural and historical literacy. Specifically, they will be able to place a contemporary news event in the appropriate cultural context, articulate the main questions being discussed, identify the author’s perspective, and explain the significance of the event in relation to contemporary culture, politics, or society.

2 Achieving Language-Proficiency Goals in Polish: Speaking

Providing Department: BA Slavic Studies

Learning Outcome Description:

Speaking Skills  Level: POL 2060 (Composition and Conversation)  Due to a change in the scheduling POL 2060 was not taught in the academic year 2018/2019. Instead, in Winter 2019 POL 2030 (Polish Conversation, 1 Credit) was taught and the six students taking this course were evaluated during their final exam. Outcome Details: Students finishing 2060 will be able to demonstrate speaking skills at the Intermediate Mid-level as defined by ACTFL: Speakers at the Intermediate Mid sublevel are able to handle successfully a variety of uncomplicated communicative tasks in straightforward social situations. Conversation is generally limited to those predictable and concrete exchanges necessary for survival in the target culture. These include personal information related to self, family, home, daily activities, interests and personal preferences, as well as physical and social needs, such as food, shopping, travel, and lodging. Intermediate Mid speakers tend to function reactively, for example, by responding to direct questions or requests for information. However, they are capable of asking a variety of questions when necessary to obtain simple information to satisfy basic needs, such as directions, prices, and services. When called on to perform functions or handle topics at the Advanced level, they provide some information but have difficulty linking ideas, manipulating time and aspect, and using communicative strategies, such as circumlocution. Intermediate Mid speakers are capable of expressing personal meaning by creating with the language, in part by combining and recombining known elements and conversational input to produce responses typically consisting of sentences and strings of sentences. Their speech may contain pauses, reformulations, and self-corrections as they search for adequate vocabulary and appropriate language forms to express themselves. In spite of the limitations in their vocabulary and/or pronunciation and/or grammar and/or syntax, Intermediate Mid speakers are generally understood by sympathetic interlocutors accustomed to dealing with non-natives. Overall, Intermediate Mid speakers are at ease when performing Intermediate-level tasks and do so with significant quantity and quality of Intermediate-level language.

2 Achieving Language-Proficiency Goals in Russian: Speaking

Providing Department: BA Slavic Studies

Learning Outcome Description:

Speaking Skills  Level: RUS 2020 (Intermediate Russian) Outcome Details: Students finishing 2020 will be able to demonstrate speaking skills at the Intermediate Mid level as defined by ACTFL: “Speakers at the Intermediate Mid sublevel are able to handle successfully a variety of uncomplicated communicative tasks in straightforward social situations. Conversation is generally limited to those predictable and concrete exchanges necessary for survival in the target culture. These include personal information related to self, family, home, daily activities, interests and personal preferences, as well as physical and social needs, such as food, shopping, travel, and lodging. Intermediate Mid speakers tend to function reactively, for example, by responding to direct questions or requests for information. However, they are capable of asking a variety of questions when necessary to obtain simple information to satisfy basic needs, such as directions, prices, and services. When called on to perform functions or handle topics at the Advanced level, they provide some information but have difficulty linking ideas, manipulating time and aspect, and using communicative strategies, such as circumlocution. Intermediate Mid speakers are able to express personal meaning by creating with the language, in
part by combining and recombining known elements and conversational input to produce responses typically consisting of sentences and strings of sentences. Their speech may contain pauses, reformulations, and self-corrections as they search for adequate vocabulary and appropriate language forms to express themselves. In spite of the limitations in their vocabulary and/or pronunciation and/or grammar and/or syntax, Intermediate Mid speakers are generally understood by sympathetic interlocutors accustomed to dealing with non-natives. Overall, Intermediate Mid speakers are at ease when performing Intermediate-level tasks and do so with significant quantity and quality of Intermediate-level language.”

3 Achieving Language-Proficiency Goals in Polish: Writing

Providing Department: BA Slavic Studies

Learning Outcome Description:

Writing Skills: Level: POL 3030 (Advanced Speaking and Writing) Outcome details: Students write at the Advanced Low level as defined by ACTFL: “Writers at the Advanced Low level are able to meet basic work and/or academic writing requirements. They demonstrate the ability to narrate and describe in major time frames with some control of aspect. They are able to compose simple summaries on familiar topics. Advanced Low writers are able to combine and link sentences into texts of paragraph length and structure. Their writing, while adequate to satisfy the criteria of the Advanced level, may not be substantive. Writers at the Advanced Low sublevel demonstrate the ability to incorporate a limited number of cohesive devices, and may resort to some redundancy and awkward repetition. They rely on patterns of oral discourse and the writing style of their first language. These writers demonstrate minimal control of common structures and vocabulary associated with the Advanced level. Their writing is understood by natives not accustomed to the writing of non-natives, although some additional effort may be required in the reading of the text. When attempting to perform functions at the Superior level, their writing will deteriorate significantly.”

3 Achieving Language-Proficiency Goals in Russian: Writing

Providing Department: BA Slavic Studies

Learning Outcome Description:

Writing Skills: Level: RUS 3020 (Intermediate-Advanced Russian) Outcome details: students will be able to demonstrate writing skills at the Advanced Low level as defined by ACTFL: "Writers at the Advanced Low sublevel are able to meet basic work and/or academic writing needs. They demonstrate the ability to narrate and describe in major time frames with some control of aspect. They are able to compose simple summaries on familiar topics. Advanced Low writers are able to combine and link sentences into texts of paragraph length and structure. Their writing, while adequate to satisfy the criteria of the Advanced level, may not be substantive. Writers at the Advanced Low sublevel demonstrate the ability to incorporate a limited number of cohesive devices, and may resort to some redundancy and awkward repetition. They rely on patterns of oral discourse and the writing style of their first language. These writers demonstrate minimal control of common structures and vocabulary associated with the Advanced level. Their writing is understood by natives not accustomed to the writing of non-natives, although some additional effort may be required in the reading of the text. When attempting to perform functions at the Superior level, their writing will deteriorate significantly.”

MA Classics

1 MA Classics Learning Outcome 1

Providing Department: MA Classics

Learning Outcome Description:

At the completion of their studies, graduate students will demonstrate a higher level of reading comprehension in their target language (Latin, Ancient Greek, or both).

2 MA Classics Learning Outcome 2

Providing Department: MA Classics

Learning Outcome Description:

At the completion of their studies, graduate students will demonstrate a higher level of translating skills in their target language (Latin, Ancient Greek, or both).

3 MA Classics Learning Outcome 3

Providing Department: MA Classics

Learning Outcome Description:

At the completion of their studies, graduate students will demonstrate a higher level of understanding of grammar and syntax in their target language (Latin, Ancient Greek, or both).

4 MA Classics Learning Outcome 4

Providing Department: MA Classics

Learning Outcome Description:

At the completion of their studies, graduate students will demonstrate a higher level of knowledge of the history of literature in their target language (Latin, Ancient Greek, or both).
5 MA Classics Learning Outcome 5
Providing Department: MA Classics
Learning Outcome Description:
At the completion of their studies, graduate students will demonstrate an enhanced knowledge and understanding of the history of either Ancient Greece, Rome, or both, depending on their personal program.

6 MA Classics Learning Outcome 6
Providing Department: MA Classics
Learning Outcome Description:
At the completion of their studies, graduate students will demonstrate an enhanced knowledge and understanding of the cultural markers of Ancient Greece or Rome, or both, depending on their personal program.

7 MA Classics Learning Outcome 7
Providing Department: MA Classics
Learning Outcome Description:
At the completion of their studies, graduate students will demonstrate an ability to conduct research in Classics and present their findings as an oral presentation.

8 MA Classics Learning Outcome 8
Providing Department: MA Classics
Learning Outcome Description:
At the completion of their studies, graduate students will demonstrate an ability to conduct research in Classics and present their findings as a written format.

MA German

1 LO 1, Writing
Providing Department: MA German
Learning Outcome Description:
Students who receive a MA can write research papers that demonstrate their ability to: 1. formulate and support a thesis 2. support arguments with a range of primary and secondary sources 3. organize content clearly and according to North American academic style 4. make persuasive arguments 5. make some original arguments 6. use the MLA style sheet for bibliography and citations 7. write in German at the advanced high to superior level

2 LO 2, Presentational Speaking
Providing Department: MA German
Learning Outcome Description:
Students who receive an MA in German will demonstrate the ability to deliver an organized presentation on a scholarly subject that is appropriate to the audience. In so doing, they will demonstrate a clear understanding of the differences between effective oral and written presentations. Their presentations will effectively summarize and analyze materials for a listening audience and make effective use of visual aids and technology. They will demonstrate the attainment of presentational speaking skills German at the advanced high to superior ACTFL level.

3 LO 3, Interpersonal Communication
Providing Department: MA German
Learning Outcome Description:
Students receiving an MA in German will be able to engage in interpersonal communication the Advanced High to Superior level according to ACTFL standards. This means that they can express themselves fully and fluently with ease and largely with lexical, syntactic and intercultural accuracy not only on familiar and concrete topics but also on unfamiliar and complex issues within the realm of German cultural studies. Students can develop hypotheses, express opinions, and develop complex arguments to support them. They can communicate in this manner both in one-on-one and group settings, such as discussions.

4 LO 4, Analysis of Primary and Secondary Sources
Providing Department: MA German
Learning Outcome Description:
Students receiving an MA in German will be able to comprehend and analyze a wide range of authentic German sources. Their skills of reading and listening comprehension will be at the Advanced High to Superior level of the ACTFL scale. Primary sources include everyday discourse, such as newspapers, radio and television programs, literary texts published between the 18th and the 21st century, documentary and feature films released between the early 20th century and the present. Secondary sources include
academic writing, both analyses of literary and filmic narratives and theory in literary, linguistic and cultural studies. In their analysis of primary sources students can analyze the narratives with regard to specific themes and topics. In their analysis of secondary sources, students can understand and summarize the thesis and argument. They can also incorporate appropriate ideas from secondary sources into their own analyses of primary sources, both in written (essay) and oral (presentation) format.

MA in Language Learning

1.0 MALL Outcome 1_ Summarize theory and research

Providing Department: MA in Language Learning
Learning Outcome Description:
Students accurately summarize theory and research in second language acquisition and foreign language pedagogy

2.0 MALL Outcome 2_ Evaluate Existing Pedagogical Materials

Providing Department: MA in Language Learning
Learning Outcome Description: Students apply theory and research to the evaluation of pedagogical materials and activities.

3.0 MALL Outcome 3_Create pedagogically sound materials

Providing Department: MA in Language Learning
Learning Outcome Description: Students develop/create pedagogically sound materials. (Pedagogically sound = student appropriately applies theory and research to the target teaching context)

4.0 MALL Outcome 4_Assessment

Providing Department: MA in Language Learning
Learning Outcome Description: Students design valid and reliable assessments for context-specific FL learning.

MA Near Eastern Languages

LO1 Reading in the target language

Providing Department: MA Near Eastern Languages
Learning Outcome Description: To read complex Arabic/Hebrew texts at an advanced level.

LO2 Writing in the target language

Providing Department: MA Near Eastern Languages
Learning Outcome Description: To write in Arabic/Hebrew at an advanced level.

LO3 Speaking in the target language

Providing Department: MA Near Eastern Languages
Learning Outcome Description: To speak in Arabic/Hebrew at an advanced level. Develop conversational skills to discuss topics of interest using a variety of language functions (e.g. clarification, description, comparison, reasoning, argumentation, supporting ideas with the appropriate evidence, etc.).

LO4 Analyzing and interpreting primary texts

Providing Department: MA Near Eastern Languages
Learning Outcome Description: To analyze and interpret the structural, conceptual, and cultural contents of Arabic/Hebrew primary sources.

LO5 Evaluating scholarly literature

Providing Department: MA Near Eastern Languages
Learning Outcome Description: To evaluate the thesis, reasoning, evidences, and importance of scholarly literature (i.e. secondary sources) in the context of the student’s research area.

LO6 Developing information literacy

Providing Department: MA Near Eastern Languages
Learning Outcome Description: To determine what information is needed to address a research question; to access diverse library and information resources for
strategic exploration; to identify scholarship of high technical quality for use in developing the research question, hypothesis, theory, and methodology.

LO7 Writing arguments based on research
Providing Department: MA Near Eastern Languages
Learning Outcome Description: To write evidence-based research papers and well-reasoned argumentative essays with appropriate documentation of evidences/sources.

LO8 Communicating research in oral presentations
Providing Department: MA Near Eastern Languages
Learning Outcome Description: To present research in clear, concise, and engaging oral presentations for diverse audiences.

Program Goal 1 Developing a Comprehensive Curriculum
Providing Department: MA Near Eastern Languages
Learning Outcome Description: To offer a rich and coherent curriculum with important linkages across linguistic, literary, and cultural studies for students to develop a comprehensive understanding of the Near East

Program Goal 2 Effective Scheduling and POW Designs
Providing Department: MA Near Eastern Languages
Learning Outcome Description: To provide course schedules and registration/Plan of Work(POW) advising to ensure that students can make timely degree progress

Program Goal 3 Extracurricular Training
Providing Department: MA Near Eastern Languages
Learning Outcome Description: To train students in professional activities outside the classroom, such as conference participation, etc.

Program Goal 4 Connecting Students to Professional Opportunities
Providing Department: MA Near Eastern Languages
Learning Outcome Description: To connect students with potential employers, professional and alumni networks, and other professional opportunities (e.g. Career Day, GTA/teacher training, workshops, etc.)

MA Romance Languages

1.0 MA Romance Languages_LO1_ Advanced oral communication
Providing Department: MA Romance Languages
Learning Outcome Description: Students communicate orally at an advanced level in the target language.

2.0 MA Romance Languages_LO2_ Advanced Written Communication
Providing Department: MA Romance Languages
Learning Outcome Description: Students communicate in writing at an advanced level in the target language.

3.0 MA Romance Languages_LO3_ Critical Thinking/Analysis
Providing Department: MA Romance Languages
Learning Outcome Description: Students critically analyze linguistic principles, regional cultures, literary and cultural history, and critical theories and approaches.

4.0 MA Romance Languages_LO4_ Research Skills: Bibliography
Providing Department: MA Romance Languages
Learning Outcome Description: Students create an extensive bibliography comprised of field-specific academic sources.

5.0 MA Romance Languages_LO5_ Research Skills: Research Project
Providing Department: MA Romance Languages
Learning Outcome Description: Students develop an original research project appropriate to the field
6.0 MA Romance Languages LO6: Research Skills: Argument  
Providing Department: MA Romance Languages  
Learning Outcome Description: Students sustain an argument drawing from field-specific academic sources

PhD in Modern Languages

LO1: Advanced Requisite Knowledge of Essential Concepts  
Providing Department: PhD in Modern Languages  
Learning Outcome Description: Students develop advanced requisite knowledge of essential concepts relevant to their area of expertise.

LO2: Original Research Projects  
Providing Department: PhD in Modern Languages  
Learning Outcome Description: Students develop original research projects that contribute new knowledge to their field.

LO3: Research Skills: Bibliography  
Providing Department: PhD in Modern Languages  
Learning Outcome Description: Students create an extensive bibliography comprised of field-specific academic sources that is part of an original research project.

LO4: Research Skills: Engagement with Previous Scholarship  
Providing Department: PhD in Modern Languages  
Learning Outcome Description: Students incorporate and engage with field-specific academic sources to support an original argument; they demonstrate awareness of how their own work fits within their field of expertise.

LO5: Professionalization  
Providing Department: PhD in Modern Languages  
Learning Outcome Description: Students demonstrate professional competence beyond the classroom through the participation and organization of workshops and conferences, through grant writing, and through other forms of professional development.

LO6: Pedagogical Skills  
Providing Department: PhD in Modern Languages  
Learning Outcome Description: Students are able to both design and deliver content for language courses and other types of courses relevant to their field.

Communication Sciences and Disorders

Learning Outcome 3: Describe and Evaluate the Effects of Language and Culture on Normal and Disordered Communication Skills  
Providing Department: Communication Sciences and Disorders  
Learning Outcome Description: The student will be able to describe and evaluate the effects of language and culture on normal and disordered communication skills.

BA in Communication Sciences and Disorders

LO 5 Clinical Writing Skills  
Providing Department: BA in Communication Sciences and Disorders  
Learning Outcome Description: The student will demonstrate introductory level clinical writing skills.

LO 6 Professionalism  
Providing Department: BA in Communication Sciences and Disorders  
Learning Outcome Description: The students will demonstrate effective communication and interpersonal skills for professional interactions.
Learning Outcome 3 Describe and Evaluate the Effects of Language and Culture on Normal and Disordered Communication Skills

Providing Department: BA in Communication Sciences and Disorders
Learning Outcome Description:
The student will be able to describe and evaluate the effects of language and culture on normal and disordered communication skills

Learning Outcome 4 Professional Responsibilities

Providing Department: BA in Communication Sciences and Disorders
Learning Outcome Description:
The student will demonstrate the interpersonal skills and personal qualities necessary for developing effective professional relationships.

Learning Outcome 5 Demonstrate Oral and Written Communication Skills Appropriate for Introductory Clinical Experience

Providing Department: BA in Communication Sciences and Disorders
Learning Outcome Description:
The student will demonstrate oral and written communication skills appropriate for introductory clinical experience

Learning Outcome 6 Demonstrate General Academic Skills Appropriate for Introductory Clinical Experience and Graduate Coursework

Providing Department: BA in Communication Sciences and Disorders
Learning Outcome Description:
The student will demonstrate general academic skills (including computer, research and study skills) appropriate for introductory clinical experience and graduate coursework

Learning Outcome 7 Demonstrate General Academic Skills Appropriate for Introductory Clinical Experience and Graduate Coursework

Providing Department: BA in Communication Sciences and Disorders
Learning Outcome Description:
The student will demonstrate general academic skills (including computer, research and study skills) appropriate for introductory clinical experience and graduate coursework

Doctor of Audiology

1 General academic skills

Providing Department: Doctor of Audiology
Learning Outcome Description:
LO1: Demonstrate Academic Skills (including computer, research and study skills) in the areas of Hearing and Diagnostics

https://wayne.campuslabs.com/planning/reports/view/18384/year/2670/unit/44855
appropriate for Clinical Experience.

2 Language and Culture
Providing Department: Doctor of Audiology
Learning Outcome Description:
LO2: Describe and evaluate the effects of language and culture on normal and hearing impaired individuals.

L03 Clinical Skills
Providing Department: Doctor of Audiology
Learning Outcome Description:
The student will possess foundation clinical skills for diagnosis of hearing impairment and hearing (re)habilitation.

L04 Interpersonal Skills
Providing Department: Doctor of Audiology
Learning Outcome Description:
The student demonstrate the interpersonal and personal qualities necessary for developing effective professional relationships.

LO 5 Professionalism
Providing Department: Doctor of Audiology
Learning Outcome Description:
The students will demonstrate effective communication and interpersonal skills for professional interactions.

LO4 Service provision to CLD populations
Providing Department: Doctor of Audiology
Learning Outcome Description:
Administer clinically appropriate and culturally sensitive assessment measures for pure-tone audiometry, immittance testing, and clinical masking.

MA with a major in speech-language pathology

1 Knowledge
Providing Department: MA with a major in speech-language pathology
Learning Outcome Description:
LO1: Demonstrate academic skills in the areas of Communication Sciences and Disorders appropriate for clinical experience.

2 Skills
Providing Department: MA with a major in speech-language pathology
Learning Outcome Description:
LO2: Possess foundation for diagnosis and treatment for basic human communication and swallowing processes.

L03 Culture and Communication
Providing Department: MA with a major in speech-language pathology
Learning Outcome Description:
Describe and evaluate the effects of language and culture on normal and disordered communication skills.

L04 Interpersonal Skills
Providing Department: MA with a major in speech-language pathology
Learning Outcome Description:
The student will demonstrate the interpersonal skills and personal qualities necessary for developing effective professional relationships

LO 3 Professionalism
Providing Department: MA with a major in speech-language pathology
Learning Outcome Description:
The students will demonstrate effective communication and interpersonal skills for professional interactions.

LO 5 Culture and Communication
Providing Department: MA with a major in speech-language pathology
Learning Outcome Description:
The student will be able to describe and evaluate the effects of language and culture on normal and disordered communication skills

PhD with a major in Communication Sciences and Disorders

L03 Language and culture
Providing Department: PhD with a major in Communication Sciences and Disorders
Learning Outcome Description:
Demonstrate knowledge of the effects of language and culture on normal and disordered communication skills

L04 Teaching Preparation
Providing Department: PhD with a major in Communication Sciences and Disorders
Learning Outcome Description:
The student will complete a pedagogy course, a teaching portfolio, and at least ten hours of university classroom teaching under faculty supervision.

LO 1 Knowledge
Providing Department: PhD with a major in Communication Sciences and Disorders
Learning Outcome Description:
Students will read, analyze, and synthesize current scholarly publications in their major content area, and synthesize their findings in a written presentation.

LO 3 Professionalism
Providing Department: PhD with a major in Communication Sciences and Disorders
Learning Outcome Description:
Students will communicate effectively and interact using appropriate interpersonal skills for a professional setting.

LO 4 Culture and Communication
Providing Department: PhD with a major in Communication Sciences and Disorders
Learning Outcome Description:
The student will be able to describe and evaluate the effects of language and culture on normal and disordered communication skills

LO2 Research Skills
Providing Department: PhD with a major in Communication Sciences and Disorders
Learning Outcome Description:
Students will conduct independent research by completing pre-candidacy and dissertation research projects.

LO5 Teaching
Providing Department: PhD with a major in Communication Sciences and Disorders
Learning Outcome Description:
Students will design course content for a communication sciences and disorders course, and deliver course content to students at the university level.

BA in Computer Science

LO1 BA Computer Science_LO 1_Apply Principles
Providing Department: BA in Computer Science
Learning Outcome Description:
Students will be able to apply the principles of Computer Science, Algorithmic Principles, Mathematics, and scientific investigation to solve real-world problems appropriate to the discipline as part of a system development team.

LO2 BA Computer Science_LO 2_Lifelong Learning Skills
Providing Department: BA in Computer Science
Learning Outcome Description:
Students will have lifelong learning skills, which will allow them to successfully adapt to evolving technologies throughout their professional careers.

LO3 BA Computer Science_LO 3_sufficiently prepared for employment.
Providing Department: BA in Computer Science
Learning Outcome Description:
Students are sufficiently prepared for employment and will have significant experiences with complex software development for real-world problems.

LO4 BA Computer Science_LO 4_sufficient teamwork, communication, and interpersonal skills
Providing Department: BA in Computer Science
Learning Outcome Description:
Students will have sufficient teamwork, communication, and interpersonal skills to enable them to work with others effectively in their professional careers.

LO5 BA Computer Science_LO 5_Function ethically and responsibly
Providing Department: BA in Computer Science
Learning Outcome Description:
Students can function ethically and responsibly, and are conscious of ethical, social, global, legal, security and professional issues related to computing.

BS in Criminal Justice

1 Criminality
Providing Department: BS in Criminal Justice
Learning Outcome Description:
1. Students can use major theoretical explanations of crime and criminality to explain the general nature of crime and criminality.

2 Constitutional Rights, Judicial Procedure
Providing Department: BS in Criminal Justice
Learning Outcome Description: Students can interpret Constitutional rights and judicial procedure

3 Interrelationships
Providing Department: BS in Criminal Justice
Learning Outcome Description:
Students can analyze the interrelationships among the separate components of the criminal justice system.

4 Methods
Providing Department: BS in Criminal Justice
Learning Outcome Description:
Students can apply the scientific method to analysis of the methods and findings of a peer-reviewed journal article

5 Journal Article
Providing Department: BS in Criminal Justice
Learning Outcome Description: Students will demonstrate the ability to independently obtain a peer-reviewed journal article.

6 Written Work
Providing Department: BS in Criminal Justice
Learning Outcome Description:
Students will generate written work that is clearly written, well-organized, reveals critical thinking skills, and uses proper citations.

MS in Criminal Justice

1 Theories
Providing Department: MS in Criminal Justice
Learning Outcome Description:
Students will develop knowledge of theories of crime and criminality, research methodology, and the empirical validity of criminal justice theories.

2 Synthesis

**Providing Department:** MS in Criminal Justice

**Learning Outcome Description:**
Students will demonstrate synthesis on a particular criminal justice topic by accessing and integrating empirical and non-empirical information into a cohesive overview of current knowledge and critical public policy response.

3 Evaluating Literature

**Providing Department:** MS in Criminal Justice

**Learning Outcome Description:**
Students will demonstrate the ability to critically evaluate the meaning, value, and contribution of published literature in the field of Criminal Justice.

4 Data Analysis

**Providing Department:** MS in Criminal Justice

**Learning Outcome Description:**
Students will develop skills in analysis such that they can design and implement an appropriate collection and analysis of data to adequately answer a research question or hypothesis and interpret empirical findings.

5 Written Work

**Providing Department:** MS in Criminal Justice

**Learning Outcome Description:**
Students will generate written work that is clearly written, well-organized, reveals critical thinking skills, and uses proper citations.

**BA in Economics**

2 Learning Outcome 2 for B.A. in economics

**Providing Department:** BA in Economics

**Learning Outcome Description:**
Learning Outcome 2: Each student will demonstrate an understanding of the basic concepts and methods of microeconomics and macroeconomics. Outcome Assessment 2.1: Students will demonstrate their understanding by successfully completing Economics 5000, 5050 and 5100.

2 Learning Outcome for Economics 2010

**Providing Department:** BA in Economics

**Learning Outcome Description:**
ECO 2010 Supply, demand, price at the level of the firm and industry; business institutions and their operation; determinants of wage and salary levels, interest rates, rent, profits, income distribution; public policy in relation to business and labor. The student will learn the basics of microeconomic theory. Topics include markets supply and demand; labor market; market efficiency and its application; government intervention in specific markets; i.e., the impact of taxation. The course will also cover market structure and compares competitive markets to monopoly.

3 Learning Outcome 3 for B.A. in economics

**Providing Department:** BA in Economics

**Learning Outcome Description:**
Learning Outcome 3: Each student will be able to communicate economic ideas in both writing and speech. Outcome Assessment 3.1: Students will demonstrate their written and oral communication skills through their written work and class participation in 5000-level Economics courses. Outcome Assessment 3.2: Students will demonstrate their written communication skills through completion of ECO 5993, the writing-intensive requirement.

3 Learning Outcome for Economics 2020

**Providing Department:** BA in Economics

**Learning Outcome Description:**
ECO 2020 Determination of national income, consumption and saving, and investment; money, banking and the Federal Reserve; inflation and unemployment; monetary and fiscal policy; economic growth and productivity; the international sector. The student will learn the basics of macroeconomic theory. Topics include determination of national income, consumption and saving, and
investment; inflation and unemployment; money and interest rates; monetary and fiscal policy. This course may cover the following topics: economic growth and productivity; the international sector.

4 Learning Outcome 4 for B.A. in economics
Providing Department: BA in Economics
Learning Outcome Description:
Learning Outcome 4: Students will demonstrate the ability to critically evaluate articles on economic subjects. Outcome Assessment 4.1: Students will demonstrate their ability to evaluate articles on economic subjects through completion of ECO 5993, the writing-intensive requirement.

4 Learning Outcome for Economics 4000
Providing Department: BA in Economics
Learning Outcome Description:
ECO 4000  Students will be able to analyze economic problems using supply and demand techniques, using both diagrams and algebra. Students will be able to analyze consumer behavior using utility functions, indifference curves and budget lines, using diagrams and sometimes algebra. Students will be able to do this in a variety of contexts, including the basic model, labor-leisure choice, intertemporal consumption, and general equilibrium theory. Students will be able to analyze producer behavior using production functions, isoquants and cost curves, using diagrams and sometimes algebra. Students will be able to integrate the techniques above to analyze problems in market structure (competitive markets, monopoly, monopsony, etc.) and government intervention in the economy.

5 Learning Outcome for Economics 4050
Providing Department: BA in Economics
Learning Outcome Description:
ECO 4050 (formerly 5050)  Theory of national income determination. National output and income, saving and capital formation. The student will learn theory of national income determination, economic growth, inflation, and unemployment. Effects of monetary and fiscal policy are studied using numerical examples. Emphasis is placed on the difference between long-run and short-run effects. All the basic concepts of macroeconomic theory are covered in this course.

6 Learning Outcome for Economics 4100
Providing Department: BA in Economics
Learning Outcome Description:
ECO 4100 (formerly 5100)  Preliminary data analysis; simple regression; multiple regression; probability and statistics; inference in multiple regression; generalized regression. The student will learn basics of statistics and econometrics. Topics include the properties of data and the clear definition of descriptive statistics; difference between the sample and the population; estimation of population moments; basics of probability theory. Then, the student will learn the concepts and methods of hypothesis testing. Finally, the instructor will teach simple linear regression and multiple linear regression models that are often used not only in academic research but also in business and finance.

7 Learning Outcome for Economics 5300
Providing Department: BA in Economics
Learning Outcome Description:
Econ. 5300  Students successfully completing this course will be able to
● Identify the principal reasons that countries trade with each other
● Predict the likely effects of trade, including the effect on prices, levels of production, and consumer welfare in each country
● Predict the likely effects of worker migration and financial capital movements between countries
● Identify the major instruments of government trade policy and their effects
● Describe important recent events and trends related to international trade
● Describe the chief arguments in favor of liberalized international trade, and some arguments against liberalized trade.

8 Learning Outcome for Economics 5520
Providing Department: BA in Economics
Learning Outcome Description:
1. To learn and apply the concepts and methods of state and local public finance in depth. 2. To learn the historical context of state and local public finance, the connections to other fields of study, and the role of ethical values in decisions and policymaking. 3. To carry out independent research and communicate findings related to state and local public finance to students, faculty, and others. 4. To interpret critically and communicate quantitative and verbal information about state and local public finance. 5. To learn how state and local public finance can be applied to issues of contemporary concern. 6. To acquire skills and interests which enable students to be lifelong learners and contributing members of their communities, including critical thinking, clear and thoughtful communication, and honest and open inquiry.
Providing Department: BA in Economics

Learning Outcome Description:
** Students will be able to analyze public finance problems using a variety of different techniques. ** Students will be able to analyze consumer behavior in public finance problems, using utility functions, indifference curves and (linear or nonlinear) budget lines, using diagrams and algebra. ** Students will be able to analyze market equilibrium in public finance problems, using supply and demand techniques, using diagrams and algebra. ** Students will be able to examine efficiency (including differences between equilibrium outcomes and socially optimal outcomes) in public finance problems.

10 Learning Outcome for Economics 5270
Providing Department: BA in Economics

Learning Outcome Description:
Upon successful completion of this course, 1) Students will be able to develop the ability to apply the game theory knowledge to various economic situations and design the suitable tools to analyze and derive the economic intuition. 2) Students will be able to understand how decision makers (such as Individuals, groups, firms...) make their decisions strategically when their actions affect each other. 3) Students will be able to derive the basics of a game and translate the basic of a game into a wide range of conflicts. 4) Students will be able to analyze conflict dynamics from the standpoint of rationality. 5) Students will be able to theorize possible and probable strategies where information is complete and incomplete, 6) Students will be able to appraise theoretical predictions obtained from Game Theory.

11 Learning Outcome for Economics 5020
Providing Department: BA in Economics

Learning Outcome Description:
** You should learn how to analyze many different types of mathematical problems. ** You should learn to analyze some kinds of economics problems (although this is much less important than learning the mathematics). ** After taking this course, you should be prepared (from a mathematical point of view) to take most of our Ph.D.-level classes in economics. ** After taking this course and ECO 7021, you should be prepared (from a mathematical point of view) to take all of our Ph.D.-level classes in economics.

12 Learning Outcome for Economics 5210
Providing Department: BA in Economics

Learning Outcome Description:
The successful student will be able to apply economics to four issues of industrial organization: (1) how price, quality, and variety get determined in a market; (2) how social welfare depends on these features of a market; (3) how public policies toward industry affect social welfare; (4) how new fields such as behavioral economics and neuroeconomics have contributed to our understanding of market behavior.

BA in Mathematical Economics

1 Construct and solve economic models
Providing Department: BA in Mathematical Economics

Learning Outcome Description:
Students will construct and solve economic models using methods from calculus, linear algebra, probability theory, and other mathematical fields.

2a Explain economic phenomena
Providing Department: BA in Mathematical Economics

Learning Outcome Description:
Students will explain the causes of economic phenomena using economic reasoning and mathematical economic models.

2b Make predictions about economic events
Providing Department: BA in Mathematical Economics

Learning Outcome Description:
Students will make predictions about the effects of real world events using economic reasoning and mathematical economic models.

3 Evaluate economic policies
Providing Department: BA in Mathematical Economics

Learning Outcome Description: Students will evaluate economic policies and events using economic reasoning and models.

4 Critique economic arguments
Providing Department: BA in Mathematical Economics
Learning Outcome Description: Students will critique economic arguments through scholarly writing.

MA in Economics

1 Learning Outcome 1 for M.A. Program
Providing Department: MA in Economics
Learning Outcome Description:
1. A good foundation in microeconomic and macroeconomic theory as well as in quantitative methods.

1 Learning Outcome for Economics 6410
Providing Department: MA in Economics
Learning Outcome Description:
Eco 7410/6410 Economics of Human Resources  
Upon successful completion of this course, students will be able to do the following: Apply microeconomic theory to individual behavior regarding labor, education, marriage, fertility, and related outcomes. Evaluate public policies, workplace policies, and other ‘natural experiments’, and predict some of their impacts on labor force outcomes and demographic outcomes. Critique both empirical and theoretical aspects of empirical research papers in economics. Design and plan a theoretically-based empirical research project.

2 Learning Outcome 2 for M.A. Program
Providing Department: MA in Economics
Learning Outcome Description:
2. One field specialization in Industrial Organization, International Trade and Finance, Labor and Human Resources, or Health Economics.

2 Learning Outcome for Economics 6520
Providing Department: MA in Economics
Learning Outcome Description:
1. To learn and apply the concepts and methods of state and local public finance in depth. 2. To learn the historical context of state and local public finance, the connections to other fields of study, and the role of ethical values in decisions and policymaking. 3. To carry out independent research and communicate findings related to state and local public finance to students, faculty, and others. 4. To interpret critically and communicate quantitative and verbal information about state and local public finance. 5. To learn how state and local public finance can be applied to issues of contemporary concern. 6. To acquire skills and interests which enable students to be lifelong learners and contributing members of their communities, including critical thinking, clear and thoughtful communication, and honest and open inquiry.

3 Learning Outcome 3 for M.A. Program
Providing Department: MA in Economics
Learning Outcome Description:
3. In special cases, the M.A. student may choose a concentration in Advanced Microeconomics or Macroeconomics.

3 Learning Outcome for Economics 6510
Providing Department: MA in Economics
Learning Outcome Description:
** Students will be able to analyze public finance problems using a variety of different techniques. ** Students will be able to analyze consumer behavior in public finance problems, using utility functions, indifference curves and (linear or nonlinear) budget lines, using diagrams and algebra. ** Students will be able to analyze market equilibrium in public finance problems, using supply and demand techniques, using diagrams and algebra. ** Students will be able to examine efficiency (including differences between equilibrium outcomes and socially optimal outcomes) in public finance problems.

4 Learning Outcome 4 for M.A. Program
Providing Department: MA in Economics
Learning Outcome Description:
4. The M.A. program should provide Preparation for careers in research organizations, industry, and public service.

4 Learning Outcome for Economics 6100
Providing Department: MA in Economics
Learning Outcome Description:
Upon completion of this course, successful students will be able to Conduct Ordinary Least Square (OLS) regression for linear
models, and analyze the estimation and inference results; Evaluate the properties for OLS under different circumstances; Identify endogeneity issues and conduct Instrument Variable (IV) estimation when necessary; Apply Logit and Probit models to binary choice models; Identify the differences among corner solutions, censoring and truncations in samples and conduct suitable estimations; Assess whether a time series is stationary and conduct appropriate estimation and inferences.

5 Learning Outcome for Economics 6000

Providing Department: MA in Economics

Learning Outcome Description:

** You should learn how to analyze various economic situations that are stated in the form of microeconomics problems. ** You should learn to use graphical analysis in analyzing problems. ** You should learn to apply pre-calculus mathematical analysis in analyzing problems. ** You should learn to apply various calculus-based techniques (including ordinary derivatives, partial derivatives and Lagrangians) in analyzing problems.

6 Learning Outcome for Economics 6210

Providing Department: MA in Economics

Learning Outcome Description:

The learning outcomes here are similar to those for ECO 5210. Successful students here will be able to think at a higher level of abstraction, express ideas with greater clarity, and write analyses with greater rigor. The successful student will be able to apply economics to four issues of industrial organization: (1) how price, quality, and variety get determined in a market; (2) how social welfare depends on these features of a market; (3) how public policies toward industry affect social welfare; (4) how new fields such as behavioral economics and neuroeconomics have contributed to our understanding of market behavior.

PhD in Economics

1 Learning Outcome 1 for Ph.D. Program

Providing Department: PhD in Economics

Learning Outcome Description: 1. The student should acquire a solid foundation in economic theory and quantitative methods.

2 Learning Outcome 2 for Ph.D. Program

Providing Department: PhD in Economics

Learning Outcome Description: 2. The student will choose two or more field specializations from the following: Industrial Organization, International, Labor, and Health/Health Care; in preparation for careers in universities, research organizations, industry, and financial institutions.

3 Learning Outcome 3 for Ph.D. Program

Providing Department: PhD in Economics

Learning Outcome Description: 2. The student must choose two or more field specializations from the following: Industrial Organization, International, Labor, and Health/Health Care; in preparation for careers in universities, research organizations, industry, and financial institutions.

3 Learning Outcome for Economics 7410

Providing Department: PhD in Economics

Learning Outcome Description: Eco 7410/6410 Economics of Human Resources Upon successful completion of this course, students will be able to do the following: Apply microeconomic theory to individual behavior regarding labor, education, marriage, fertility, and related outcomes. Evaluate public policies, workplace policies, and other 'natural experiments', and predict some of their impacts on labor force outcomes and demographic outcomes. Critique both empirical and theoretical aspects of empirical research papers in economics. Design and plan a theoretically-based empirical research project.

3 Learning Outcome for Economics 7050

Providing Department: PhD in Economics

Learning Outcome Description: Economic growth theory; Business cycle model; Monetary policy. Students who take this course will be able to understand the general framework of neoclassical growth model and business cycle model. Also, they can explain the issues related to monetary policy based on modern theory.

9 Learning Outcome for Economics 7200

Providing Department: PhD in Economics

Learning Outcome Description:
ECO 7200 Industrial Organization I The successful student will know the literature on three fundamental issues of industrial organization: why firms direct resource allocation when prices could do the same thing, how a firm determines its boundary and how a firm organizes its activities. Beyond that, the successful student can do research on any of the following issues of markets: managerialism, fragility, contagion, leverage, and bubbles. The successful student is conversant in antitrust case history and can conduct economic analyses for parties involved in antitrust litigation.

10 Learning Outcome for Economics 7021

**Providing Department:** PhD in Economics

**Learning Outcome Description:**
Upon completion of this course, successful students will be able to: Define sets and their Cartesian products and apply basic operations on sets; Define various spaces and characterize their properties; Use convergence theory to determine limits of sequences; Use distribution functions to calculate moments, probabilities and conditional probabilities; Identify the commonly used distributions and derive their properties; Derive limiting distributions for a sequence of random variables and characterize their properties; Derive Euler Equation and solve Calculus of Variation problems; Apply Maximum Principle to solve Optimal Control problems; Derive Value Function and use Bellman Equation to solve Dynamic Programming problems.

11 Learning Outcome for Economics 7120

**Providing Department:** PhD in Economics

**Learning Outcome Description:**
Upon completion of this course, successful students will be able to: Conduct Generalized Method of Moments (GMM) estimation and inferences; Conduct time series analysis for stationary and nonstationary, univariate and multivariate data; Measure, model, estimate and forecast volatility; Estimate binary choice models; Identify sample selection problems and conduct censored or truncated regression analysis.

12 Learning Outcome for Economics 7020

**Providing Department:** PhD in Economics

**Learning Outcome Description:**
** You should learn how to analyze many different types of mathematical problems. ** You should learn to analyze some kinds of economics problems (although this is much less important than learning the mathematics). ** After taking this course, you should be prepared (from a mathematical point of view) to take most of our Ph.D.-level classes in economics. ** After taking this course and ECO 7021, you should be prepared (from a mathematical point of view) to take all of our Ph.D.-level classes in economics.

13 Learning Outcome for Economics 7060

**Providing Department:** PhD in Economics

**Learning Outcome Description:**
Detailed specifications of macroeconomic models; Interpretation of empirical macroeconomic models. Students who take this course will be able to understand the detailed specification of macroeconomic models. The theories of overlapping generations model, aggregate consumption, investment, unemployment, and nominal and real rigidities are covered. Students will be able to read and interpret the empirical literature on macroeconomic issues.

14 Learning Outcome for Economics 7100

**Providing Department:** PhD in Economics

**Learning Outcome Description:**
By the end of the course, the students will be able to understand the fundamental concepts and techniques in econometric analysis; be able to construct valid econometric models based on sound hypotheses; be able to apply linear regression analysis to real world problems and primary datasets; be able to identify and solve a number of common problems in linear regression estimation; be able to critically read and understand journal articles that use methods introduced in the course.

15 Learning Outcome for Economics 7110

**Providing Department:** PhD in Economics

**Learning Outcome Description:**
By the end of the course, the students will be able to understand the theoretical properties of various econometric estimation and testing procedures; be able to apply different mathematical, statistical and graphical techniques appropriately; be able to conduct empirical research at an advanced level using modern econometrics techniques; be able to critically interpret and analyze the regression results in a written report.

BA in English

1 Reading

**Providing Department:** BA in English
Learning Outcome Description:
READING: Students will be able to describe, explicate, analyze, comprehend, and explain literary, media, and/or rhetorical works.

2 Writing
Providing Department: BA in English
Learning Outcome Description:
WRITING: Students will be able to write logical and compelling essays that demonstrate fluency in close reading, clarity in argumentation, and sophistication in critical thinking, reflecting broad knowledge of a range of literary and cultural topics and methods. (NB: By “sophistication,” we mean nuance, complexity, and reflexivity.)

3 Research
Providing Department: BA in English
Learning Outcome Description:
RESEARCH: Students will be able to search for, identify, and evaluate pertinent primary and secondary sources, in both print and digital formats; identify, define, and use field-appropriate research methods as well as theoretical and interpretive frames; and integrate, with appropriate citation, sources, methods, and theories into original arguments.

4 Content Knowledge
Providing Department: BA in English
Learning Outcome Description:
CONTENT KNOWLEDGE: Students will be able to demonstrate familiarity with literary and cultural production from a range of communities and cultures; to make connections among diverse historical eras, genres, styles, forms, theories, and techniques; and to situate works within literary, historical, and cultural contexts.

New Learning Outcome (Program-level) Item
Providing Department: BA in English
Learning Outcome Description:

BA in Film Studies

1 Analysis
Providing Department: BA in Film Studies
Learning Outcome Description:
Students will be able to describe, explicate, comprehend, and explain moving image (and other) media, employing methods of formal, structural, theoretical, historical, technical, and cultural analysis.

2 Writing
Providing Department: BA in Film Studies
Learning Outcome Description:
Students will be able to write logical and compelling essays that demonstrate fluency in analysis, clarity in argumentation, and sophistication in critical thinking, reflecting broad knowledge of topics and methods in cinema and media studies. (NB: sophistication connotes nuance, complexity, and reflexivity)

3 Research
Providing Department: BA in Film Studies
Learning Outcome Description:
Students will be able to search for, identify, and evaluate pertinent scholarly sources in both print and digital formats; to identify, define, and use field-appropriate research methods as well as theoretical and interpretive frames; and to integrate, with appropriate citation, sources, methods, and theories into original arguments.

4 Content Knowledge
Providing Department: BA in Film Studies
Learning Outcome Description:
Students will be able to demonstrate familiarity with film and media production from a range of historical periods, national cinemas, communities, and cultures; to make connections among diverse historical eras, geographical locations, genres, styles, forms, techniques, and media; to explain and deploy major positions in the history of classical and contemporary film theory; and to situate works within economic, social, technical, and cultural contexts and systems.

Composition
Learning Outcome #1: Analyze occasions for writing
Providing Department: Composition
Learning Outcome Description:
Produce writing that demonstrates the ability to identify, describe, and analyze various occasions for writing, individual texts, genres, conventions, and audiences, from a rhetorical perspective.

Learning Outcome #2: Produce extended writing project
Providing Department: Composition
Learning Outcome Description:
Produce an extended writing project that uses research methods and research genres to explore a topic applicable to the course and that draws substantively on concepts from primary and/or secondary sources.

Learning Outcome #3: Use a flexible writing process
Providing Department: Composition
Learning Outcome Description:
Produce writing that shows use of a flexible writing process (generating ideas, drafting, substantive revision, and editing) and shows the ability to adapt this process for different writing situations and tasks.

Learning Outcome #4: Find, evaluate, and integrate research into writing
Providing Department: Composition
Learning Outcome Description:
Find, evaluate, and integrate research into writing

MA in English

A.1 Demonstrate broad knowledge of their field in English Studies.
Providing Department: MA in English
Learning Outcome Description: Plan A learning outcomes pertain to the Plan A Thesis track for the M.A. in English.

A.2 Conduct scholarly and creative work in an ethical manner, consistent with professional standards.
Providing Department: MA in English
Learning Outcome Description: Plan A learning outcomes pertain to the Plan A Thesis track for the M.A. in English.

A.3 Create an original work or an original body of work of aesthetic value, assessable by a Master's Thesis
Providing Department: MA in English
Learning Outcome Description: Plan A learning outcomes pertain to the Plan A Thesis track for the M.A. in English.

B.1 Demonstrate broad knowledge of their field in English Studies.
Providing Department: MA in English
Learning Outcome Description: Plan B learning outcomes pertain to the Plan B Essay track for the M.A. in English.

B.2 Conduct scholarly work in an ethical manner, consistent with professional standards.
Providing Department: MA in English
Learning Outcome Description: Plan B learning outcomes pertain to the Plan B Essay track for the M.A. in English.

B.3 Create scholarly work that demonstrates fluency and skill in the critical analysis of literature, media, culture, and/or rhetoric & composition, assessable by the M.A. Essay.
Providing Department: MA in English
Learning Outcome Description: Plan B learning outcomes pertain to the Plan B Essay track for the M.A. in English.

C.1 Demonstrate broad knowledge of their field in English Studies
Providing Department: MA in English
Learning Outcome Description: Plan C learning outcomes pertain to the Plan C Portfolio track for the M.A. in English.

C.2 Conduct scholarly and creative work in an ethical manner, consistent with professional standards.
Providing Department: MA in English
Learning Outcome Description: Plan C learning outcomes pertain to the Plan C Portfolio track for the M.A. in English.
C.3 Create scholarly work that demonstrates fluency and skill in the critical analysis of literature, media, culture, and/or rhetoric & composition, assessable by the M.A. Portfolio.

Providing Department: MA in English
Learning Outcome Description: Plan C learning outcomes pertain to the Plan C Portfolio track for the M.A. in English.

PhD in English

1 Demonstrate proficiency in their field.

Providing Department: PhD in English
Learning Outcome Description: Demonstrate proficiency in their field.

2 Conduct scholarly and professional activities in an ethical manner.

Providing Department: PhD in English
Learning Outcome Description: Conduct scholarly and professional activities in an ethical manner.

3 Meet degree benchmarks in a timely manner.

Providing Department: PhD in English
Learning Outcome Description: Meet degree benchmarks in a timely manner.

4 Create and defend scholarly work that makes a contribution to knowledge in the field.

Providing Department: PhD in English
Learning Outcome Description: Create and defend scholarly work that makes a contribution to knowledge in the field.

BA in Geology

1 Identification

Providing Department: BA in Geology
Learning Outcome Description: Students should be able to identify and name rocks, minerals and soils on the basis of their physical and mineralogical characteristics both in hand specimen and thin section.

2 Origin

Providing Department: BA in Geology
Learning Outcome Description: Students should be able to recognize geologic structures and be able to explain how and why they formed.

3 History

Providing Department: BA in Geology
Learning Outcome Description: Students should be able to summarize relative and numerical dating techniques and arrange major events in Earth history along the geologic time scale.

4 Three-Dimensional Thinking

Providing Department: BA in Geology
Learning Outcome Description: Students should be able to describe the structure, forces, properties and changes in the Earth's surface in three dimensions.

5 Mapping

Providing Department: BA in Geology
Learning Outcome Description: Students should be able to construct and interpret geologic maps and cross-sections.

BS in Environmental Science

1.0 Learning Outcome 1: Unit Conversions

Providing Department: BS in Environmental Science
Learning Outcome Description: Students will correctly apply unit conversions in flow rates, fluxes, and mass balance calculations.

2.0 Learning Outcome 2: Ecological Writing
Providing Department: BS in Environmental Science
Learning Outcome Description: Students will convey ecological concepts effectively in written form.

3.0 Learning Outcome 3: Interpreting Figures and Charts
Providing Department: BS in Environmental Science
Learning Outcome Description: Students will correctly interpret environmental data and relationships among environmental variables displayed in figures and charts.

4 Learning Outcome 4: Uncertainty and Error Propagation
Providing Department: BS in Environmental Science
Learning Outcome Description: Students will quantify uncertainty and propagation of error in environmental calculations.

BS in Geology

1 Identification
Providing Department: BS in Geology
Learning Outcome Description: Students should be able to identify and name rocks, minerals and soils on the basis of their physical and mineralogical characteristics both in hand specimen and thin section.

2 Origin
Providing Department: BS in Geology
Learning Outcome Description: Students should be able to recognize geologic structures and be able to explain how and why they formed.

3 History
Providing Department: BS in Geology
Learning Outcome Description: Students should be able to summarize relative and numerical dating techniques and arrange major events in Earth history along the geologic time scale.

4 Three-dimensional thinking
Providing Department: BS in Geology
Learning Outcome Description: Students should be able to describe the structure, forces, properties and changes in the Earth’s surface in three dimensions.

5 Mapping
Providing Department: BS in Geology
Learning Outcome Description: Students should be able to construct and interpret geologic maps and cross-sections.

MA in Geology

1 PLO 1. Major concepts
Providing Department: MA in Geology
Learning Outcome Description: Students will understand the major concepts of Earth science, and the techniques used to study them

2 PLO 2. Data analysis
Providing Department: MA in Geology
Learning Outcome Description: Students will be able to analyze environmental data in order to assess site contamination

3 PLO 3. Mitigation design
Providing Department: MA in Geology
Learning Outcome Description: Students will be able to design strategies to mitigate environmental contamination

4 PLO 4. Communication
Providing Department: MA in Geology
Learning Outcome Description:
Students will be able to communicate effectively to scientific and general audiences through written reports

MS in Geology

1 Research skills
Providing Department: MS in Geology
Learning Outcome Description:
Students who earn a Master of Science in Geology should be able to locate information in the scientific literature and critically read a scientific paper.

2 Technical writing
Providing Department: MS in Geology
Learning Outcome Description:
Students who earn a Master of Science in Geology should be able to write a scientific paper with appropriate statistical analysis and proper citations.

3 Oral communication
Providing Department: MS in Geology
Learning Outcome Description:
Students who earn a Master of Science in Geology should be able to describe/defend the results of a scientific investigation before a scientific audience.

4 Conceptual knowledge
Providing Department: MS in Geology
Learning Outcome Description:
Students who earn a Master of Science in Geology should be able to collect and analyze geological samples and data and demonstrate advanced proficiency in one or more of the following areas of study: Mineralogy, Petrology, Sedimentology, Stratigraphy, Structural Geology, Geologic Mapping, Hydrogeology, Geophysics, Geochemistry, Nuclear Geology, Environmental Geology, Soils, Contaminant Fate and Transport.

5 Problem Solving
Providing Department: MS in Geology
Learning Outcome Description:
Students who earn a Master of Science in Geology should be able to apply quantitative methods to solving problems, including identifying and formulating the appropriate calculations.

6 Data analysis
Providing Department: MS in Geology
Learning Outcome Description:
Students who earn a Master of Science in Geology should be able to perform statistical data analysis and evaluate uncertainties in data as well as apply geostatistical statistics when appropriate.

BA in History

1.0 B.A. LO1 - Compare Histories over Region and Time
Providing Department: BA in History
Learning Outcome Description:
History majors will be able to compare the histories of diverse geographical regions and appraise their development over time.

2.0 B.A. LO2 - Analyze Historical Documents
Providing Department: BA in History
Learning Outcome Description:
History majors will be able to analyze historical documents, address historical problems, and pose historical questions.

3.0 B.A. LO3 - Analytical Writing
Providing Department: BA in History
Learning Outcome Description: History majors will demonstrate a command of analytical writing.
4.0 B.A. LO4 - Ability to Conduct Independent Historical Research

Providing Department: BA in History
Learning Outcome Description: History majors will demonstrate the ability to conduct independent historical research.

GC in World History

1 Historical Knowledge in World History

Providing Department: GC in World History
Learning Outcome Description: Students will recognize broad global historical areas.

2 World Historical Analysis

Providing Department: GC in World History
Learning Outcome Description: Students will interpret prominent theories and methodologies in world history.

3 Historical Scholarship in World History

Providing Department: GC in World History
Learning Outcome Description:
Students will assemble relevant secondary sources of a specific historical area or event relating to world history for a literature review.

4 Linking World History to Academic Interests

Providing Department: GC in World History
Learning Outcome Description: Students will assess literature linking their own academic interests to broader historical scholarship.

MA in History

1 Identifying sources

Providing Department: MA in History
Learning Outcome Description: MA students will identify relevant primary and secondary sources.

2 Analyzing sources

Providing Department: MA in History
Learning Outcome Description: MA Students will analyze relevant primary and secondary sources.

3 Interpret events

Providing Department: MA in History
Learning Outcome Description: MA Students will interpret the principal historical events in a chosen field of history.

4 Historiography

Providing Department: MA in History
Learning Outcome Description: MA Students will engage with current historiography in a chosen field of history.

5 Historical argument

Providing Department: MA in History
Learning Outcome Description: MA Students will articulate a historical argument, using evidence based in primary and secondary sources.

6 High-quality writing

Providing Department: MA in History
Learning Outcome Description: MA Students will exhibit high-quality writing in their research projects.

MA in Public History

1.0 Historical Knowledge

Providing Department: MA in Public History
Learning Outcome Description:
MAPH students will interpret the principal historical events in a chosen field of history, and in the context of a public history
specialization

2.0 Research methods
Providing Department: MA in Public History
Learning Outcome Description: MAPH students will apply current methods of producing public history research

3.0 Public History Project
Providing Department: MA in Public History
Learning Outcome Description: MAPH students will carry out a public history project

4.0 Professional Experience
Providing Department: MA in Public History
Learning Outcome Description: MAPH students will demonstrate a professional, project-management skill set during an internship in the field

5.0 High-quality writing
Providing Department: MA in Public History
Learning Outcome Description: MAPH Students will exhibit high-quality writing in their research projects.

PhD in History

1 Identifying sources
Providing Department: PhD in History
Learning Outcome Description: Doctoral Students will identify relevant primary and secondary sources.

2 Analyzing sources
Providing Department: PhD in History
Learning Outcome Description: Doctoral Students will analyze relevant primary and secondary sources.

3 Interpret events
Providing Department: PhD in History
Learning Outcome Description: Doctoral Students will interpret the principal historical events in two major fields and one minor field of history.

4 Historiography
Providing Department: PhD in History
Learning Outcome Description: Doctoral students will engage with current historiography in their specialized area(s) of research.

5 Historical argument
Providing Department: PhD in History
Learning Outcome Description: Doctoral Students will articulate an original historical argument, using extensive evidence based in primary and secondary sources.

6 High-quality writing
Providing Department: PhD in History
Learning Outcome Description: Doctoral Students will exhibit high-quality writing in their research projects.

7 Professional standards
Providing Department: PhD in History
Learning Outcome Description: Doctoral students will adhere to professional/scholarly standards.

BA in Actuarial Mathematics

1 B.A. in Actuarial Mathematics: Learning Outcome 1. Knowledge of Core Subject Content
Providing Department: BA in Actuarial Mathematics
Learning Outcome Description: Each student completing the B.A. in Actuarial Mathematics program is expected to have a detailed understanding of basic
mathematical concepts and results from calculus, linear algebra, probability theory, mathematical and applied statistics, and higher-level mathematical subjects that depend on probability and statistics. Also, each actuarial student is expected to have an understanding of economics and finance.

2 B.A. in Actuarial Mathematics: Learning Outcome 2. Computing and Data Analysis
Providing Department: BA in Actuarial Mathematics
Learning Outcome Description:
Depending on the particular industry in which they work, actuaries need to analyze large amounts of data concerning people’s health, age, life span, driving records, area of residence, etc., so that they can estimate risks of death, illness, fire, theft, car accidents, and other mishaps. Thus each actuarial student is expected to master computing and data analysis skills.

3 B.A. in Actuarial Mathematics: Learning Outcome 3. Logical Thinking Skills
Providing Department: BA in Actuarial Mathematics
Learning Outcome Description:
Each student completing the B.A. in Actuarial Mathematics program is expected to be proficient in applying the laws of logic. Each student should understand the role of axioms or assumptions, distinguish between valid and fallacious arguments, abstract general principles from examples, and formulate precise and relevant mathematical statements and questions.

Providing Department: BA in Actuarial Mathematics
Learning Outcome Description:
Each student completing the B.A. in Actuarial Mathematics program should be able to communicate mathematical ideas and methods effectively with mathematicians and non-mathematicians, both orally and in writing.

5 B.A. in Actuarial Mathematics: Learning Outcome 5. Preparation for Employment
Providing Department: BA in Actuarial Mathematics
Learning Outcome Description:
Each student completing the B.A. in Actuarial Mathematics program should be prepared (in combination with needed independent self study) to take and pass the first set of actuarial exam(s). Also, each student should possess the mathematical background and skills needed for employment in the actuarial sciences.

BA in Mathematics

1 B.A. in Mathematics: Learning Outcome 1. Knowledge of Core Subject Content
Providing Department: BA in Mathematics
Learning Outcome Description:
Each student completing the B.A. in Mathematics program is expected to have a detailed understanding of basic mathematical concepts and results from calculus, linear algebra, abstract algebra, analysis, and at least one other subject such as applied mathematics, geometry, or probability and statistics.

2 B.A. in Mathematics: Learning Outcome 2. Logical Thinking Skills
Providing Department: BA in Mathematics
Learning Outcome Description:
Each student completing the B.A. in Mathematics program is expected to be proficient in applying the laws of logic. In particular, each student should understand the role of axioms or assumptions, distinguish between valid and fallacious arguments, abstract general principles from examples, and formulate precise and relevant mathematical statements and questions.

3 B.A. in Mathematics: Learning Outcome 3. Communication Skills
Providing Department: BA in Mathematics
Learning Outcome Description:
Each student completing the B.A. in Mathematics program should be able to communicate mathematical ideas and methods effectively, both orally and in writing.

4 B.A. in Mathematics: Learning Outcome 4. Preparation for Employment
Providing Department: BA in Mathematics
Learning Outcome Description:
Each student completing the B.A. in Mathematics program should have mathematical skills suitable for employment in government, industry, or education.
BS in Mathematics

1 B.S. in Mathematics: Learning Outcome 1. Knowledge of Core Subject Content
Providing Department: BS in Mathematics
Learning Outcome Description:
Each student completing the B.S. in Mathematics program is expected to have a detailed understanding of basic mathematical concepts and results from calculus, linear algebra, abstract algebra, analysis, and at least one other subject such as applied mathematics, geometry, or probability and statistics.

2 B.S. in Mathematics: Learning Outcome 2. Logical Thinking Skills
Providing Department: BS in Mathematics
Learning Outcome Description:
Each student completing the B.S. in Mathematics program is expected to be proficient in applying the laws of logic. In particular, each student should understand the role of axioms or assumptions, distinguish between valid and fallacious arguments, abstract general principles from examples, and formulate precise and relevant mathematical statements and questions.

3 B.S. in Mathematics: Learning Outcome 3. Communication Skills
Providing Department: BS in Mathematics
Learning Outcome Description:
Each student completing the B.S. in Mathematics program should be able to communicate mathematical ideas and methods effectively, both orally and in writing.

4 B.S. in Mathematics: Learning Outcome 4. Preparation for Employment
Providing Department: BS in Mathematics
Learning Outcome Description:
Each student completing the B.S. in Mathematics program should have mathematical skills suitable for employment in government, industry, or education.

5 B.S. in Mathematics: Learning Outcome 5. Mathematics' Place in the Natural Sciences
Providing Department: BS in Mathematics
Learning Outcome Description:
Each student completing the B.S. in Mathematics program should appreciate the essential role of mathematics in the natural sciences.

BS in Statistics

1 B.S. in Statistics: Learning Outcome 1. Knowledge of Core Subject Content
Providing Department: BS in Statistics
Learning Outcome Description:
Each student completing the B.S. in Statistics program is expected to have a detailed understanding of basic mathematical concepts and results from calculus, linear algebra, and probability, as well as a solid knowledge of statistics. With the help of an advisor, students select electives from a wide variety of courses according to their perceived future needs.

2 B.S. in Statistics: Learning Outcome 2. Computing and Data Analysis
Providing Department: BS in Statistics
Learning Outcome Description:
The application of statistics to real world problems requires analysis of data. Usually the data sets are large in size, so the analysis is done with the help of computers. Students are therefore required to acquire skills in computing and data analysis.

3 B.S. in Statistics: Learning Outcome 3. Logical Thinking Skills
Providing Department: BS in Statistics
Learning Outcome Description:
Each student completing the B.S. in Statistics program is expected to be proficient in applying the laws of logic. Each student should understand the role of axioms or assumptions, distinguish between valid and fallacious arguments, abstract general principles from examples, and formulate precise and relevant mathematical statements and questions.

Providing Department: BS in Statistics
Learning Outcome Description:
Each student completing the B.S. in Statistics program should be able to communicate mathematical ideas and methods effectively, both orally and in writing.

5 BS in Statistics: Learning Outcome 5. Preparation for Employment
Providing Department: BS in Statistics
Learning Outcome Description:
Each student completing the B.S. in Statistics program should have mathematical skills suitable for employment in government, industry, or education.

MA in Applied Mathematics

1 M.A. in Applied Mathematics: Learning Outcome 1. Broad Background
Providing Department: MA in Applied Mathematics
Learning Outcome Description:
Each student completing the M.A. in Applied Mathematics should possess a broad background in applied mathematics and in a related area outside of mathematics if he/she chooses to do a minor outside of mathematics.

2 M.A. in Applied Mathematics: Learning Outcome 2. Depth of Knowledge in a Specific Applied Area
Providing Department: MA in Applied Mathematics
Learning Outcome Description:
Each student completing the M.A. in Applied Mathematics should possess a broad background in an area for which applied mathematics is relevant. If the student chooses to do a minor in an area outside of mathematics, he/she should possess an introductory background in that particular area.

3 M.A. in Applied Mathematics: Learning Outcome 3. Communication Skills
Providing Department: MA in Applied Mathematics
Learning Outcome Description:
Each student completing the M.A. in Applied Mathematics should be able to communicate mathematical ideas and methods effectively, both orally and in writing.

4 M.A. in Applied Mathematics: Learning Outcome 4. Employment Prospects
Providing Department: MA in Applied Mathematics
Learning Outcome Description:
Each student completing the M.A. in Applied Mathematics should have mathematical skills suitable for employment in government, industry, or academia.

MA in Mathematics

1 M.A. in Mathematics: Learning Outcome
Providing Department: MA in Mathematics
Learning Outcome Description:
Each student completing the M.A. in Mathematics will have a solid mathematical foundation suitable for future Ph.D. work in mathematics.

2 M.A. in Mathematics: Learning Outcome
Providing Department: MA in Mathematics
Learning Outcome Description:
Each student completing the M.A. in Mathematics possesses mathematical skills suitable for employment in government, industry, or academics.

3 M.A. in Mathematics: Learning Outcome
Providing Department: MA in Mathematics
Learning Outcome Description:
Each student completing the M.A. in Mathematics can effectively communicate in mathematical terms, both written and orally.

4 M.A. in Mathematics: Learning Outcome
Providing Department: MA in Mathematics
Learning Outcome Description:
Each student completing the M.A. in Mathematics has a detailed understanding of a broad subset of known mathematical notions and results.

**MA with a major in Mathematical Statistics**

1 **M.A. in Mathematical Statistics: Learning Outcome 1. Theoretical Foundation**
   
   **Providing Department:** MA with a major in Mathematical Statistics
   
   **Learning Outcome Description:**
   Each student should possess a solid mathematical foundation in statistics for future PhD work in statistics or a related field and for employment in industry, government and education.

2 **M.A. in Mathematical Statistics: Learning Outcome 2. Practical Skills for Employment**
   
   **Providing Department:** MA with a major in Mathematical Statistics
   
   **Learning Outcome Description:**
   Each student should possess practical statistical skills for employment in industry, government and education.

3 **M.A. in Mathematical Statistics: Learning Outcome 3. Communication Skills**

   **Providing Department:** MA with a major in Mathematical Statistics

   **Learning Outcome Description:**
   Each student should be able to communicate statistical ideas and methods effectively, both orally and in writing.

4 **M.A. in Mathematical Statistics: Learning Outcome 4. Mathematical Expressions**

   **Providing Department:** MA with a major in Mathematical Statistics

   **Learning Outcome Description:**
   Each student is expected to have a detailed understanding of a broad set of known mathematical and statistical notations.

**MS in Mathematics**

1 **M.S. in Mathematics: Learning Outcome 1. Mathematical Foundation**

   **Providing Department:** MS in Mathematics

   **Learning Outcome Description:**
   Each student completing the M.S. in Mathematics should have a solid mathematical foundation for future Ph.D. work in mathematics.

2 **M.S. in Mathematics: Learning Outcome 2. Broad Background**

   **Providing Department:** MS in Mathematics

   **Learning Outcome Description:**
   Each student completing the M.S. in Mathematics should have a detailed understanding of a broad subset of mathematical notions and results.

3 **M.S. in Mathematics: Learning Outcome 3. Communication Skills**

   **Providing Department:** MS in Mathematics

   **Learning Outcome Description:**
   Each student completing the M.S. in Mathematics should be able to communicate mathematical ideas and methods effectively, both orally and in writing.

4 **M.S. in Mathematics: Learning Outcome 4. Employment Prospects**

   **Providing Department:** MS in Mathematics

   **Learning Outcome Description:**
   Each student completing the M.S. in Mathematics should have mathematical skills suitable for employment in government, industry or academia.

**PhD in Mathematics**

1 **Ph.D. in Mathematics: Learning Outcome 1. Solid Foundation**

   **Providing Department:** PhD in Mathematics

   **Learning Outcome Description:**
   Each student completing the Ph.D. in Mathematics should have a solid foundation in a broad selection of mathematical areas.
2 Ph.D. in Mathematics: Learning Outcome 2. Original Research

**Providing Department:** PhD in Mathematics

**Learning Outcome Description:**
Each student completing the Ph.D. in Mathematics is expected to make original research contributions in a specific field of study.

3 Ph.D. in Mathematics: Learning Outcome 3. Deep Knowledge in Specific Field

**Providing Department:** PhD in Mathematics

**Learning Outcome Description:**
Each student completing the Ph.D. in Mathematics should have deep knowledge in a specific field of study.

4 Ph.D. in Mathematics: Learning Outcome 4. Employment Prospects

**Providing Department:** PhD in Mathematics

**Learning Outcome Description:**
Each student completing the Ph.D. in Mathematics should possess mathematical skills suitable for employment in government, industry, or academia.

**BA in Nutrition and Food Sciences**

Learning Outcome 1 Integrate general research and analytical skills

**Providing Department:** BA in Nutrition and Food Sciences

**Learning Outcome Description:** Integrate general research and analytical skills into contemporary food and nutrition issues

Learning Outcome 2 Understand the structure, biochemical and metabolic functions

**Providing Department:** BA in Nutrition and Food Sciences

**Learning Outcome Description:** Understands the structure, biochemical and metabolic functions of nutrients and other dietary constituents

Learning Outcome 3 Apply knowledge of food, diets, and supplements

**Providing Department:** BA in Nutrition and Food Sciences

**Learning Outcome Description:** Apply knowledge of food, diets, and supplements in assessment and planning optimal diets

Learning Outcome 4 Apply techniques of nutritional status assessment

**Providing Department:** BA in Nutrition and Food Sciences

**Learning Outcome Description:** Apply techniques of nutritional status assessment in intervention and policy-making for healthy people and those with chronic diseases

**BS in Dietetics**

Learning Outcome 1 Dietetics Learning Outcomes Assessment CRD 1

**Providing Department:** BS in Dietetics

**Learning Outcome Description:**
Scientific & Evidence Base of Practice: Integration of scientific information and research into practice

Learning Outcome 2 Dietetics Learning Outcomes Assessment CRD 2

**Providing Department:** BS in Dietetics

**Learning Outcome Description:** Professional Practice Expectations: Beliefs, values, attitudes and behaviors for the professional dietitian level of practice

Learning Outcome 3 Dietetics Learning Outcomes Assessment CRD 3

**Providing Department:** BS in Dietetics

**Learning Outcome Description:** Clinical and Customer Services: Development and delivery of information, products and services to individuals, groups and populations

Learning Outcome 4 Dietetics Learning Outcomes Assessment CRD 4

**Providing Department:** BS in Dietetics
Learning Outcome Description:
Practice Management and Use of Resources: Strategic application of principles of management and systems in the provision of services to individuals and organizations

Learning Outcome Overview An Overview of Learning outcome
Providing Department: BS in Dietetics
Learning Outcome Description:
•The CPD is accredited by the Academy of Nutrition and Dietetics educational arm – Accreditation Council for Education in Nutrition and Dietetics (ACEND) – The accreditation cycle is 7 years, with reporting annually • ACEND education standards include learning outcomes – Core Competencies (CRDs) • All Programs must have an assessment plan – The plan includes data collection on • Measurable objectives for each CRD • Methods used for data collection, including tools and timeline • Designation of person/s responsible for the data collection

BS in Nutrition and Food Sciences
Learning Outcome 1 Integrate general research and analytical skills
Providing Department: BS in Nutrition and Food Sciences
Learning Outcome Description: Integrate general research and analytical skills into contemporary food and nutrition issues

Learning Outcome 2 Understand the structure, biochemical and metabolic functions
Providing Department: BS in Nutrition and Food Sciences
Learning Outcome Description:
Understand the structure, biochemical and metabolic functions of nutrients and other dietary constituents

Learning Outcome 3 Apply knowledge of food, diets, and supplements
Providing Department: BS in Nutrition and Food Sciences
Learning Outcome Description:
Apply knowledge of food, diets, and supplements in assessment and planning optimal diets

Learning Outcome 4 Apply techniques of nutritional status assessment
Providing Department: BS in Nutrition and Food Sciences
Learning Outcome Description:
Apply techniques of nutritional status assessment in interventions and policy-making for healthy people and those with chronic diseases

MA in Nutrition and Food Sciences
Learning Outcome 1 Understand the structure, biochemical and metabolic.....
Providing Department: MA in Nutrition and Food Sciences
Learning Outcome Description:
Understand the structure, biochemical and metabolic functions of nutrients and other dietary constituents and integrate general research and analytical skills into food and nutrition issues at an advanced level

Learning Outcome 2 Develop scientific methods, collect and interpret data
Providing Department: MA in Nutrition and Food Sciences
Learning Outcome Description: Develop scientific methods, collect and interpret data

Learning Outcome 3 Develop a testable hypothesis, locate and utilize information related to his/her field of study
Providing Department: MA in Nutrition and Food Sciences
Learning Outcome Description:
Develop a testable hypothesis, locate and utilize information related to his/her field of study and read, understand and critically review literature

Learning Outcome 4 Analyze and explain the contributions his/her work to the field of existing knowledge....
Providing Department: MA in Nutrition and Food Sciences
Learning Outcome Description:
Analyze and explain the contributions his/her work to the field of existing knowledge: Communicate the importance of his/her work in an oral presentation and written format
MS in Nutrition and Food Sciences

Learning Outcome 1 Understand the structure, biochemical and metabolic......

Providing Department: MS in Nutrition and Food Sciences

Learning Outcome Description:
Understand the structure, biochemical and metabolic functions of nutrients and other dietary constituents and integrate general research and analytical skills into food and nutrition issues at an advanced level

Learning Outcome 2 Develop scientific methods, collect and interpret data

Providing Department: MS in Nutrition and Food Sciences

Learning Outcome Description: Develop scientific methods, collect and interpret data

Learning Outcome 3 Develop a testable hypothesis, locate and utilize and critically review literature

Providing Department: MS in Nutrition and Food Sciences

Learning Outcome Description: Develop a testable hypothesis, locate and utilize information related to his/her field of study and read, understand and critically review literature

Learning Outcome 4 Analyze and explain the contributions his/her work to the field of existing knowledge..

Providing Department: MS in Nutrition and Food Sciences

Learning Outcome Description: Analyze and explain the contributions his/her work to the field of existing knowledge: Communicate the importance of his/her work in an oral presentation and written format

PhD in Nutrition and Food Sciences

Learning Outcome 1 Develop and display foundation in nutrition and food science for continuing Ph.D. programs in either nutrition or food science disciplines

Providing Department: PhD in Nutrition and Food Sciences

Learning Outcome Description: Develop and display foundation in nutrition and food science for continuing Ph.D. programs in either nutrition or food science disciplines

Learning Outcome 2 Understand the structure, biochemical and metabolic functions of nutrients and other dietary constituents and integrate general research and analytical skills into food and nutrition issues at an advanced level

Providing Department: PhD in Nutrition and Food Sciences

Learning Outcome Description: Understand the structure, biochemical and metabolic functions of nutrients and other dietary constituents and integrate general research and analytical skills into food and nutrition issues at an advanced level

Learning Outcome 3 Apply acquired scientific knowledge in nutrition and food science to research and developing hypotheses

Providing Department: PhD in Nutrition and Food Sciences

Learning Outcome Description: Apply acquired scientific knowledge in nutrition and food science to research and developing hypotheses

Learning Outcome 4 Develop scientific methods, collect and interpret data and draft manuscripts

Providing Department: PhD in Nutrition and Food Sciences

Learning Outcome Description: Develop scientific methods, collect and interpret data and draft manuscripts

Post Bachelor Certificate in Dietetics

Learning Outcome 1 Dietetics Learning Outcomes Assessment CRD 1

Providing Department: Post Bachelor Certificate in Dietetics

Learning Outcome Description: Scientific & Evidence Base of Practice: Integration of scientific information and research into practice

Learning Outcome 2 Dietetics Learning Outcomes Assessment CRD 2
Providing Department: Post Bachelor Certificate in Dietetics

Learning Outcome Description:
Professional Practice Expectations: Beliefs, values, attitudes and behaviors for the professional dietitian level of practice

Learning Outcome 3 Dietetics Learning Outcomes Assessment CRD 3

Providing Department: Post Bachelor Certificate in Dietetics

Learning Outcome Description:
Clinical and Customer Services: Development and delivery of information, products and services to individuals, groups and populations

Learning Outcome 4 Dietetics Learning Outcomes Assessment CRD 4

Providing Department: Post Bachelor Certificate in Dietetics

Learning Outcome Description:
Practice Management and Use of Resources: Strategic application of principles of management and systems in the provision of services to individuals and organizations

Learning Outcome Overview An Overview of Learning Outcome

Providing Department: Post Bachelor Certificate in Dietetics

Learning Outcome Description:
- The CPD is accredited by the Academy of Nutrition and Dietetics educational arm – Accreditation Council for Education in Nutrition and Dietetics (ACEND) – The accreditation cycle is 7 years, with reporting annually – ACEND education standards include learning outcomes – Core Competencies (CRDs) – All Programs must have an assessment plan – The plan includes data collection on • Measurable objectives for each CRD • Methods used for data collection, including tools and timeline • Designation of person/s responsible for the data collection

Latino/a and Latin American Studies Co-major

1 Describe, in broad terms, some of the areas of focus of Latino/a Studies and Latin American Cultural Studies.

Providing Department: Latino/a and Latin American Studies Co-major

Learning Outcome Description:
- Upon completion of the minor students should have a general understanding of the differences and similarities between Latino/a Studies and Latin American Studies and how they complement each other.

2 Compare and contrast different academic fields (e.g., sociology, literature and history) and how they contribute to Latino/a and Latin American Studies.

Providing Department: Latino/a and Latin American Studies Co-major

Learning Outcome Description:
- Upon completion of the minor, students should have a working knowledge of how different academic disciplines (such as history, sociology and literature) approach, present or explain Latino/a and Latin American Studies.

3 Demonstrate a basic understanding of the some of the major cultural, social, economic or political forces that have shaped the development of diverse Latino/a and Latin American communities or societies.

Providing Department: Latino/a and Latin American Studies Co-major

Learning Outcome Description:
- Upon completion of the minor, students should have a basic grasp of how colonialism, annexation, immigration, race, class, ethnicity and/or gender have contributed to the formation of distinctive Latino/a and Latin American social groups.

4 Investigate, through original research, methods that can and have been used by Latino/as and Latin Americans to solve challenges faced by their communities.

Providing Department: Latino/a and Latin American Studies Co-major

Learning Outcome Description:
- Upon completion of the minor, students should be familiar with some of exclusionary policies around immigration, language, employment, schooling, housing, or civic engagement that Latinos/as have encountered in the U.S., and be able to propose potential solutions for addressing those challenges.

Co-major in Peace and Conflict

1 Subject Area Knowledge and Societal Remedies

Providing Department: Co-major in Peace and Conflict
Learning Outcome Description:

PCS 2050 Non-violence class demonstrated excellent learning outcomes and active use of learning, typical of those in our general undergraduate set, despite Covid. The indicators included the following account: My Winter 2020 semester class was a beautiful example of what I consider a successful teaching-learning community. The students truly supported and appreciated each other. Several of them even met as a group after class and continued to build caring friendships. In spirit and action, they demonstrated how a diverse group of individuals would benefit from relating to each other based on the principles of non-violence and emotional intelligence. Their exchanges were expressed with respect and empathy and many of them extended these emotionally intelligent interactions to their family and friends (several students made the effort to reconcile broken relationships when they realized how they could have handled the prior situations differently). A majority of the students related their experiences in their well-written observations and reflective papers. An especially good example of such an experience is attached: “This week my mother tested my emotional intelligence abilities. . .she is occasionally overwhelmed and stressed. . .she got angry with me [after a family argument]. . .and told me I shouldn’t go [to the store] because it was late. . .She was not happy with my response and told me I could do what I want if I just moved out and that I should do that because I never listen anyways. This statement made my blood boil. . .but I waited a moment to respond. I did the heart lock-in technique because I felt that it fit since I know I love her. I stayed silent for a few minutes even though I know it made her more upset temporarily. . .I went over the emotions I felt. . .and tried especially to consider every aspect of the situation. . .Once she was alone in her room I knocked and quietly sat on her bed. . .I told her I was sorry I talked back and that I didn’t understand why she wanted me to stay home. . .She started saying [why] she is stressed out. . .While she talked, I tried to be as. . .attentive as I could. I tried repeating what she was saying back to her so she knew I was really listening what she was saying. . .she talked for at least an hour and I think hearing herself out loud really helped her to feel better and plan stronger emotionally controlled conversations. I feel like taking a break from the situation and walking away until I could. . .acknowledge my anger and let it pass, and then do the breathing exercises. . .dramatically improved my emotional control before I offered myself to be a listener. I was able to focus on her conflicts because I had already settled my own.” Demonstrated knowledge of and critical thinking about Peace and Conflict related societal problems and remedial methods. Problems include violence ramifications and management, conflict definitions and aspects in local, interpersonal and global contexts, and definitions of peace. Critical thinking entails balanced views with pros and cons about implications and remedies.” A number of students have written to praise what they learned after the end of the class, including one from 2008 who has practiced the principles ever since.

2 Life changing impacts

Providing Department: Co-major in Peace and Conflict

Learning Outcome Description:

Self-awareness of how peace and conflict issues affect the student’s personal life. Changes for student’s personal outlook instilled by courses. See the indicators from the student experience under Learning Outcomes. These are typical especially of the skill building course in non-violence. The advanced (5000 level) course in Dispute Resolution reported similar life changing outcomes from Fall 2019: “I learned the basic principles of dispute system design as well as the ability to assess what ADR process is necessary to manage a particular situation. I learned a lot, not only from the readings assigned and the coursepack, . . .the lectures and videos in class were the greatest source of learning. I learned about negotiations from various perspectives that I had not considered before, such as labor/ mgt negotiations. I learned the importance of listening and I have tried to make it a milestone of my daily life. I have learned to listen for the needs and interests of people. I learned not to let my ego control my reactions and conversations. This entire class made me learn to start thinking outside the box and looking at options, . . .it was a great experience. I learned the importance of understanding and responding skills in communication. I learned to communicate effectively. . .I also learned to avoid giving the person I am communicating with nonaccepting responses that would cause that person to become defensive thereby blocking constructive communication. I learned that Active Listening and Assertiveness theory can go a long way in reducing defensive reactions in others. This course provided a practical and easy to understand guide to developing good communication skills, particularly Active Listening, as well as how to deliver and receive effective feedback. I learned what the barriers are to effective communication, as well as the importance of establishing a supportive rather than a defensive climate. I learned that in addition to evaluating the behavior of others you need to examine your own. I learned that in the process of observing and evaluating the behavior of others I need to better understand their nonverbal communication as well as their verbal, in other words I learned to pay attention to body language and paralinguistics. I learned how ineffective it is to immediately give advice to a person you are trying to help solve a problem, and to not get emotionally involved in that person’s problem. I enjoyed this course and most importantly the humor that went along with the class lectures. I believe that the real life experiences which carried over into the lectures made it more relatable and easier to understand. Many of the lectures and course materials I learned in this class will be used by me in my everyday life. As an older student I can see that many of the negotiation tools taught in this class are techniques I have used myself and several others wish I had used in other situations. I actually found myself using the techniques I learned in this class in my current job. I look forward to using the skills I learned in this class in my future career. Prior to taking this class I knew nothing about ADR and didn’t know the difference between Mediation, Arbitration, and Adjudication. I learned that being mindful of your reactions can change outcomes, and to apply this in my everyday life. I was impressed by how down to earth many of the strategies we learned turned out to be. I learned ways to subvert the manipulative tactics often employed in everyday life. I think that this course or some premutation of the material could also be appropriate general education credit. Much of communication has more to do with emotional intelligence than vocabulary and sentence structure. Discussing both Assertiveness Theory and Transactional Analysis could be helpful. I learned that we must first understand our own interests and feelings before entering into negotiations. Negotiation is everywhere, I used the skills I learned in this class to finally be able to communicate with my 13 year old son. I learned that dressing appropriately for a situation is a way to communicate with others. Preperation is a must and thinking about what you are going to wear is the first step in that process. I liked the idea of Interest Based Negotiation. I learned that the key to negotiations
is listening not talking. I learned how to be an Active Listener instead of thinking ahead about what's on my mind while the other person is talking. I learned the importance of Paraphrasing and how that is a habit that you can use to force yourself to listen. Assertiveness Theory helped me to understand that I am a passive person and that I need to become more assertive in my life to fulfill my needs. This was one of the best courses I have ever taken. I encountered extensive knowledge in different subjects with this course which I have already begun using and will continue to use in the future. The material on effective communication and listening has helped improve my relationships/friendships as well as my working relationships. I learned that my bad habits aren't effective at all and I learned to correct those habits and this has helped me professionally. This has been a great class and I also enjoyed the life lessons and tips the professor shared with us that were not covered in the readings. I enjoyed the guest speakers. Thank you professor, you were the best professor I ever had and I have learned a lot. [ sorry Fred I just couldn't resist putting in that quote] Not only did I learn a lot but I also know now how to deal with questions more carefully. I enjoyed the exercises we did in class, and I particularly enjoyed the lecture given by the lead Hostage Negotiator for the Detroit Police Department. I learned methods of dealing with confrontation. I want to open a business and this class has taught me how to negotiate, business deals and contracts and made me understand how disputes are resolved in the legal world. I learned that when dealing with people in work or in daily life there are certain ways to approach and converse with people because attitude has a big affect on how people perceive you. I learned that it is better to listen than to speak, because when you speak you give information away, when you listen you gain information. I learned a lot about negotiations in this class. I am majoring in Psych. And Marketing, so all of the tactics and ideas presented about conducting negotiations will certainly help me in my career in business. Forms of Power was a topic that stood out for me. I learned from the Hostage Negotiator lecture that sometimes it can take a ridiculous amount of time to get through to someone, but with persistence and patience, almost anything is attainable. This class has taught me so many useful things that I will incorporate in my life, and that is not something I can say for very many classes I have taken. The paraphrasing exercise we did in class impressed me so much that it is a tool that I will use for the rest of my career. In the past I have had trouble paying attention to people I am supposed to be listening to. I am now using paraphrasing as a test to force me to be attentive and understand what is being said in order to avoid miscommunication. Effective Feedback and Active Listening are also techniques I plan to use in the future. Overall this has been one of the most interesting classes I have had in my college career, because we communicate and negotiate every day and I think I can use most of the information in my day to day life. This class has helped give me the confidence to negotiate, which is a necessity for anything that people do. The course has been my guide to not only getting what I want but helping people see the bigger picture and getting what they need. This class has made me feel more empowered in my job. Real life examples intensified the learning experience. The Dispute Resolution class demonstrated and showed how to develop different tools to address the circumstances that require negotiation based on effective communication. The importance of listening effectively was evidenced throughout the course by identifying what the communication barriers are, and where different factors impact negatively in the transmission of the message because they prevent empathic non judgmental listening. This class provided tools to respond to, and deliver messages effectively. I learned that listening is more important then speaking. I learned not to inject humor or give advice when helping someone to solve a problem. Even though this was one of the harder classes I have taken, due to the fact that it required me to be engaged and to truly learn the content, I am happy I took this class because everything I got out of it applies to my life currently as well as in the future.

3 Subject Area Community Engagement

Providing Department: Co-major in Peace and Conflict

Learning Outcome Description:
Familiarity with the relationship of peace to social justice concerns and with practical experience of community and global organizations in this domain. A number of co-majors and minors became active with the WSU Rotaract Junior Rotary service club, and undertook community engagement projects in both the State of Michigan and Mexico (e.g., environmental cleanup, community gardening, food and medical supply distribution). Most of these activities occurred in 2019, before the pandemic made social contact difficult, but the Rotaract organization has continued to meet and plan its programming online.

4 Cogent writing

Providing Department: Co-major in Peace and Conflict

Learning Outcome Description:
Ability to write cogently on topics covered in the first three learning objectives. Cogent writing entails at minimum the ability to write a clear and well organized essay of approximately five paragraphs, including an introduction, expansion and exposition, and conclusion, based on logical and evidence based arguments or assertions. All writing assignments should feature proper source utilization and citation. The Special Topics courses on Human Trafficking and Global Health Disparities provided ample opportunity for research based diagnostic writing with professional ethnographic standards (stemming from anthropology and medical anthropology). Students in those courses and the online “Social Justice Activism” course submitted regular (weekly) writing curriculum board writing input, which was graded and returned for cumulative improvement. The latter class also led to student activism engagement as well as their review of activist organizations.

GC in Peace and Conflict

1 Subject Knowledge

Providing Department: GC in Peace and Conflict

Learning Outcome Description:
Demonstrated knowledge of and critical thinking about Peace Studies and Security Studies as social science related fields. Peace and Security Studies have traditionally been separate areas of study. The certificate student will become familiar with the approaches and findings in each area and be able to integrate them across the areas.

2 Implication of Boundaries

**Providing Department:** GC in Peace and Conflict

**Learning Outcome Description:**

Awareness of the implications of inter-personal, inter-group and international boundaries and the prerequisites for peaceful relations across such boundaries.

3 Policy Relevant Knowledge

**Providing Department:** GC in Peace and Conflict

**Learning Outcome Description:**

Students will be familiarized with policy models, alternatives, and practices as applied to peace and security issues. Role playing and practicum or internship experience will be required in appropriate courses.

4 Professional writing

**Providing Department:** GC in Peace and Conflict

**Learning Outcome Description:**

Students will improve their ability to write cogently and professionally, including critical perspectives, on peace and security related topics. Writing may be in the form of policy papers or academic analyses. Analytical papers will be required in all courses, dealing with professional research journals and books, and/or with policy alternatives and selection criteria.

5 Research

**Providing Department:** GC in Peace and Conflict

**Learning Outcome Description:**

Ability to analyze and conduct research at the graduate level on peace and conflict topics. Occasion for such research will take place in reviews of relevant literature as well as in field research or practicum assignments.

### BA in Labor Studies

1. Knowledge and Skills

**Providing Department:** BA in Labor Studies

**Learning Outcome Description:**

Students will be able to understand and evaluate management decisions, workplace and public policies that impact workers and/or labor organizations.

2. Written and Oral Communication

**Providing Department:** BA in Labor Studies

**Learning Outcome Description:**

Students will be able to communicate effectively verbally and in writing when making professional presentations that address questions and/or problems relevant to the field of labor and employment relations.

3. Professional Development

**Providing Department:** BA in Labor Studies

**Learning Outcome Description:**

Students will be able to demonstrate an ability to interact with and influence others in a professional manner, to effectively present ideas, prospectives and recommendations.

### Learning Outcome 4

4. Critical Thinking

**Providing Department:** BA in Labor Studies

**Learning Outcome Description:**

4. Students will think critically when analyzing problems occurring between employers and employees in the workplace.

### MA in Employment and Labor Relations

#### #1 Knowledge and Skills

**Providing Department:** MA in Employment and Labor Relations

**Learning Outcome Description:**
1: Students will demonstrate an understanding of relevant theories and apply them appropriately based on the facts, background and/or data of a work situation.

#2 2. Research Skills

**Providing Department:** MA in Employment and Labor Relations  
**Learning Outcome Description:** Students will apply quantitative and/or qualitative methods for research on workplace issues.

#3 Career Development

**Providing Department:** MA in Employment and Labor Relations  
**Learning Outcome Description:** Students will demonstrate an ability to collect, analyze and synthesize information and data to make logical and informed decisions impacting the workplace.

#4 4. Critical Thinking

**Providing Department:** MA in Employment and Labor Relations  
**Learning Outcome Description:** Students will apply critical thinking skills to apply acquired knowledge to analyze data or problems occurring in the field of employment and labor relations and report findings, results and conclusions.

**BA in Gender, Sexuality, and Women’s Studies**

**BA LO1 BA Learning Outcome 1**

**Providing Department:** BA in Gender, Sexuality, and Women’s Studies  
**Learning Outcome Description:** Students demonstrate their ability to communicate their arguments effectively in written form.

**BA LO2 BA Learning Outcome 2**

**Providing Department:** BA in Gender, Sexuality, and Women’s Studies  
**Learning Outcome Description:** Students will situate their analysis of questions within the broader field of GSW studies to demonstrate the breadth of their knowledge.

**BA LO3 BA Learning Outcome 3**

**Providing Department:** BA in Gender, Sexuality, and Women’s Studies  
**Learning Outcome Description:** Drawing from feminist, gender, and queer theory, students demonstrate the ability to engage in their subject theoretically.

**BA LO4 BA Learning Outcome 4**

**Providing Department:** BA in Gender, Sexuality, and Women’s Studies  
**Learning Outcome Description:** Students demonstrate a depth of knowledge in their understanding of the GSW field.

**BA in Linguistics**

**S-1 Syntactic Patterns**

**Providing Department:** BA in Linguistics  
**Learning Outcome Description:** Recognize syntactic patterns in English and other languages for which glosses are provided

**S-2 Theoretical Concepts in Syntax**

**Providing Department:** BA in Linguistics  
**Learning Outcome Description:** Utilize the theoretical concepts and tools of syntactic theory in order to describe and analyze patterns

**S-3 Syntactic Analysis**

**Providing Department:** BA in Linguistics  
**Learning Outcome Description:** Analyze the structure of reasonably complex sentences

**S4 Proficiency in articulating the defining properties of human language**

**Providing Department:** BA in Linguistics  
**Learning Outcome Description:** General proficiency in articulating the defining properties of human language.
S5 Patterns of language usage
Providing Department: BA in Linguistics
Learning Outcome Description: The students will be able to recognize and analyze the patterns of language usage as researched in one or more of the following linguistic disciplines: pragmatics/discourse, sociolinguistics, psycholinguistics, anthropological linguistics.

MA in Linguistics
A4.1 Helping students with MA thesis
Providing Department: MA in Linguistics
Learning Outcome Description: Writing an MA thesis has proved to be the most challenging job for many of our MA students. Students are faced with issues of finding the proper topic, finding the most helpful faculty, practicing writing, and following the university regulation for filing the thesis. Some students cannot graduate in time, mainly because of the burden and frustration for completing their MA theses.

S-1 Syntax: Recognize Patterns
Providing Department: MA in Linguistics
Learning Outcome Description: Recognize syntactic patterns in English and other languages for which glosses are provided

S-2 Syntax: Theoretical Concepts
Providing Department: MA in Linguistics
Learning Outcome Description: Utilize the theoretical concepts and tools of syntactic theory in order to describe and analyze syntactic patterns

S-3 Syntax: Analysis
Providing Department: MA in Linguistics
Learning Outcome Description: Analyze the structure of reasonably complex sentences

S-4 Do scholarly work (MA essay)
Providing Department: MA in Linguistics
Learning Outcome Description: Demonstrate ability to produce scholarly work in linguistics through MA essay process

S-5 Patterns of Language Usage
Providing Department: MA in Linguistics
Learning Outcome Description: The students will be able to recognize and analyze the patterns of language usage as researched in one or more of the following linguistic disciplines: pragmatics/discourse, sociolinguistics, psycholinguistics, anthropological linguistics.

BS in Neuroscience
AC-1 Analytic and communication skills: Critical analysis
Providing Department: BS in Neuroscience
Learning Outcome Description: Students critically evaluate neuroscience-related scientific literature.

AC-2 Analytic and communication skills: Scientific communication
Providing Department: BS in Neuroscience
Learning Outcome Description: Students communicate neuroscientific information, both verbally and in writing.

AC-3 Analytic and communication skills: Research
Providing Department: BS in Neuroscience
Learning Outcome Description: Students apply appropriate principals of design and analysis to neuroscientific research.

CK-1 Conceptual knowledge
Providing Department: BS in Neuroscience
Learning Outcome Description: Students apply foundational and core concepts in Neuroscience to molecular, cellular, cognitive, and behavioral levels of analysis.

DP-1 Individual development and professionalism: Career paths
Providing Department: BS in Neuroscience
Learning Outcome Description: Students describe the different career paths of Neuroscience.

DP-2 Individual development and professionalism: Ethics
Providing Department: BS in Neuroscience
Learning Outcome Description: Students describe ethical principles involved in conducting basic science and clinical research.

BS in Public Health

1 BS Public Health Learning Outcome 1_Public Health Foundational Knowledge
Providing Department: BS in Public Health
Learning Outcome Description: Describe foundational knowledge in public health on a specific topic.

2 BS Public Health Learning Outcome 2_Written Communication
Providing Department: BS in Public Health
Learning Outcome Description: Communicate audience-appropriate public health content clearly in written form.

3 BS Public Health Learning Outcome 3_Oral Communication
Providing Department: BS in Public Health
Learning Outcome Description: Communicate audience-appropriate public health content clearly in oral form.

4 BS Public Health Learning Outcome 4_Research & Evaluation Methods
Providing Department: BS in Public Health
Learning Outcome Description: Summarize methodological techniques in public health to assess, plan, and evaluate.

5 BS Public Health Learning Outcome 5_Data Analysis
Providing Department: BS in Public Health
Learning Outcome Description: Perform analytic techniques in public health applied to a specific topic.

6 BS Public Health Learning Outcome 6_Fieldwork & Practice
Providing Department: BS in Public Health
Learning Outcome Description: Locate, use, evaluate and synthesize public health information on a specific topic.

BA in Philosophy

1 Content Knowledge
Providing Department: BA in Philosophy
Learning Outcome Description: Students will demonstrate knowledge of important themes, figures, problems, and methods in the major areas of philosophy.

2 Analytical Reasoning
Providing Department: BA in Philosophy
Learning Outcome Description: Students will demonstrate skill at identifying, constructing, evaluating, and re-constructing arguments.

3 Clarity of Thought and Expression
Providing Department: BA in Philosophy
Learning Outcome Description: Students will demonstrate skill at writing (or speaking) in an organized, informed, and precise manner.

4 Research Skill
Providing Department: BA in Philosophy
Learning Outcome Description: Students will demonstrate skill at identifying and evaluating relevant sources for the philosophical themes, figures, and problems they explore.

MA in Philosophy
1 Content Knowledge

Providing Department: MA in Philosophy

Learning Outcome Description:
Students will demonstrate knowledge of important themes, figures, problems, and methods in the major areas of philosophy.

2 Analytical Reasoning

Providing Department: MA in Philosophy

Learning Outcome Description:
Students will demonstrate skill at identifying, constructing, evaluating, and re-constructing arguments.

3 Clarity of Thought and Expression

Providing Department: MA in Philosophy

Learning Outcome Description:
Students will demonstrate skill at writing (or speaking) in an organized, informed, and precise manner.

4 Research Skill

Providing Department: MA in Philosophy

Learning Outcome Description:
Students will demonstrate skill at identifying and evaluating relevant sources for the philosophical themes, figures, and problems they explore.

PhD in Philosophy

1 Content Knowledge

Providing Department: PhD in Philosophy

Learning Outcome Description:
Students will demonstrate knowledge of important themes, figures, problems, and methods in the major areas of philosophy.

2 Analytical Reasoning

Providing Department: PhD in Philosophy

Learning Outcome Description:
Students will demonstrate skill at identifying, constructing, evaluating, and re-constructing arguments.

3 Clarity of Thought and Expression

Providing Department: PhD in Philosophy

Learning Outcome Description:
Students will demonstrate skill at writing (or speaking) in an organized, informed, and precise manner.

4 Research Skill

Providing Department: PhD in Philosophy

Learning Outcome Description:
Students will demonstrate skill at identifying and evaluating relevant sources for the philosophical themes, figures, and problems they explore.

BA in Astronomy

1 Demonstrate physical reasoning

Providing Department: BA in Astronomy

Learning Outcome Description: Students should be able to master the basic concepts of physics.

2 Explain and analyze observations.

Providing Department: BA in Astronomy

Learning Outcome Description:
Students will be able to use conceptual physical and mathematical reasoning to analyze and thus explain physics and astronomy observations.

3 Scientific communication

Providing Department:
BA in Astronomy

**Learning Outcome Description:** Communicate scientific information in an effective and professional manner.

4 Modeling

**Providing Department:** BA in Astronomy

**Learning Outcome Description:**
Use mathematical and computer-based modeling to analyze data and solve moderately complex problems.

5 Experimental Skills

**Providing Department:** BA in Astronomy

**Learning Outcome Description:**
Demonstrate proficient experimental design skills to solve technical problems and gather and analyze data involving modern physics and astronomy research techniques.

6 Synthesis

**Providing Department:** BA in Astronomy

**Learning Outcome Description:**
Synthesize knowledge and proficiencies in astronomy, physics, mathematics, chemistry, geology and biology and have familiarity with the interdisciplinary nature of modern astronomy.

7 Student Success

**Providing Department:** BA in Astronomy

**Learning Outcome Description:**
Students who complete the BA in Astronomy degree program should go on to a career in a STEM field.

BA in Physics

1 **Learning Outcome: Knowledge**

**Providing Department:** BA in Physics

**Learning Outcome Description:**
Learn about the properties of matter and energy through studies of mechanics, electricity, magnetism, heat, light, and other radiation, and the structure of atoms.

2 **Learning Outcome: Conceptual Reasoning**

**Providing Department:** BA in Physics

**Learning Outcome Description:**
Use conceptual-physics and mathematical reasoning to explain and analyze physical systems encountered in laboratory experiments and the physical world.

3 **Learning Outcome: Communication**

**Providing Department:** BA in Physics

**Learning Outcome Description:**
Critically read, write and orally present scientific information in an effective and professional manner.

4 **Learning Outcome: Problem Solving**

**Providing Department:** BA in Physics

**Learning Outcome Description:**
Use mathematical and computer-based modeling to solve moderately complex problems.

5 **Learning Outcome: Application**

**Providing Department:** BA in Physics

**Learning Outcome Description:**
Appreciate the role of quantum and classical mechanics, electricity and magnetism, and relativity in contemporary problems in frontier research.

6 **Learning Outcome: Experiment**

**Providing Department:** BA in Physics

**Learning Outcome Description:**
Demonstrate proficient experimental techniques to gather and critically analyze data involving state-of-the-art physics research techniques.
BS in Biomedical Physics

1 Learning Outcome: Problem Solving
Providing Department: BS in Biomedical Physics
Learning Outcome Description: Apply laws of physics in solving biomedical physics problems.

2 Learning Outcome: Reasoning and Analysis
Providing Department: BS in Biomedical Physics
Learning Outcome Description: Use physical-conceptual and mathematical reasoning to explain and analyze physical systems related to biological and medical problems.

3 Learning Outcome: Scientific Communication
Providing Department: BS in Biomedical Physics
Learning Outcome Description: Critically read, write and orally present scientific knowledge in biomedical research area effectively and professionally.

4 Learning Outcome: Computation and Modeling
Providing Department: BS in Biomedical Physics
Learning Outcome Description: Use mathematical and computer-based modeling to solve moderately complex problems.

5 Learning Outcome: Knowledge Synthesis
Providing Department: BS in Biomedical Physics
Learning Outcome Description: Synthesize knowledge and proficiencies in physics, mathematics, biology, chemistry and medical technology and appreciate the interdisciplinary nature of modern biomedical science.

6 Learning Outcome: Experimental Skills
Providing Department: BS in Biomedical Physics
Learning Outcome Description: Demonstrate proficient experimental design skills to solve technical problems, and gather and analyze data involving optics, electronics and modern biophysical research techniques.

BS in Physics

1 Learning Outcome: Knowledge
Providing Department: BS in Physics
Learning Outcome Description: Learn about the properties of matter and energy through studies of mechanics, electricity, magnetism, heat, light, and other radiation, and the structure of atoms.

2 Learning Outcome: Reasoning
Providing Department: BS in Physics
Learning Outcome Description: Translate the physical description of a problem into equations that can be used to answer relevant questions.

3 Learning Outcome: Science Communication
Providing Department: BS in Physics
Learning Outcome Description: Critically read, write and orally present scientific information in an effective and professional manner.

4 Learning Outcome: Problem Solving
Providing Department: BS in Physics
Learning Outcome Description: Employ mathematical methods needed to solve physics problems: a. Work analytically and numerically with ordinary and partial differential equations, linear algebra, calculus of variations, probability and statistics, and other mathematical tools. b. Visualize problems in terms of relevant sketches or graphs. c. Recognize when and how to make useful approximations, i.e., which terms in a series expansion are important in a specific physical limit. d. Recognize when symmetries are useful.
5 Learning outcome: Applications
Providing Department: BS in Physics
Learning Outcome Description:
Apply knowledge in quantum and classical mechanics, electricity and magnetism, and relativity to contemporary problems in frontier research.

6 Learning Outcome: Experiment
Providing Department: BS in Physics
Learning Outcome Description:
Demonstrate proficient experimental techniques to gather and critically analyze data involving state-of-the-art physics research techniques.

MA in Physics

1 Broad knowledge of advanced physics
Providing Department: MA in Physics
Learning Outcome Description: Students must have a broad knowledge of advanced physics.

2 Oral Presentation Skills
Providing Department: MA in Physics
Learning Outcome Description: Students must be able to orally present results of their original research.

3 Written presentation skills
Providing Department: MA in Physics
Learning Outcome Description: Students must be able to make a written presentation of original research.

4 Time to degree
Providing Department: MA in Physics
Learning Outcome Description: Students should complete a Masters of Arts degree in a timely manner.

5 Post MA Employment
Providing Department: MA in Physics
Learning Outcome Description: Students should achieve a job in the STEM field after completing their MA.

MS in Physics

1 Broad knowledge of advanced physics
Providing Department: MS in Physics
Learning Outcome Description: Students must have a broad knowledge of advanced physics.

2 Oral Presentation Skills
Providing Department: MS in Physics
Learning Outcome Description: Students must be able to orally present results of their original research.

3 Written presentation skills
Providing Department: MS in Physics
Learning Outcome Description: Students must be able to make a written presentation of original research.

4 Time to degree
Providing Department: MS in Physics
Learning Outcome Description: Students should complete a Masters Of Sciences degree in a timely manner.

5 Original contribution to research
Providing Department: MS in Physics
Learning Outcome Description: The student must make an original contribution to modern physics research.

6 Post MS employment
Providing Department: MS in Physics
Learning Outcome Description: Students should achieve a job in the STEM field after completing their MS.

**PhD in Physics**

1 **Mastery of Undergraduate Physics**
   
   **Providing Department:** PhD in Physics
   **Learning Outcome Description:**
   PhD candidates will demonstrate mastery of the broad knowledge of physics expected of all students who have obtained an undergraduate level physics degree. This includes Classical Mechanics, Electricity and Magnetism, Statistical and Thermal Physics, Quantum Mechanics, and Modern Physics.

2 **Planning and Presentation Skills**
   
   **Providing Department:** PhD in Physics
   **Learning Outcome Description:**
   PhD candidates have to demonstrate the ability to plan a research project and present the results of research activities.

3 **Research Skills**
   
   **Providing Department:** PhD in Physics
   **Learning Outcome Description:** Students have to master the research skills in whichever sub-discipline they are conducting research.

4 **Written communication of research.**
   
   **Providing Department:** PhD in Physics
   **Learning Outcome Description:**
   PhD students have to demonstrate the ability to communicate in writing the results of original research.

5 **Broad knowledge of modern physics research**
   
   **Providing Department:** PhD in Physics
   **Learning Outcome Description:**
   PhD students should have a broad knowledge of modern physics research.

6 **Original research contribution**
   
   **Providing Department:** PhD in Physics
   **Learning Outcome Description:**
   PhD students must make an original research contribution.

7 **Success of post-PhD employment**
   
   **Providing Department:** PhD in Physics
   **Learning Outcome Description:**
   Students should be working as a STEM researcher in their initial job after the completion of their PhD.

8 **Time to PhD**
   
   **Providing Department:** PhD in Physics
   **Learning Outcome Description:**
   Students should complete their PhD in a reasonable time frame.

**BA in Political Science**

1 **Research**
   
   **Providing Department:** BA in Political Science
   **Learning Outcome Description:**
   To access and appropriately invoke scholarly research bearing on issues and topics.

2 **Appreciation of Multiple Perspectives**
   
   **Providing Department:** BA in Political Science
   **Learning Outcome Description:**
   To demonstrate appreciation of competing conceptual approaches to the subject matter.

3 **Critical Judgment**
   
   **Providing Department:** BA in Political Science
   **Learning Outcome Description:**
   To apply critical judgment in assessing accounts and explanations of political phenomena.

4 **Expression**
**Bachelor of Public Affairs**

1 **Research**

- **Providing Department:** Bachelor of Public Affairs
- **Learning Outcome Description:** To access and appropriately invoke scholarly research bearing on issues and topics.

2 **Appreciation of Multiple Perspectives**

- **Providing Department:** Bachelor of Public Affairs
- **Learning Outcome Description:** To demonstrate appreciation of competing conceptual approaches to the subject matter.

3 **Critical Judgment**

- **Providing Department:** Bachelor of Public Affairs
- **Learning Outcome Description:** To apply critical judgment in assessing accounts and explanations of political phenomena.

4 **Expression**

- **Providing Department:** Bachelor of Public Affairs
- **Learning Outcome Description:** To communicate information and argumentation in writing in a clear, logical, and formally correct manner (with appropriate citations).

**GC in Nonprofit Management**

1 Graduate Certificate in Nonprofit Management New Learning Outcome (Program-level) Item

- **Providing Department:** GC in Nonprofit Management
- **Learning Outcome Description:** A graduate of the certificate program will be able to: 1. Understand nonprofit governance structure and navigate challenges associated with managing within this structure. 2. Develop a clear, coherent, and feasible business model for operating a nonprofit organization. 3. Communicate and market the services of a nonprofit organization. 4. Formulate a sustainable fund-development strategy and access and manage financial resources for a nonprofit organization. 5. Understand role of collaboration and the process of forming strategic partnerships with other organizations (esp. government and business).

**MA in Political Science**

1.0 **MA Political Science LO 1.0 Statistical Analysis**

- **Providing Department:** MA in Political Science
- **Learning Outcome Description:** Students will understand fundamental concepts in statistics and be able to apply the basics of statistical inference, estimation hypothesis testing and statistical reasoning. They will learn to conduct and interpret statistical analysis with statistical packages (SPSS or STATA).

2.0 **MA Political Science - LO 2.0 Research Methods**

- **Providing Department:** MA in Political Science
- **Learning Outcome Description:** Students will identify the basic characteristics of the four major research designs in political science, and apply this knowledge by designing an original research project.

3.0 **MA Political Science LO 3.0 Formal academic writing and citation**

- **Providing Department:** MA in Political Science
- **Learning Outcome Description:** Students will master skills of formal academic writing and citation. They will communicate information and argumentation in writing in a clear, logical and formally correct manner with good grammar and appropriate citations.

4.1 **MA Political Science LO 4.1 Subfield Specialization**
Planning

MA in Political Science

Learning Outcome Description:
MA students will demonstrate specialized knowledge of the literature in one of six subfields of Political Science: American Politics, Comparative Politics, Political Theory, Public Policy, Urban Politics or World Politics.

4.2 MA Political Science LO 4.2 Subfield Mastery

Learning Outcome Description:
Students will demonstrate mastery of key literature and concepts in one of six subfields of Political Science: American Politics, Comparative Politics, Political Theory, Public Policy, Urban Politics or World Politics.

Master of Public Administration

1 To lead and manage in public interest

Learning Outcome Description:
- A graduate of our program will be able to understand how both structure and culture of public service organizations affect organizational effectiveness (1A)
- A graduate of our program will know how to effectively manage human resources and provide leadership in this regard (1B)

2 To participate in and contribute to the policy process

Learning Outcome Description:
- A graduate of our program will be able to identify key stakeholders, their positions, coalitions, and the political context (2A)
- A graduate of our program will be able to understand and apply the different aspects of the policy making cycle (2B)

3 To analyze, synthesize, think critically, solve problems and make evidence-informed decisions in a complex and dynamic environment

Learning Outcome Description:
- A graduate of our program will be able to utilize data and analytic techniques, scholarly research, and best professional practices in systematically analyzing and making policy and administrative decisions in public service organizations (3A)
- A graduate of our program will be able to apply these concepts to a real world (substantive) case (3B)

4 To articulate, apply, and advance a public service perspective

Learning Outcome Description:
- A graduate of our program will be able to make informed decisions and manage public service organizations in the public interest by effectively utilizing and balancing key public service values (4A)
- A graduate of our program will understand the value of fair and transparent administration and will be able to effectively and ethically engage citizens in public service organizations (4B)

5 To communicate and interact productively and in culturally responsive ways with a diverse and changing workforce and society at large

Learning Outcome Description:
- A graduate of our program will have the ability to develop and exercise intercultural sensitivity with employees and other stakeholders (5A)
- A graduate of our program will be able to communicate and engage appropriately, effectively and respectfully with multiple audiences (5B)

PhD in Political Science

1.0 PhD Political Science LO 1.0 Statistical analysis

Learning Outcome Description:
Students will learn principles of statistical inference, estimation, hypothesis-testing and statistical reasoning. They will learn to conduct and interpret linear and multivariate regression with statistical packages (SPSS or STATA).

2.0 PhD Political Science LO 2.0 Research Methods

Learning Outcome Description:
Students will learn principles of statistical inference, estimation, hypothesis-testing and statistical reasoning. They will learn to conduct and interpret linear and multivariate regression with statistical packages (SPSS or STATA).
Learning Outcome Description:
Students will demonstrate mastery of techniques for using quantitative and qualitative methods to test competing hypotheses about problems in politics.

3.1 PhD Political Science LO 3.1 Summarize theory and research
Providing Department: PhD in Political Science
Learning Outcome Description: Students will accurately summarize theory and research in their major field of specialization.

3.2 PhD in Political Science LO 3.2 Summarize Theory and Research: Minor fields
Providing Department: PhD in Political Science
Learning Outcome Description: Students will accurately summarize core works of theory and research in two minor fields of specialization.

4.0 PhD in Political Science LO 4.0 Research Design
Providing Department: PhD in Political Science
Learning Outcome Description: Students will design and carry out independent research.

BA in Psychology

1 Knowledge Base in Psychology
Providing Department: BA in Psychology
Learning Outcome Description: Students should be able to demonstrate and apply fundamental knowledge and comprehension of the major concepts and theoretical perspectives in psychology.

2 Ethics
Providing Department: BA in Psychology
Learning Outcome Description: Students should be able to identify violations of ethical standards in psychological contexts.

3 Writing Style
Providing Department: BA in Psychology
Learning Outcome Description: Students should have the ability to write and format papers using APA style.

4 Expression of Ideas
Providing Department: BA in Psychology
Learning Outcome Description: Students should be able to write clear, logical, scientific arguments

5 Research Design
Providing Department: BA in Psychology
Learning Outcome Description: Demonstrate an understanding of common research designs.

6 Research Interpretation
Providing Department: BA in Psychology
Learning Outcome Description: Draw appropriate conclusions about scientific data using knowledge of research.

BS in Psychology

1 Knowledge Base in Psychology
Providing Department: BS in Psychology
Learning Outcome Description: Students should be able to demonstrate and apply fundamental knowledge and comprehension of the major concepts and theoretical perspectives in psychology.

2 Ethics
Providing Department: BS in Psychology
Learning Outcome Description: Students should be able to identify violations of ethical standards in psychological contexts.

3 Writing Style
Providing Department: BS in Psychology
Learning Outcome Description: Students should be able to write and format papers using APA style.

4 Expression of Ideas
Providing Department: BS in Psychology
Learning Outcome Description: Students should be able to write clear, logical, scientific arguments

5 Research Design
Providing Department: BS in Psychology
Learning Outcome Description: Demonstrate an understanding of common research designs.

6 Research Interpretation
Providing Department: BS in Psychology
Learning Outcome Description: Draw appropriate conclusions about scientific data using knowledge of research.

MA in Industrial/Organizational Psychology

1 Application of Psychological Principles
Providing Department: MA in Industrial/Organizational Psychology
Learning Outcome Description: Apply psychological principles to the solution or amelioration of organizational problems.

2 Personnel Selection and Placement Establishment
Providing Department: MA in Industrial/Organizational Psychology
Learning Outcome Description: Establish personnel selection and placement programs in work organizations in accordance with accepted scientific, professional, and legal standards.

3 Performance Management Systems Knowledge
Providing Department: MA in Industrial/Organizational Psychology
Learning Outcome Description:
- Design, implement, and evaluate performance management systems in work organizations
- Formulate and evaluate employee and management job-relevant training and employee development programs
- Design, execute, and present organizational policy and management support research

4 Job Training and Development Skills
Providing Department: MA in Industrial/Organizational Psychology
Learning Outcome Description:
- Formulate and evaluate employee and management job-relevant training and employee development programs
- Design, execute, and present organizational policy and management support research

5 Organizational Policy and Management Support
Providing Department: MA in Industrial/Organizational Psychology
Learning Outcome Description:
- Design, execute, and present organizational policy and management support research

MA in Psychology

1 Knowledge Base
Providing Department: MA in Psychology
Learning Outcome Description: Demonstrate knowledge of the broad science of psychology, and deep mastery of one or more chosen subdisciplines.
2 Evaluation Skills  
**Providing Department:** MA in Psychology  
**Learning Outcome Description:** Critically evaluate research and theory in psychology, including its validity, interpretation, and application.

3 Research Design Skills  
**Providing Department:** MA in Psychology  
**Learning Outcome Description:** Apply research methods appropriate to the research question.

4 Data Analysis Skills  
**Providing Department:** MA in Psychology  
**Learning Outcome Description:** Conduct data analysis appropriate to the research question.

5 Research Contributions  
**Providing Department:** MA in Psychology  
**Learning Outcome Description:** Disseminate research that adds to the body of knowledge in psychology.

6 Communication Skills  
**Providing Department:** MA in Psychology  
**Learning Outcome Description:** Communicate scientific knowledge effectively to varied audiences, both orally and in writing.

7 Ethics  
**Providing Department:** MA in Psychology  
**Learning Outcome Description:** Students will adhere to ethical guidelines for research and professional work as a psychologist, appropriate to their specialty.

**PhD in Psychology**

1 Knowledge Base  
**Providing Department:** PhD in Psychology  
**Learning Outcome Description:** Demonstrate knowledge of the broad science of psychology, and deep mastery of one or more chosen subdisciplines.

2 Evaluation Skills  
**Providing Department:** PhD in Psychology  
**Learning Outcome Description:** Critically evaluate research and theory in psychology, including its validity, interpretation, and application.

3 Research Design Skills  
**Providing Department:** PhD in Psychology  
**Learning Outcome Description:** Apply research methods appropriate to the research question.

4 Data Analysis Skills  
**Providing Department:** PhD in Psychology  
**Learning Outcome Description:** Conduct data analysis appropriate to the research question.

5 Research Contributions  
**Providing Department:** PhD in Psychology  
**Learning Outcome Description:** Disseminate research that adds to the body of knowledge in psychology.

6 Communication Skills  
**Providing Department:** PhD in Psychology  
**Learning Outcome Description:** Communicate scientific knowledge effectively to varied audiences, both orally and in writing.

7 Ethics  
**Providing Department:** PhD in Psychology  
**Learning Outcome Description:**
Students will adhere to ethical guidelines for research and professional work as a psychologist, appropriate to their specialty.

**BA in Sociology**

1. **The Sociological Eye**
   - **Providing Department:** BA in Sociology
   - **Learning Outcome Description:**
     Students will recognize key theoretical frameworks and assumptions on which the discipline is founded and differentiated from other social sciences.

2. **Social Structure**
   - **Providing Department:** BA in Sociology
   - **Learning Outcome Description:**
     Students can articulate what sociologists mean by social structure and how structural forces affect human action and social life at the micro, meso, and macro levels.

3. **Stratification**
   - **Providing Department:** BA in Sociology
   - **Learning Outcome Description:**
     Students will identify how social structures create and reproduce different forms of social inequality in human society through specific processes, and interpret empirical patterns and effects of social inequality.

4. **Socialization**
   - **Providing Department:** BA in Sociology
   - **Learning Outcome Description:**
     Students will explain the relationship between the self and society and how the self is socially constructed and maintained at multiple levels.

5. **Social Change and Reproduction**
   - **Providing Department:** BA in Sociology
   - **Learning Outcome Description:**
     Students will comprehend how social structures reproduce themselves across generations but also how social change occurs in cultural, social, political, and economic terms.

6. **Apply Sociological Theory**
   - **Providing Department:** BA in Sociology
   - **Learning Outcome Description:**
     Students will be able to identify how sociological concepts and theories relate to everyday life.

7. **Critically Evaluate Explanations of Human Behavior**
   - **Providing Department:** BA in Sociology
   - **Learning Outcome Description:**
     Students will apply a critical lens of understanding human behavior and societies.

8. **Apply Scientific Principles to Understand the Social World**
   - **Providing Department:** BA in Sociology
   - **Learning Outcome Description:**
     Students will articulate the importance of evidence and scientific methods for explanations of social phenomena.

9. **Evaluate Quality of Data**
   - **Providing Department:** BA in Sociology
   - **Learning Outcome Description:**
     Students will be able to identify the characteristics of high-quality data and methods in sociological research.

10. **Rigorously Analyze Social Scientific Data**
    - **Providing Department:** BA in Sociology
    - **Learning Outcome Description:**
      Students will identify disciplinary standards for both the qualitative and quantitative analysis of data.

11. **Use sociological knowledge**
    - **Providing Department:** BA in Sociology
Learning Outcome Description:
Students will use their sociological knowledge and skills to engage with and impact the world around them.

MA in Sociology

1 MA SOCIOLOGY_Learning Outcome 1_Foundational Knowledge
Providing Department: MA in Sociology
Learning Outcome Description: 1. Describe foundational knowledge in sociology applied to a topic.

2 MA SOCIOLOGY_Learning Outcome 2_Research Methods
Providing Department: MA in Sociology
Learning Outcome Description: 2. Summarize methodological techniques in sociology evaluating a specific topic.

3 MA SOCIOLOGY_Learning Outcome 3_Data Analysis
Providing Department: MA in Sociology
Learning Outcome Description: 3. Perform analytic techniques in sociology applied to a specific topic.

4 MA SOCIOLOGY_Learning Outcome 4_Written Communication
Providing Department: MA in Sociology
Learning Outcome Description: 4. Communicate clearly in a sociological writing style on a specific topic.

5 MA SOCIOLOGY_Learning Outcome 5_Contributions
Providing Department: MA in Sociology
Learning Outcome Description: 5. Generate original contributions to the discipline.

6 MA SOCIOLOGY_Learning Outcome 6_Oral Communication
Providing Department: MA in Sociology
Learning Outcome Description: 6. Communicate clearly in oral presentation on a specific topic.

PhD in Sociology

1 PhD SOCIOLOGY_Learning Outcome 1_Foundational Knowledge
Providing Department: PhD in Sociology
Learning Outcome Description: Describe theoretical foundational knowledge in sociology applied to a specific topic.

2 PhD SOCIOLOGY_Learning Outcome 2_Research Methods
Providing Department: PhD in Sociology
Learning Outcome Description: Summarize methodological techniques in sociology evaluating a specific topic.

3 PhD SOCIOLOGY_Learning Outcome 3_Data Analysis
Providing Department: PhD in Sociology
Learning Outcome Description: Perform analytic techniques in sociology applied to a specific topic.

4 PhD SOCIOLOGY_Learning Outcome 4_Written Communication
Providing Department: PhD in Sociology
Learning Outcome Description: Communicate clearly in a sociological writing style on a specific topic.

5 PhD SOCIOLOGY_Learning Outcome 5_Contributions
Providing Department: PhD in Sociology
Learning Outcome Description: Generate original contributions to the discipline.

6 PhD SOCIOLOGY_Learning Outcome 6_Oral Communication
Providing Department: PhD in Sociology
Learning Outcome Description: Communicate clearly in a sociological oral presentation on a specific topic.

7 PhD SOCIOLOGY_Learning Outcome 7_Substantive Area
Providing Department: PhD in Sociology
**Learning Outcome Description:** Demonstrate knowledge of a substantive specialization.

### BA in Urban Studies

**1a Program Learning Outcome 1a - Content-Driven Knowledge**

**Providing Department:** BA in Urban Studies  

**Learning Outcome Description:**  
Urban Studies Program graduates shall know: US1a - Theories on how to view the city, including distinctive perspectives and analytic insights each of the core disciplines (GPH, HIS, PS, SOC and US) provides about urban areas. Assessment method: Capstone course questionnaire (see Assessment section); relevant exam and quiz grades in GPH3130 and US4510

**1b Program Learning Outcome 1b - Content-Driven Knowledge**

**Providing Department:** BA in Urban Studies  

**Learning Outcome Description:**  
Urban Studies Program graduates shall know: US1b - The history of urbanization and its associated economic processes. This includes histories of ancient settlements, post-Renaissance cities, and post-Industrial Revolution cities. Assessment method: Capstone course questionnaire; relevant exam and course grades in GPH 3130 and US4510

**2a Program Learning Outcome 2a - Competencies**

**Providing Department:** BA in Urban Studies  

**Learning Outcome Description:**  
Urban Studies Program graduates shall be able to: US2a - Demonstrate written and oral competencies in the analysis of urban issues and policy, including the completion of the writing intensive (WI) capstone course, involving several significant writing assignments and oral presentation of completed work. Assessment method: Capstone course questionnaire; assignment grades in US4620 for final written and oral presentations

**2b Program Learning Outcome 2b - Competencies**

**Providing Department:** BA in Urban Studies  

**Learning Outcome Description:**  
Urban Studies program graduates shall be able to: US2b - Retrieve and analyze economic, demographic, and research data, including primary and secondary data sources. Assessment method: Capstone course questionnaire; course grades and assignment grades in US5820, GPH3600, and research methods program requirement

### GC in Economic Development

**Learning Outcome 1 Theory and Practice of Urban Economic Development**

**Providing Department:** GC in Economic Development  

**Learning Outcome Description:**  
1. Theory and Practice of Urban Economic Development

**Learning Outcome 2 Economic Development Policy, Politics, and Institutions**

**Providing Department:** GC in Economic Development  

**Learning Outcome Description:**  
2. Economic Development Policy, Politics, and Institutions

**Learning Outcome 3 Economics and Finance of Economic Development**

**Providing Department:** GC in Economic Development  

**Learning Outcome Description:**  
3. Economics and Finance of Economic Development

**Learning Outcome 4 Economic Development Management and Analysis Techniques**

**Providing Department:** GC in Economic Development  

**Learning Outcome Description:**  
4. Economic Development Management and Analysis Techniques

https://wayne.campuslabs.com/planning/reports/view/18384/year/2021/unit/44855
development, financial management, or evaluation.

**Master of Urban Planning**

**MUP LO #1 Learning Outcome #1 (General Planning Knowledge): Purpose and Meaning of Planning**

*Providing Department: Master of Urban Planning*

*Learning Outcome Description:*

1. Students have knowledge about the basic purpose and meaning of planning. This includes knowledge of the evolution and history of planning, its rationales, purposes, and significant successes and failures in US contexts; relationship of planning to society, economy, and governance; and basic tools of planning.

**MUP LO #2 Learning Outcome #2 (General Planning Knowledge): Planning Theory**

*Providing Department: Master of Urban Planning*

*Learning Outcome Description:*

2. Students have knowledge about theories of planning. This includes knowledge of planning contexts and problems; relationship of politics, and rationales for and methods of community participation in planning; planning models; ethical dimensions of planning practice; and relationship between planning field, profession, practice.

**MUP LO #3 MUP Learning Outcome #3 (Planning Skills)**

*Providing Department: Master of Urban Planning*

*Learning Outcome Description:*

3. Students are competent in the application of quantitative and qualitative methods in the analysis of planning problems.

**MUP LO #4 MUP Learning Outcome #4 (Planning Skills)**

*Providing Department: Master of Urban Planning*

*Learning Outcome Description:*

4. Students are knowledgeable about and have skills to develop and implement plans and policies, including components of comprehensive plans.

**MUP LO #5 MUP Learning Outcome #5 (Values and Ethics)**

*Providing Department: Master of Urban Planning*

*Learning Outcome Description:*

5. Students diagnose and apply professional ethical principles in everyday planning processes.

**MUP LO #6 MUP Learning Outcome #6 (Values and Ethics)**

*Providing Department: Master of Urban Planning*

*Learning Outcome Description:*

6. Students incorporate and nurture in their planning practice, core values associated with community participation and collaborative processes in democratic governance.

**MS- Anatomy & Cell Biology**

**LO1 Mastery of Subject Material**

*Providing Department: MS- Anatomy & Cell Biology*

*Learning Outcome Description:*

LO1: The student will demonstrate mastery of all subject material related to the program curriculum and thesis project.

**LO2 Technical Skill Development**

*Providing Department: MS- Anatomy & Cell Biology*

*Learning Outcome Description:*

LO2: The student will develop technical skills to conduct research in an ethical and professional manner.

**LO3 Ethical Conduct in Science**

*Providing Department: MS- Anatomy & Cell Biology*

*Learning Outcome Description:*

LO3: The student will learn to conduct scholarly activities in an ethical manner, following the principles of the scientific process.

**LO4 Effective Communication**

*Providing Department: MS- Anatomy & Cell Biology*
Learning Outcome Description:
The student will learn to effectively communicate scientific material publically in both written and oral formats

**PhD-Anatomy & Cell Biology/ANA**

**LO1 Contribute to Scientific Knowledge**
*Providing Department: PhD-Anatomy & Cell Biology/ANA*
*Learning Outcome Description:*  
LO1: The student will be expected to produce and defend an original significant contribution to scientific knowledge.

**LO2 Mastery of Subject Material**
*Providing Department: PhD-Anatomy & Cell Biology/ANA*
*Learning Outcome Description:*  
LO2: The student will demonstrate mastery of all subject material related to program curriculum and dissertation project.

**LO3 Ethical Conduct in Science**
*Providing Department: PhD-Anatomy & Cell Biology/ANA*
*Learning Outcome Description:*  
LO3: The student will learn to conduct scholarly activities in an ethical manner, following the principles of the scientific process.

**LO4 Effective Communication**
*Providing Department: PhD-Anatomy & Cell Biology/ANA*
*Learning Outcome Description:*  
LO4: The student will learn to effectively communicate scientific material publically in both written and oral formats.

**MS-Genetic Counseling/GCO**

**Outcome 1.1 Domain I Genetics Expertise and Analysis: Family History**
*Providing Department: MS-Genetic Counseling/GCO*
*Learning Outcome Description:*  
From the Accreditation Council of Genetic Counseling Practice-Based Competencies, required of genetic counseling graduate students. Through coursework and robust clinical experiences, demonstrate a depth and breadth of genomics knowledge through the ability to construct relevant, targeted, and comprehensive personal and family medical histories and pedigrees.

**Outcome 1.2 Domain I Genetics Expertise and Analysis: Genetic Risk Assessment**
*Providing Department: MS-Genetic Counseling/GCO*
*Learning Outcome Description:*  
From the Accreditation Council of Genetic Counseling Practice-Based Competencies Through coursework and robust clinical experiences, demonstrate a depth and breadth of genomics knowledge through the ability to assess individuals' and their relatives' probability of conditions with a genetic component or carrier status based on pedigree, test result(s), and other pertinent information.

**Outcome 1.3 Domain I Genetics Expertise and Analysis: Genetic Testing**
*Providing Department: MS-Genetic Counseling/GCO*
*Learning Outcome Description:*  
From the Accreditation Council of Genetic Counseling Practice-Based Competencies Through coursework and robust clinical experiences, demonstrate a depth and breadth of genomics knowledge through the ability to identify, assess, and facilitate genomic testing.

**Outcome 1.4 Domain I Genetics Expertise and Analysis: Case Management**
*Providing Department: MS-Genetic Counseling/GCO*
*Learning Outcome Description:*  
From the Accreditation Council of Genetic Counseling Practice-Based Competencies Through coursework and robust clinical experiences, demonstrate a depth and breadth of genomics knowledge through the ability to execute successful case management.

**Outcome 2.1 Domain II Interpersonal, Psychosocial, and Counseling Skills: Contracting**
*Providing Department: MS-Genetic Counseling/GCO*
*Learning Outcome Description:*
From the Accreditation Council of Genetic Counseling Practice Based Competencies Demonstrate the ability to contract- to establish rapport, develop a mutually agreed upon genetic counseling agenda and to modify the agenda as needed to address emerging concerns.

Outcome 2.2 Domain II Interpersonal, Psychosocial and Counseling Skills: Active Listening and Interviewing
Providing Department: MS-Genetic Counseling/GCO
Learning Outcome Description:
From the Accreditation Council of Genetic Counseling Practice Based Competencies Employ active listening skills and interviewing skills to identify, assess, and empathically respond to stated and emerging concerns.

Outcome 2.3 Domain II Interpersonal, Psychosocial and Counseling Skills: Decision Making and Adaptation
Providing Department: MS-Genetic Counseling/GCO
Learning Outcome Description:
From the Accreditation Council of Genetic Counseling Practice-Based Competencies Use a range of genetic counseling skills and models of practice to facilitate informed decision making and adaptation to risk.

Outcome 3.1 Domain III Education: Patient Education
Providing Department: MS-Genetic Counseling/GCO
Learning Outcome Description:
From the Accreditation Council of Genetic Counseling Practice-Based Competencies Employ active listening skills and interviewing skills to identify, assess, and empathically respond to stated and emerging concerns.

Outcome 3.2 Domain III Education: Written Documentation of the Genetic Counseling Encounter
Providing Department: MS-Genetic Counseling/GCO
Learning Outcome Description:
From the Accreditation Council of Genetic Counseling Practice-Based Competencies Compose clear, comprehensive and accurate written clinical summaries that are tailored to the health literacy of the intended audience and comply with medical documentation and confidentiality requirements.

Outcome 3.3 Domain III Education: Presentation Skills
Providing Department: MS-Genetic Counseling/GCO
Learning Outcome Description:
From the Accreditation Council of Genetic Counseling Practice-Based Competencies Design and deliver presentations on genetics, genomics, and genetic counseling issues that demonstrate core components of effective presentations and are tailored to the intended audience.

Outcome 4.1 Domain IV Professional Development and Practice: Ethical, Legal, and Philosophical Principles and Values
Providing Department: MS-Genetic Counseling/GCO
Learning Outcome Description:
From the Accreditation Council of Genetic Counseling Practice Based Competencies Act in accordance with ethical, legal, and philosophical principles and values of the genetic counseling profession and the policies of one’s institution or organization.

Outcome 4.2 Domain IV Professional Development and Practice: Self-Reflective Practice
Providing Department: MS-Genetic Counseling/GCO
Learning Outcome Description:
From the Accreditation Council of Genetic Counseling’s Practice-Based Competencies Demonstrate a self-reflective approach to genetic counseling practice through recognizing one’s limitations and capabilities in the context of genetic counseling practice, seeking feedback and responding to performance critique, and accepting responsibility for one’s physical and emotional health as it impacts performance.

Outcome 4.3 Domain IV Professional Development and Practice: Evidence-Based Practice
Providing Department: MS-Genetic Counseling/GCO
Learning Outcome Description:
From the Accreditation Council of Genetic Counseling Practice-Based Competencies Demonstrate an evidence-based and current approach to genetic counseling practice with a concomitant commitment to lifelong learning.

Outcome 5 Research Genetic Counseling Research
Providing Department: MS-Genetic Counseling/GCO
Learning Outcome Description:
Produce an original contribution to the genetic counseling literature through secondary data analysis or original study. Students achieve this objective through a Plan B project. The Graduate School defines the Plan B requirement as an essay that “shows evidence of scholarly study and writing and be related to the student’s major.” The genetic counseling program stipulates that the project should also involve formulating and testing a research question or hypothesis (modified Plan B). Examples of student projects might include the following: a report on a small series of cases which illustrates a novel concept or answers a specific question; the evaluation of an innovative educational tool, screening tool, or counseling strategy; analysis and interpretation of data from an existing research project or database to answer a new question; or generation of new data followed by analysis and interpretation to answer an original question. A comprehensive literature review might also be appropriate if it hypothesis driven (such as a meta-analysis of existing research on a topic).

MS-Molecular Genetics and Genomics

1 Learning Outcome No.: 1
Providing Department: MS-Molecular Genetics and Genomics
Learning Outcome Description:
Students will acquire a broad understanding of current molecular genetics and genomics including current areas of research and research methodologies.

2 Learning Outcome No.: 2
Providing Department: MS-Molecular Genetics and Genomics
Learning Outcome Description:
Students will master data analysis and learn to critically evaluate their own data and data in the research literature.

3 Learning Outcome No.: 3
Providing Department: MS-Molecular Genetics and Genomics
Learning Outcome Description:
Students will learn to identify important outstanding problems in molecular genetics and genomics and to plan research to address these problems.

4 Learning Outcome No.: 4
Providing Department: MS-Molecular Genetics and Genomics
Learning Outcome Description:
Students will learn to organize and present research plans and results to an audience, including preparation of research proposals and manuscripts for publication in scientific journals.

PhD-Molecular Genetics and Genomics

1 Learning Outcome No.: 1
Providing Department: PhD-Molecular Genetics and Genomics
Learning Outcome Description:
Students will acquire a broad and comprehensive understanding of current molecular genetics and genomics relevant to human biology and disease, including current areas of research and research methodologies.

2 Learning Outcome No.: 2
Providing Department: PhD-Molecular Genetics and Genomics
Learning Outcome Description:
Students will master data analysis and learn to critically evaluate their own data and data in the research literature.

3 Learning Outcome No.: 3
Providing Department: PhD-Molecular Genetics and Genomics
Learning Outcome Description:
Students will learn to identify important outstanding problems in molecular genetics and genomics and to plan research to address these problems. Students will plan and execute experiments that address a research problem.

4 Learning Outcome No.: 4
Providing Department: PhD-Molecular Genetics and Genomics
Learning Outcome Description:
To develop within each student the approach to scientific thinking and exploration needed for original research as an independent
investigator in molecular genetics and genomics.

5 Learning Outcome No.: 5

Providing Department: PhD-Molecular Genetics and Genomics

Learning Outcome Description:
Students will learn to organize and present research plans and results to a variety of audiences, including preparation of research proposals and manuscripts for publication in scientific journals.

GC-Clinical & Translational Science/CTS

1.0 Graduate Certificate in Clinical and Trans. Sci. /Bridge Program Learning Objectives

Providing Department: GC-Clinical & Translational Science/CTS

Learning Outcome Description:
1. Students will apply their basic science knowledge and clinical medicine skills to the design and execution of responsible clinical trials and the delivery of modern medicine.

2a. Graduate Certificate in Clinical and Trans. Sci. /Bridge Program Learning Objectives

Providing Department: GC-Clinical & Translational Science/CTS

Learning Outcome Description:
1. Students will apply their basic science knowledge and clinical medicine skills to the design and execution of responsible clinical trials and the delivery of modern medicine.

2b. Graduate Certificate in Clinical and Trans. Sci. /Bridge Program Learning Objectives

Providing Department: GC-Clinical & Translational Science/CTS

Learning Outcome Description:
Physician scientists will apply their detailed understanding of pathological mechanisms to develop and apply novel/effective diagnoses, treatments, and trials for human disease.

2c. Graduate Certificate in Clinical and Trans. Sci. /Bridge Program Learning Objectives

Providing Department: GC-Clinical & Translational Science/CTS

Learning Outcome Description:
Specific learning objectives from medical and graduate programs will apply as students progress through the respective training venues.

MD/PHD-Dual Degree Program

1 MD/PHD-Dual Degree Program Learning Objective 1

Providing Department: MD/PHD-Dual Degree Program

Learning Outcome Description:
The students will demonstrate an understanding of basic medical science knowledge acquired during the first two years of medical school.

2 MD/PHD Dual Degree Program Learning Objective 2

Providing Department: MD/PHD-Dual Degree Program

Learning Outcome Description:
The students will participate in at least two research rotations during the first two years of medical school and select a mentor and laboratory for their doctoral research training.

3 MD/PHD Dual Degree Program Learning Objective 3

Providing Department: MD/PHD-Dual Degree Program

Learning Outcome Description:
During their first two graduate training years each student will plan and execute a series of experiments that will test an original hypothesis and that will serve as the foundation for a submitted fellowship application.

4 MD/PHD Dual Degree Program Learning Objective 4

Providing Department: MD/PHD-Dual Degree Program

Learning Outcome Description:
During their final years of graduate training each student will present their peer reviewed scientific findings at a regional, national or
international conference. Each student will prepare one or more manuscripts, based on their research, for publication in peer reviewed journals of impact in their area of research prior to their dissertation defense.

**MD-Medical Doctor**

**AB01** The ability to apply humanistic values in the delivery of health care.

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* AB01: The ability to apply humanistic values in the delivery of health care.

**AB02** The ability to work cooperatively with other health care workers in the delivery of health care.

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* AB02: The ability to work cooperatively with other health care workers in the delivery of health care.

**AB03** The ability to respect the patients' dignity, privacy, and confidentiality in the delivery of health care.

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* AB03: The ability to respect the patients' dignity, privacy, and confidentiality in the delivery of health care.

**AB04** The ability to effectively interact with patients, peers and other healthcare workers from diverse cultural backgrounds.

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* AB04: The ability to effectively interact with patients, peers and other healthcare workers from diverse cultural backgrounds.

**AB05** Recognize the need to engage in lifelong learning to stay abreast of relevant scientific advances.

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* AB05: Recognize the need to engage in lifelong learning to stay abreast of relevant scientific advances.

**AB06** The ability to recognize personal educational needs and to select and utilize appropriate learning resources.

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* AB06: The ability to recognize personal educational needs and to select and utilize appropriate learning resources.

**K01** Knowledge of the normal structure of the human body (cell tissues and organs).

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* K01: Knowledge of the normal structure of the human body (cell tissues and organs).

**K02** Knowledge of the normal function of the human body (cell tissues and organs).

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* K02: Knowledge of the normal function of the human body (cell tissues and organs).

**K03** Knowledge of the nature of agents and mechanisms that produce alterations in structure and function of the body.

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* K03: Knowledge of the nature of agents and mechanisms that produce alterations in structure and function of the body.

**K04** Knowledge of the nature and course of alterations in function produced by etiological agents and mechanisms (Pathophysiology) of the body.

*Providing Department:* MD-Medical Doctor

*Learning Outcome Description:* K04: Knowledge of the nature and course of alterations in function produced by etiological agents and mechanisms (Pathophysiology) of the body.

**K05** Knowledge of the nature and course of alterations in function produced by etiological agents and mechanisms (Pathophysiology) of the body.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K5: Knowledge of the nature and course of alterations in function produced by etiological agents and mechanisms (Pathophysiology) of the body.

K06 Knowledge of the appropriate use of laboratory techniques in identifying diseases or health problems.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K6: Knowledge of the appropriate use of laboratory techniques in identifying diseases or health problems.

K07 Knowledge of the action, metabolism, and toxic effects of drugs.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K6: Knowledge of the action, metabolism, and toxic effects of drugs.

K08 Knowledge of the therapeutic use of drugs.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K8: Knowledge of the therapeutic use of drugs.

K09 Knowledge of normal growth and development.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K9: Knowledge of normal growth and development.

K10 Knowledge of the principles and concepts underlying normal behavior and mental illness.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K10 Knowledge of the principles and concepts underlying normal behavior and mental illness.

K11 Knowledge of the aging process.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K11: Knowledge of the aging process.

K12 Knowledge about relieving pain and ameliorating the suffering of patients.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K12: Knowledge about relieving pain and ameliorating the suffering of patients.

K13 Knowledge of the health care delivery systems including social, economic and political dimensions.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K13: Knowledge of the health care delivery systems including social, economic and political dimensions.

K14 An understanding of the need and value of consultations and referrals in the delivery of health care.
Providing Department: MD-Medical Doctor
Learning Outcome Description: K14: An understanding of the need and value of consultations and referrals in the delivery of health care.

S01 The ability to perform a satisfactory physical exam.
Providing Department: MD-Medical Doctor
Learning Outcome Description: S1: The ability to perform a satisfactory physical exam.

S02 The ability to take a satisfactory medical history including psychosocial, nutritional, occupational and sexual dimensions.
Providing Department: MD-Medical Doctor
Learning Outcome Description: S2: The ability to take a satisfactory medical history including psychosocial, nutritional, occupational and sexual dimensions.

S03 The ability to utilize data from the history, physical exam and laboratory evaluations to identify the health problem.
Providing Department: MD-Medical Doctor
Learning Outcome Description:
S3: The ability to utilize data from the history, physical exam and laboratory evaluations to identify the health problem.

S04 The ability to formulate an appropriate differential diagnosis.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S4: The ability to formulate an appropriate differential diagnosis.

S05 The ability to formulate effective management plans (diagnostic, treatment, and prevention strategies) for diseases and other health problems.

Providing Department: MD-Medical Doctor
Learning Outcome Description:
S5: The ability to formulate effective management plans (diagnostic, treatment, and prevention strategies) for diseases and other health problems.

S06 The ability to monitor the course of illnesses and to appropriately revise the management plan.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S6: The ability to monitor the course of illnesses and to appropriately revise the management plan.

S07 The ability to perform routine technical procedures specified by the medical school and clerkship.

Providing Department: MD-Medical Doctor
Learning Outcome Description:
S7: The ability to perform routine technical procedures specified by the medical school and clerkship.

S08 The ability to document the clinical encounter.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S8: The ability to document the clinical encounter.

S09 The ability to apply the principles and concepts underlying normal behavior and mental illness.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S9: The ability to apply the principles and concepts underlying normal behavior and mental illness.

S10 The ability to diagnose and participate in the management of mental illnesses.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S10: The ability to diagnose and participate in the management of mental illnesses.

S11 The ability to apply the therapeutic use of drugs in patient care.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S11: The ability to apply the therapeutic use of drugs in patient care.

S12 The ability to recognize normal growth and development.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S12: The ability to recognize normal growth and development.

S13 The ability to recognize the relationship between health and illness, the patient and the patient's environment.

Providing Department: MD-Medical Doctor
Learning Outcome Description:
S13: The ability to recognize the relationship between health and illness, the patient and the patient's environment.

S14 The ability to apply psychosocial principles and concepts in the delivery of health care.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S14: The ability to apply psychosocial principles and concepts in the delivery of health care.

S15 The ability to apply preventive and health maintenance principles and techniques in the delivery of health care.

Providing Department: MD-Medical Doctor
Learning Outcome Description:
S15: The ability to apply preventive and health maintenance principles and techniques in the delivery of health care.
S16 The ability to apply the appropriate use of laboratory methods in identifying diseases or health problems.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S16: The ability to apply the appropriate use of laboratory methods in identifying diseases or health problems.

S17 The ability to recognize patients with immediately life threatening conditions.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S17: The ability to recognize patients with immediately life threatening conditions.

S18 The ability to apply Translational Medicine principles to clinical decision making.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S18: The ability to apply Translational Medicine principles to clinical decision making.

S19 The ability to demonstrate effective physician-patient interaction skills.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S19: The ability to demonstrate effective physician-patient interaction skills.

S20 The ability to utilize appropriate communication skills to obtain a history, diagnosis, and deliver an effective treatment plan to patients.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S20: The ability to utilize appropriate communication skills to obtain a history, diagnosis, and deliver an effective treatment plan to patients.

S21 The ability to effectively communicate with peers and members of the healthcare team in the care of patients and their families.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S21: The ability to effectively communicate with peers and members of the healthcare team in the care of patients and their families.

S22 The ability to apply the concepts and principles of primary care and Family Medicine in the delivery of health care.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S22: The ability to apply the concepts and principles of primary care and Family Medicine in the delivery of health care.

S23 The ability to apply cost containment principles and techniques in the delivery of health care.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S23: The ability to apply cost containment principles and techniques in the delivery of health care.

S24 The ability to critically appraise the medical literature.

Providing Department: MD-Medical Doctor
Learning Outcome Description: S24: The ability to critically appraise the medical literature.

**MS-Basic Medical Sciences/BMS**

1 Learning Outcome #1: Core Curriculum Learning

Providing Department: MS-Basic Medical Sciences/BMS
Learning Outcome Description: Students will master the fundamentals of graduate level training in core areas of specialization, including biochemistry, physiology, immunology, toxicology and pharmacology.

2 Learning Outcome #2: Area of Specialization

Providing Department: MS-Basic Medical Sciences/BMS
Learning Outcome Description: Students will master the fundamentals of graduate level training in academic concentrations of their choice.

3 Learning Outcome #3: Communication Skills

https://wayne.campuslabs.com/planning/reports/view/18384/year/2670/unit/44855
Providing Department: MS-Basic Medical Sciences/BMS
Learning Outcome Description:
Students will become proficient in communicating scientific concepts appropriate for scientific reports and manuscripts.

4 Learning Outcome #4: Biomedical Literature Review
Providing Department: MS-Basic Medical Sciences/BMS
Learning Outcome Description:
Students will master the skills of searching the literature on a biomedical topic of their choice, studying the information obtained and preparing a written review of the topic summarizing the state of the art.

MS-Medical Research/MEDR

1 Learning Outcome 1: Mastery in Area of Specialization
Providing Department: MS-Medical Research/MEDR
Learning Outcome Description: Students will master an area of specialization related to their areas of research interests.

2 Learning Outcome 2 - Writing Skills
Providing Department: MS-Medical Research/MEDR
Learning Outcome Description: The students will become proficient in communicating scientific concepts appropriate for manuscript preparation.

3 Learning Outcome 3 - Ethics
Providing Department: MS-Medical Research/MEDR
Learning Outcome Description: To understand ethical principles underlying scholarly work.

4 Learning Outcome 4 - Research Skills
Providing Department: MS-Medical Research/MEDR
Learning Outcome Description: Students will be able to design, execute and interpret state-of-the-art experiments in their discipline.

Bridge GC-Public Health Practice /PHP

1. Program Outcome #1: Public Health Knowledge: Environmental Health
Providing Department: Bridge GC-Public Health Practice /PHP
Learning Outcome Description:
Program Outcome # 1.0 Public Health Knowledge: Environmental Health: Apply evidence-based knowledge from environmental health to improving the health of the public.

2. Program Outcome #2: Scholarly Research and Analysis
Providing Department: Bridge GC-Public Health Practice /PHP
Learning Outcome Description:
Program Outcome #2. Scholarly Research & Analysis: Uses appropriate research and analytical strategies to describe and address public health issues.

3a Program Outcome #3a. Communicates public health principles and findings in oral presentations.
Providing Department: Bridge GC-Public Health Practice /PHP
Learning Outcome Description:
Program Outcome 3a. Competency in Verbal Communication: Case Study Role Play as evidence of public health communication to public audiences

3b. Program Outcome #3.b. Communicates public health principles and findings in writing.
Providing Department: Bridge GC-Public Health Practice /PHP
Learning Outcome Description:
Program Outcome 3.b. Communicates public health principles and findings in writing to professional and community audiences in a Briefing Paper.

MPH-Public Health/PH
1.0 #1.0. Public Health Knowledge
Providing Department: MPH-Public Health/PH
Learning Outcome Description: #1.0. Apply evidence-based knowledge from the following public health domains to understanding and improving the health of the public: epidemiology, biostatistics, social and behavioral health, environmental health, healthcare organization and administration.

2.0 #2. Scholarly Research and Analysis
Providing Department: MPH-Public Health/PH
Learning Outcome Description: #2.0. Uses appropriate research and analytical strategies to address public health issues.

3a #3a. Scholarly Communication. Verbal
Providing Department: MPH-Public Health/PH
Learning Outcome Description: #3 Scholarly Communication: Communicates public health principles and findings in writing to professional and community audiences using a variety of media and methodologies

3b #3b. Scholarly Communication. Written
Providing Department: MPH-Public Health/PH
Learning Outcome Description: Learning Outcome #3b Verbal Communication: Communicate public health principles and findings to professional and community audiences verbally using a variety of media and methodologies.

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**MS- Biochemistry & Molecular Biology/BMB**

**LO1 MS-BMB-didactic goals**
Providing Department: MS- Biochemistry & Molecular Biology/BMB
Learning Outcome Description: LO1 To learn core concepts in biochemistry, including protein, nucleic acid and membrane structure and function, intermediary metabolism and the signal transduction pathways that regulate and coordinate cellular function. To learn core concepts molecular biology including recombinant DNA methods, DNA replication and repair, RNA synthesis and processing and the regulation of gene expression. Performance on exams in the required course, writing and problem solving assignments, writing a research plan for the thesis research, oral presentations at the ends of each semester to a thesis committee, writing and orally defending the final thesis to a thesis committee.

**LO2 MS-BMB-Critical thinking and learning tools goals**
Providing Department: MS- Biochemistry & Molecular Biology/BMB
Learning Outcome Description: LO2 To learn how to access and critically evaluate the scientific literature, online resources and data bases. Performance of annual Journal Club presentations, participation in discussions of these presentations, written thesis research plan, writing and defending the thesis. To integrate the knowledge obtained through course work and the literature with critical thinking to solve problems. Adviser and thesis committee assessments of performance in the independent studies and dissertation research. To develop oral communication skills. Journal club presentations, presentation of the research in thesis committee presentations each semester and at the final defense, and presentation of posters at local or national scientific meetings. To develop written communication skills. Writing the research plan and the final thesis, and writing scientific publications with the adviser.

**LO3 MS-BMB-technical expertise goals**
Providing Department: MS- Biochemistry & Molecular Biology/BMB
Learning Outcome Description: LO3 To develop an understanding of the scientific method and research skills by conducting original research. A methods-oriented introductory required course rotations, which includes hands-on lab exercises and demonstrations, and the major program requirement of original research for the thesis.

**LO4 MS-BMB-scientific presentations skills goals**
Providing Department: MS- Biochemistry & Molecular Biology/BMB
Learning Outcome Description: To assess the student’s ability to present original research material, published in the literature or from his/her own work, in a clear and coherent manner, to demonstrate understanding of the concepts of the experiments, and to be able to discuss and ask questions upon hearing materials presented by others.
**MS- Immunology & Microbiology/IMM**

1 Fundamental Principles - M.S.

*Providing Department: MS- Immunology & Microbiology/IMM*

*Learning Outcome Description:*

Students will understand the fundamental principles of immunology, microbiology and virology and will be able to read and evaluate the current scientific literature in these disciplines.

2 Research Skills - M.S.

*Providing Department: MS- Immunology & Microbiology/IMM*

*Learning Outcome Description:*

Students will be able to design, execute and interpret state-of-the-art experiments in their discipline.

3 Research Ethics - M.S.

*Providing Department: MS- Immunology & Microbiology/IMM*

*Learning Outcome Description:*

Students will be familiar with principles and guidelines for ethical conduct of biomedical research, and competent in their application to research in their discipline.

4 Scientific Communication - M.S.

*Providing Department: MS- Immunology & Microbiology/IMM*

*Learning Outcome Description:*

Students will develop skills at oral, graphic, and written communication of scientific ideas and data to audiences that range from scientifically naïve to specialists in the areas of the student’s research.

**PhD- Biochemistry & Molecular Biology/BMB**

**LO1 Knowledge of biochemistry & molecular biology and cellular biology.**

*Providing Department: PhD- Biochemistry & Molecular Biology/BMB*

*Learning Outcome Description:*

LO1: To ensure that the student will have has an advanced, up to date knowledge of biochemistry, molecular and cellular biology upon completion of the Ph.D. degree.

**LO2 Ability to evaluate scientific literature**

*Providing Department: PhD- Biochemistry & Molecular Biology/BMB*

*Learning Outcome Description:*

LO2: To learn how to access and critically evaluate the scientific literature, online resources and data bases.

**LO3 Learn and apply the scientific method**

*Providing Department: PhD- Biochemistry & Molecular Biology/BMB*

*Learning Outcome Description:*

LO3: To learn the scientific method include experiment design, execution and interpretation by conduction original research.

**LO4 Learn and demonstrate effective oral communication skills**

*Providing Department: PhD- Biochemistry & Molecular Biology/BMB*

*Learning Outcome Description:*

LO4: To learn effective oral communication skills in order to effectively report research results to students and other scientists.

**LO5 Learn and demonstrate effective written communication skills**

*Providing Department: PhD- Biochemistry & Molecular Biology/BMB*

*Learning Outcome Description:*

LO5: To learn effective written communication skills for the preparation of manuscripts, grants and other reports.

**PhD- Immunology & Microbiology/IMM**

1 Fundamental Principles - Ph.D.

*Providing Department: PhD- Immunology & Microbiology/IMM*

*Learning Outcome Description:*


Students will understand the fundamental principles of immunology, microbiology and virology and will be able to read and evaluate the current scientific literature in these disciplines.

2 Research Skills - Ph.D.
Providing Department: PhD- Immunology & Microbiology/IMM
Learning Outcome Description: Students will be able to design, execute and interpret state-of-the-art experiments in their discipline.

3 Research Ethics - Ph.D.
Providing Department: PhD- Immunology & Microbiology/IMM
Learning Outcome Description: Students will be familiar with principles and guidelines for ethical conduct of biomedical research, and competent in their application to research in their discipline.

4 Scientific Communication - Ph.D.
Providing Department: PhD- Immunology & Microbiology/IMM
Learning Outcome Description: Students will develop skills at oral, graphic, and written communication of scientific ideas and data to audiences that range from scientifically naïve to specialists in the areas of the student’s research.

MS-Cancer Biology/CB

1 Learning outcome 1 - Original Research
Providing Department: MS-Cancer Biology/CB
Learning Outcome Description: To produce evidence of scholarship in cancer biology.

2 Learning Outcome 2 - Critical Thinking
Providing Department: MS-Cancer Biology/CB
Learning Outcome Description: To effectively critique current literature in Cancer Biology

3 Learning Outcome 3 - Ethics
Providing Department: MS-Cancer Biology/CB
Learning Outcome Description: To conduct original scholarly research in cancer biology in an ethical manner.

4 Learning Outcome 4 - Clinical Relevance
Providing Department: MS-Cancer Biology/CB
Learning Outcome Description: To understand how the cancer biology discipline relates to the clinical experience of cancer patients.

PhD-Cancer Biology/CB

1 Learning Outcome 1 - Original Research
Providing Department: PhD-Cancer Biology/CB
Learning Outcome Description: To generate and defend a significant body of original research in cancer biology.

2 Learning Outcome 2 - Communication
Providing Department: PhD-Cancer Biology/CB
Learning Outcome Description: To communicate effectively a specialized area of Cancer Biology.

3 Learning Outcome 3 - Ethics
Providing Department: PhD-Cancer Biology/CB
Learning Outcome Description: To conduct original scholarly research in cancer biology in an ethical manner

4 Learning Outcome 4 - Clinical Relevance
Providing Department: PhD-Cancer Biology/CB
Learning Outcome Description: To relate the cancer biology discipline to the clinical experience of cancer patients.

PhD-Pathology/PATH

1 Knowledge base: physiology and cell biology
Providing Department: PhD-Pathology/PATH
Learning Outcome Description:
Develop a fundamental understanding of the molecular mechanisms of disease. This will include molecular mechanisms of normal physiology and cell biology.

2 Laboratory research skills
Providing Department: PhD-Pathology/PATH
Learning Outcome Description:
Master basic methodological skills required to carry out basic research investigations into mechanisms of disease.

3 Communication skills: written
Providing Department: PhD-Pathology/PATH
Learning Outcome Description:
Students will learn the writing skills necessary to effectively communicate experimental ideas and scientific findings. This will be accomplished in the context of two specific writing tasks: grant proposals, and peer-reviewed research publications.

4 Communication skills: oral
Providing Department: PhD-Pathology/PATH
Learning Outcome Description:
Students will learn how to present an engaging and effective seminar on their own research projects and on published research findings (e.g. in a journal club format). This will include the ability to describe and present relevant background information, a project's rationale and experimental design, as well as the findings & their significance. In addition, the student will learn how to design and construct presentation materials to clearly and effectively communicate their own data.

5 Critical analysis
Providing Department: PhD-Pathology/PATH
Learning Outcome Description:
Learn to critically evaluate, analyze and discuss experimental data. This includes analysis of findings from the published literature as well as results presented orally in the form of seminars and public presentations.

PhD-Pharmacology/PHA

1. general education
Providing Department: PhD-Pharmacology/PHA
Learning Outcome Description:
PROGRAM LEARNING GOALS The students shall demonstrate an understanding of biomedical research and a thorough knowledge of basic pharmacology.

2. literature
Providing Department: PhD-Pharmacology/PHA
Learning Outcome Description: The students shall be aware of the current literature in pharmacology and related sciences.

3. research
Providing Department: PhD-Pharmacology/PHA
Learning Outcome Description: The students shall plan and execute a series of experiments that will test an original hypothesis.

4. oral communication
Providing Department: PhD-Pharmacology/PHA
Learning Outcome Description: The students shall be able to present their research to an audience of professionals.

5. written communication: grants
Providing Department: PhD-Pharmacology/PHA
Learning Outcome Description: The students shall be able to write grants to support their research.

6. written communication: manuscripts
Providing Department: PhD-Pharmacology/PHA
Learning Outcome Description: The students shall be able write manuscripts based on their research for publication in well-recognized journals.
MS-Pharmacology/PHA

1. education
Providing Department: MS-Pharmacology/PHA
Learning Outcome Description: The students shall demonstrate an understanding of biomedical research and a thorough knowledge of basic pharmacology.

2. literature
Providing Department: MS-Pharmacology/PHA
Learning Outcome Description: The students shall be aware of the current literature in pharmacology and related sciences.

3. research
Providing Department: MS-Pharmacology/PHA
Learning Outcome Description: The students shall plan and execute a series of experiments that will test an original hypothesis.

4. oral communication
Providing Department: MS-Pharmacology/PHA
Learning Outcome Description: The students shall be able to present their research to an audience of professionals.

5. written communication
Providing Department: MS-Pharmacology/PHA
Learning Outcome Description: The students shall contribute to manuscripts involving their research for publication in well-recognized journals.

MS-Physiology/PSL

1.0 Learning Outcome - Demonstrate knowledge of cellular and organ systems physiology
Providing Department: MS-Physiology/PSL
Learning Outcome Description: Students will be able to describe basic core principles of cellular and organ systems physiology.

2.0 Learning Outcome - Acquire fundamentals of basic physiology laboratory techniques
Providing Department: MS-Physiology/PSL
Learning Outcome Description: Students will be introduced to the experimental approaches used in cell, molecular, and organ systems physiology.

3.0 Learning Outcome - Demonstrate written and oral communication skills
Providing Department: MS-Physiology/PSL
Learning Outcome Description: Students should be able to effectively present their work orally and in written form to scientists.

4.0 Learning Outcome - Formulate and test an experimental hypothesis
Providing Department: MS-Physiology/PSL
Learning Outcome Description: Students will demonstrate that they are capable of formulating a testable hypothesis in molecular, cellular, or organ systems physiology and testing the hypothesis with an appropriate experimental design.

PhD-Physiology/PSL

1.0 Learning Outcome - Explain basic principles of cellular and organ systems physiology
Providing Department: PhD-Physiology/PSL
Learning Outcome Description: Students will be able to summarize basic physiological principles, explain detailed mechanisms in their specific field of study, and describe their applications to human disease.

2.0 Learning Outcome - Identify current concepts in specific fields of study and critically assess the literature
Providing Department: PhD-Physiology/PSL
Learning Outcome Description:
Students will learn to able to identify current concepts in their field and critically assess the literature.

3.0 Learning Outcome - Formulate hypotheses and design experiments that yield valid results.

Providing Department: PhD-Physiology/PSL

Learning Outcome Description:
Students will demonstrate that they are capable of formulating testable hypotheses in molecular, cellular, or organ systems physiology and designing experiments that yield valid results.

4.0 Learning Outcome - Develop oral and written presentation skills for communication with scientists and the lay public.

Providing Department: PhD-Physiology/PSL

Learning Outcome Description:
Students should be able to communicate orally and in writing their work in physiology to trained scientists in the field and the educated lay public.

5.0 Learning Outcome - Recognize ethical issues related to their work and formulate strategies for dealing with them.

Providing Department: PhD-Physiology/PSL

Learning Outcome Description:
Students will recognize ethical issues related to their work and formulate strategies for dealing with them.

PhD-Translational Neurosciences/TNP

Learning Outcome 1 Didactic Curriculum

Providing Department: PhD-Translational Neurosciences/TNP

Learning Outcome Description:
Through a diverse didactic curriculum, students will gain knowledge and understanding of basic sciences related to the neurobiology of the nervous system, brain disorders, diseases and injuries, the fundamentals of neuroimaging techniques, and statistical approaches to modeling research data.

Learning Outcome 2 Skills at Communicating and Critiquing Science

Providing Department: PhD-Translational Neurosciences/TNP

Learning Outcome Description:
Students will learn and develop the skills in communicating orally and in writing, critiquing and challenging basic and clinical research results through journal club and seminar participation, and oral and poster presentation of research (e.g., at local, national and international scientific meetings, and TNP seminars).

Learning Outcome 3 Advanced Proficiency in Knowledge in a Research Area of Interest

Providing Department: PhD-Translational Neurosciences/TNP

Learning Outcome Description:
Students will gain advanced knowledge in basic, translational and clinical neuroscience as well as gain expertise in a particular research area of interest. With guidance from advisor and advisory committee, students will design, develop and write a dissertation research prospectus in the form of a research grant proposal with testable hypotheses and experimental approach.

Learning Outcome 4 Dissertation Research Project

Providing Department: PhD-Translational Neurosciences/TNP

Learning Outcome Description:
With guidance from advisor and advisory committee, students are expected to conduct graduate-level research and exhibit advanced knowledge and mastery within their chosen research interest.

GC in Medical Physics

1 Understanding of the Fundamentals of Radiological Physics

Providing Department: GC in Medical Physics

Learning Outcome Description:
We intend to provide students with a thorough understanding of the fundamentals of radiological physics, along with the underlying physics and mathematical principles, as well as an understanding of how these fundamental principles are related to the practical application of radiological principles in medicine.
2 Understanding the Clinical Application of Medical Physics Principles
Providing Department: GC in Medical Physics
Learning Outcome Description:
We intend to provide students with a thorough understanding of the practice of clinical medical physics within Radiation Oncology, Diagnostic Imaging, and Nuclear Medicine as well as how fundamental physics principles are applied to these clinical practices.

3 Opportunities for Hands-On Practical Experience
Providing Department: GC in Medical Physics
Learning Outcome Description:
We intend to provide students with opportunities for hands-on practical experience in Radiation Oncology, Diagnostic Imaging, and Nuclear Medicine physics.

4 Education and Training in Hospital Environment
Providing Department: GC in Medical Physics
Learning Outcome Description:
We intend to provide students with education and training in the fundamentals and practical application of radiation protection and safety in a hospital environment.

**Medical Physics Masters/RADP**

1 Understanding of the Fundamentals of Radiological Physics
Providing Department: Medical Physics Masters/RADP
Learning Outcome Description:
We intend to provide students with a thorough understanding of the fundamentals of radiological physics, along with the underlying physics and mathematical principles, as well as an understanding of how these fundamental principles are related to the practical application of radiological principles in medicine.

2 Understanding the Clinical Application of Medical Physics Principles
Providing Department: Medical Physics Masters/RADP
Learning Outcome Description:
We intend to provide students with a thorough understanding of the practice of clinical medical physics within Radiation Oncology, Diagnostic Imaging, and Nuclear Medicine as well as how fundamental physics principles are applied to these clinical practices.

3 Opportunities for Hands-On Practical Experience
Providing Department: Medical Physics Masters/RADP
Learning Outcome Description:
We intend to provide students with opportunities for hands-on practical experience in Radiation Oncology, Diagnostic Imaging, and Nuclear Medicine physics.

4 Education and Training in a Hospital Environment
Providing Department: Medical Physics Masters/RADP
Learning Outcome Description:
We intend to provide students with education and training in the fundamentals and practical application of radiation protection and safety in a hospital environment.

**PhD-Medical Physics/MP**

1 Understanding of the Fundamentals of Radiological Physics
Providing Department: PhD-Medical Physics/MP
Learning Outcome Description:
We intend to provide students with a thorough understanding of the fundamentals of radiological physics, along with the underlying physics and mathematical principles, as well as an understanding of how these fundamental principles are related to the practical application of radiological principles in medicine.

2 Understanding the Clinical Application of Medical Physics Principles
Providing Department: PhD-Medical Physics/MP
Learning Outcome Description:
We intend to provide students with a thorough understanding of the practice of clinical medical physics within Radiation Oncology,
Diagnostic Imaging, and Nuclear Medicine as well as how fundamental physics principles are applied to these clinical practices.

3 Opportunities for Hands-On Practical Experience
Providing Department: PhD-Medical Physics/MP
Learning Outcome Description:
We intend to provide students with opportunities for hands-on practical experience in Radiation Oncology, Diagnostic Imaging, and Nuclear Medicine physics.

4 Education and Training in a Hospital Environment
Providing Department: PhD-Medical Physics/MP
Learning Outcome Description:
We intend to provide students with education and training in the fundamentals and practical application of radiation protection and safety in a hospital environment.

GC in Acute Care Nurse Practitioner

1.0 Scientific Findings and Quality Improvement
Providing Department: GC in Acute Care Nurse Practitioner
Learning Outcome Description:
Demonstrate skill in translating and integrating scientific findings and quality improvement principles to provide safe acute and critical care management of the adult-gerontological patient population health/illness status through health promotion, health protection, disease prevention, and treatment.

2.0 Interprofessional Teams
Providing Department: GC in Acute Care Nurse Practitioner
Learning Outcome Description:
Carry out interpersonal transactions to manage and coordinate care with the adult-gerontological patient population and interprofessional teams as a member and a leader to achieve therapeutic patient outcomes.

3.0 Teaching/Coaching
Providing Department: GC in Acute Care Nurse Practitioner
Learning Outcome Description:
Competently use the teaching-coaching function through imparting knowledge and skills to the adult-gerontological patient population, as well as interpreting and individualizing therapies.

4.0 Advocacy and Policy Development
Providing Department: GC in Acute Care Nurse Practitioner
Learning Outcome Description:
Formulate a position on the Adult-Gerontology Acute Care Nurse practitioner role in the policy development process and employment of advocacy strategies to advance the profession and influence health and health care of the adult-gerontological population.

5.0 Communication and Coordination of Care
Providing Department: GC in Acute Care Nurse Practitioner
Learning Outcome Description:
Skillfully use patient-care and communication technologies to deliver, enhance, integrate, and coordinate care in the Acute and Critical Care delivery systems.

6.0 Monitoring and ensuring quality of care
Providing Department: GC in Acute Care Nurse Practitioner
Learning Outcome Description:
Assume responsibility for monitoring and ensuring the quality of healthcare practice that is developmentally, culturally, spiritually, and ethically appropriate with respect for the adult-gerontological population.

GC in Nurse Midwifery

1.0 Demonstrate Competence
Providing Department: GC in Nurse Midwifery
Learning Outcome Description:
Demonstrate competence in the clinical practice of midwifery as characterized by the Core Competencies for Basic Midwifery Practice 2012 (American College of Nurse Midwives, 2012)

2.0 Practice Collaboratively

**Providing Department:** GC in Nurse Midwifery  
**Learning Outcome Description:**  
Practice collaboratively within the healthcare system while providing primary care to women and newborns.

3.0 Adapt healthcare interventions

**Providing Department:** GC in Nurse Midwifery  
**Learning Outcome Description:**  
Use midwifery knowledge, innovation, creativity and cultural competence to adapt healthcare interventions based on the interrelationships among person, environment and health.

4.0 Analyze and evaluate effectiveness of healthcare interventions

**Providing Department:** GC in Nurse Midwifery  
**Learning Outcome Description:**  
Analyze current knowledge for midwifery practice, evaluate effectiveness of health care interventions and use evidence-based care in clinical practice.

5.0 Advance Knowledge

**Providing Department:** GC in Nurse Midwifery  
**Learning Outcome Description:**  
Engage in scholarly activity to advance knowledge in women’s health, newborn and midwifery care and collect accurate and clinical practice data/statistics.

6.0 Provide leadership

**Providing Department:** GC in Nurse Midwifery  
**Learning Outcome Description:**  
Provide leadership in women’s health care through active involvement in professional organizations, clinical teaching, and political awareness/involvement.

**GC in Nursing Education**

1.0 Formulate a conceptual framework

**Providing Department:** GC in Nursing Education  
**Learning Outcome Description:**  
Upon completion of the GCNE, the student will formulate a conceptual framework of the teaching-learning process.

2.0 Analyze concepts and theories

**Providing Department:** GC in Nursing Education  
**Learning Outcome Description:**  
Upon completion of the GCNE, the student will analyze concepts and theories relevant to cognitive, affective and psychomotor learning, the teaching process, and instructional methods.

3.0 Measurement, analysis, evaluation and grading.

**Providing Department:** GC in Nursing Education  
**Learning Outcome Description:**  
Upon completion of the GCNE, the student will utilize concepts of measurement, analysis, evaluation and grading by analyzing results of evaluation strategies.

4.0 Role of the teacher

**Providing Department:** GC in Nursing Education  
**Learning Outcome Description:**  
Upon completion of the GCNE, the student will examine the role of the teacher in nursing in varied settings and situations.

**GC in Pediatric Nurse Practitioner-Acute Care**
1.0 Demonstrate competence
Providing Department: GC in Pediatric Nurse Practitioner-Acute Care
Learning Outcome Description:
Demonstrate competence in Acute Care Pediatric Nurse Practitioner clinical practice as characterized by the Nurse Practitioner Core Competencies (NONFP, 2012) and Population-Focused Nurse Practitioner Competencies-Pediatric Acute Care (NONPF, 2013).

2.0 Practice collaboratively
Providing Department: GC in Pediatric Nurse Practitioner-Acute Care
Learning Outcome Description:
Practice collaboratively within the health care system while providing care to infants, children, and adolescents with complex acute, critical, and chronic health conditions and families.

3.0 Adapt healthcare interventions
Providing Department: GC in Pediatric Nurse Practitioner-Acute Care
Learning Outcome Description:
Use knowledge, innovation, creativity, and cultural competence to adapt healthcare interventions based on the interrelationships among person, environment, and health.

4.0 Analyze and evaluate effectiveness
Providing Department: GC in Pediatric Nurse Practitioner-Acute Care
Learning Outcome Description:
Analyze current knowledge for acute care pediatric nurse practitioner practice, evaluate effectiveness of health care interventions, and use evidence-based care in clinical practice.

5.0 Scholarly activity
Providing Department: GC in Pediatric Nurse Practitioner-Acute Care
Learning Outcome Description:
Engage in scholarly activity to advance knowledge in pediatric acute care and collect accurate outcome and clinical practice data/statistics.

6.0 Provide leadership
Providing Department: GC in Pediatric Nurse Practitioner-Acute Care
Learning Outcome Description:
Provide leadership in pediatric acute healthcare through active involvement in professional organizations, clinical teaching, and political awareness/involvement.

GC in Pediatric Nurse practitioner-Primary Care

1.0 Demonstrate competence
Providing Department: GC in Pediatric Nurse practitioner-Primary Care
Learning Outcome Description:
Demonstrate competence in pediatric Nurse Practitioner primary care clinical practice as characterized by the Nurse Practitioner Core Competencies (NONFP, 2012) and Population-Focused Nurse Practitioner competencies-Pediatric Primary Care (NONFP, 2013)

2.0 Practice Collaboratively
Providing Department: GC in Pediatric Nurse practitioner-Primary Care
Learning Outcome Description:
Practice collaboratively within the health care system while providing care to infants, children, adolescents, and families.

3.0 Adapt healthcare interventions
Providing Department: GC in Pediatric Nurse practitioner-Primary Care
Learning Outcome Description:
Use knowledge, innovation, creativity, and cultural competence to adapt healthcare interventions based on the interrelationships among person, environment, and health.

4.0 Analyze and evaluate health care
Providing Department: GC in Pediatric Nurse practitioner-Primary Care
Learning Outcome Description:
Analyze current knowledge for primary care pediatric nurse practitioner practice, evaluate effectiveness of health care interventions, and use evidence-based care in clinical practice.

5.0 Scholarly activity

Providing Department: GC in Pediatric Nurse practitioner-Primary Care
Learning Outcome Description: Engage in scholarly activity to advance knowledge in pediatric primary care and collect accurate outcome and clinical practice data/statistics.

6.0 Provide leadership

Providing Department: GC in Pediatric Nurse practitioner-Primary Care
Learning Outcome Description: Provide leadership in pediatric primary healthcare through active involvement in professional organizations, clinical teaching, and political awareness/involvement.

Nursing - BSN

1.0 Integrates knowledge in nursing care

Providing Department: Nursing - BSN
Learning Outcome Description: Integrates knowledge of health promotion, health restoration and supportive measures in management of nursing care of individuals, families and communities in diverse populations.

2.0 Evaluates healthcare

Providing Department: Nursing - BSN
Learning Outcome Description: Systematically evaluates the processes and outcomes of healthcare using established criteria.

3.0 Critical reasoning

Providing Department: Nursing - BSN
Learning Outcome Description: Integrates critical reasoning skills in the application of theoretical knowledge and research evidence in professional nursing practice.

4.0 Innovations and Technology

Providing Department: Nursing - BSN
Learning Outcome Description: Utilizes innovations and technology in planning, delivering, and evaluating nursing care and nursing care outcomes

5.0 Effective communication skills

Providing Department: Nursing - BSN
Learning Outcome Description: Demonstrates effective communication skills across the spectrum of nursing care.

6.0 Values and Ethics

Providing Department: Nursing - BSN
Learning Outcome Description: Demonstrates behaviors that reflect internalization of values and ethics of professional nursing.

7.0 Cultural Competence

Providing Department: Nursing - BSN
Learning Outcome Description: Demonstrates cultural competence in care of diverse populations.

Nursing (PhD)

1.0 Disseminate scholarly work to professional and lay audiences

Providing Department: Nursing (PhD)
Learning Outcome Description: By the completion of the program, PhD students will be able to write articles for publication. Students will also disseminate scholarly work through presentations at conferences.

2.0 Demonstrate Advanced Knowledge
Providing Department: Nursing (PhD)
Learning Outcome Description:
Demonstrate advanced knowledge and skills in the design, conduct, and analysis of studies in nursing and urban health.

3.0 Research proposals
Providing Department: Nursing (PhD)
Learning Outcome Description: At the completion of the PhD program, the student will be able to develop a research proposal.

4.0 Conduct Original Research
Providing Department: Nursing (PhD)
Learning Outcome Description: Students will conduct original research with an urban health focus.

Nursing Practice (DNP)

1.0 Provide advance practice nursing care
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will provide advance practice nursing care to individuals, families, and/or populations that is ethical and science-based.

2.0 Develop and initiate new innovative practice approaches
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will develop and initiate new innovative practice approaches based on theories from nursing and other disciplines.

3.0 Evaluate accessibility and quality of care
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will analyze, synthesize and evaluate accessibility and quality of care across diverse, underserved and vulnerable populations.

4.0 Utilize determinants of health
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will utilize the determinants of health for individuals and/or aggregates/communities for diverse, underserved and vulnerable populations.

5.0 Appraise, disseminate, and translate science
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will critically appraise, disseminate and translate science to advance the quality and accessibility of care.

6.0 Demonstrate advanced clinical investigative competencies to evaluate outcomes and systems.
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will demonstrate advanced clinical investigative competencies to evaluate clinical outcomes and systems of care.

7.0 Use information technology
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will use information technology in design, selection, use and evaluation of programs to advance the accessibility of care.

8.0 Innovative technological advancement
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will critically appraise, disseminate and translate innovative technological advancement to improve the quality and accessibility of care.

9.0 Leadership in communication and collaboration
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will demonstrate leadership in communication and collaborative skills as agents of change that improves accessibility to quality healthcare for diverse, underserved and vulnerable populations.

10.0 Analyze clinical patterns and delivery approaches
Providing Department: Nursing Practice (DNP)
Learning Outcome Description:
The student will analyze emerging clinical patterns and develop delivery approaches to care that deals with complex problems within the practice settings, healthcare organizations, and communities.

11.0 Shape the healthcare policy debate
Providing Department: Nursing Practice (DNP)
Learning Outcome Description: The student will shape the healthcare policy debate.

Nursing Undergraduate Curriculum Committee

Integrative strategy 2 Practice with theory
Providing Department: Nursing Undergraduate Curriculum Committee
Learning Outcome Description: The Nursing UG curriculum integrates practice with theory.

Use integrative strategies in Essential I Liberal education
Providing Department: Nursing Undergraduate Curriculum Committee
Learning Outcome Description: The Nursing UG curriculum integrates liberal education throughout its components.

Nursing-MSN

1.0 Practices advanced nursing from a holistic, evidence-based perspective.
Providing Department: Nursing-MSN
Learning Outcome Description: The graduate of the MSN Program practices advanced nursing from a holistic, evidence-based perspective that is ethically, culturally congruent and economically sound.

2.0 Develops skills for leadership and quality improvement.
Providing Department: Nursing-MSN
Learning Outcome Description: The graduate of the MSN Program develops skills for leadership and quality improvement in complex organizational systems.

3.0 Analyzes informatics and technology
Providing Department: Nursing-MSN
Learning Outcome Description: The graduate of the MSN Program analyzes the impact of informatics and technology on the delivery and outcomes of healthcare in diverse settings.

4.0 Healthcare policies and patient advocate
Providing Department: Nursing-MSN
Learning Outcome Description: The graduate of the MSN Program implements healthcare policies and advocates for patients and the nursing profession through interaction with organizational, local, state, and/or federal-level policy makers.

5.0 Interdisciplinary advance nursing practice
Providing Department: Nursing-MSN
Learning Outcome Description: The graduate of the MSN Program, in collaboration with interdisciplinary colleagues, practices advanced nursing that focuses on health-promoting and risk-reduction interventions to achieve optimal patient and population health outcomes.

Bachelor of Health Science
Learning Outcome 1 Oral Communication Skills
Providing Department: Bachelor of Health Science
Learning Outcome Description: Grads of the Bachelor of Health Sciences degree program will demonstrate effective oral communication skills necessary for future client interactions.

Learning Outcome 2 Written Communication Skills
Providing Department: Bachelor of Health Science
Learning Outcome Description: Grads of the Bachelor of Health Sciences degree program will demonstrate effective written communication skills necessary for future practice.

Learning Outcome 3 Patient Safety
Providing Department: Bachelor of Health Science
Learning Outcome Description: Understand basic principles of patient safety in the community and hospital practice setting.

Learning Outcome 4 Health Care Systems
Providing Department: Bachelor of Health Science
Learning Outcome Description: Describe the influences and components of United States health care systems and/or discipline specific professional organizations within the health care system.

New Learning Outcome (Program-level) Item
Providing Department: Bachelor of Health Science
Learning Outcome Description:

BS, Clinical Laboratory Science

1 CLS Program Learning Outcome #1
Providing Department: BS, Clinical Laboratory Science
Learning Outcome Description: Learning Outcome #1: Clinical Laboratory Science program graduates will demonstrate entry-level knowledge necessary to perform the full range of clinical laboratory testing.

2 CLS Program Learning Outcome #2
Providing Department: BS, Clinical Laboratory Science
Learning Outcome Description: a) Learning Outcome #2: Clinical Laboratory Science program graduates will apply principles and practices of professional conduct.

3 CLS Program Learning Outcome #3
Providing Department: BS, Clinical Laboratory Science
Learning Outcome Description: Learning Outcome #3: Clinical Laboratory Science program graduates will apply safety regulations and standards as appropriate to clinical laboratory science.

4 CLS Program Learning Outcome #4
Providing Department: BS, Clinical Laboratory Science
Learning Outcome Description: Learning Outcome #4: Clinical Laboratory Science program graduates will communicate appropriately with members of the health care team.

5 CLS Program Learning Outcome #5
Providing Department: BS, Clinical Laboratory Science
Learning Outcome Description: Learning Outcome #5: Clinical Laboratory Science program graduates will apply principles and practices of management and supervision as appropriate to clinical laboratory science.

6 CLS Program Learning Outcome #6
Providing Department: BS, Clinical Laboratory Science
Learning Outcome Description:
Learning Outcome #6: Clinical Laboratory Science program graduates will utilize educational methodologies and terminology sufficient to train/educate users and providers of laboratory services.

7 CLS Program Learning Outcome #7
Providing Department: BS, Clinical Laboratory Science
Learning Outcome Description:
Learning Outcome #7: Clinical Laboratory Science program graduates will apply principles and practices of clinical study design, implementation, and dissemination of results.

BS, Mortuary Science

1 Funeral Arrangements
Providing Department: BS, Mortuary Science
Learning Outcome Description:
Demonstrate proper practices in funeral arranging by applying knowledge of the types of ceremonies and methods of final disposition, merchandising, and trends.

2 Preparation of Remains
Providing Department: BS, Mortuary Science
Learning Outcome Description:
Demonstrate an ability to prepare human remains through embalming and other preparation and presentation skills.

3 Grief Applications
Providing Department: BS, Mortuary Science
Learning Outcome Description:
Relate principles of the grief process and sociology to approaches and methods of interaction with the bereaved.

4 Legal, Ethical, & Business Standards
Providing Department: BS, Mortuary Science
Learning Outcome Description: Apply legal, ethical, and business standards to funeral service practice.

Certificate, Post-Bachelor’s Forensic Investigation

1 Learning Outcome #1 PBFI
Providing Department: Certificate, Post-Bachelor’s Forensic Investigation
Learning Outcome Description:
LO1: Upon completion of the PBFI program, graduates will be able to describe the legal/ethical and operational parameters of a forensic investigation specialist.

2 Learning Outcome #2 PBFI
Providing Department: Certificate, Post-Bachelor’s Forensic Investigation
Learning Outcome Description:
Upon completion of the program, graduates will be able to describe specimen collection techniques that meet protocol specifications.

3 Learning Outcome #3 PBFI
Providing Department: Certificate, Post-Bachelor’s Forensic Investigation
Learning Outcome Description: Upon completion of the PBFI program, graduates will assess forensic case studies.

4 Learning Outcome #4 PBFI
Providing Department: Certificate, Post-Bachelor’s Forensic Investigation
Learning Outcome Description:
Upon completion of the PBFI program, graduates will assess quality control measures as found in forensic laboratory compliance.

5 Learning Outcome #5 PBFI
Providing Department: Certificate, Post-Bachelor’s Forensic Investigation
Learning Outcome Description:
Upon Completion of the PBFI program, graduates will design and assess functionality and responsiveness of contemporary medicolegal laboratories.

6 Learning Outcome #6 PBFI

Providing Department: Certificate, Post-Bachelor’s Forensic Investigation

Learning Outcome Description:
Upon completion of the PBFI program, graduates will assist the criminal justice system with cognitive development in interview and interrogation techniques.

7 Learning Outcome #7 PBFI

Providing Department: Certificate, Post-Bachelor’s Forensic Investigation

Learning Outcome Description:
Upon completion of the PBFI program, graduates will assist the criminal justice system in firearm evidence collection and evaluation including identification, ballistics and explosive materials

MS in Pathologists’ Assistant

LO1 PAA Learning Outcome #1

Providing Department: MS in Pathologists’ Assistant

Learning Outcome Description:
SLO #1: Graduates of the Pathologists’ Assistant program will demonstrate entry level competency in General and Systemic Pathology.

LO2 PAA Learning Outcome #2

Providing Department: MS in Pathologists’ Assistant

Learning Outcome Description:
SLO #2: Graduates of the Pathologists’ Assistant program will demonstrate entry level competency in anatomic pathology techniques.

LO3 PAA Learning Outcome #3

Providing Department: MS in Pathologists’ Assistant

Learning Outcome Description:
SLO #3: Graduates of the Pathologists’ Assistant program will demonstrate entry level competency in gross anatomy and normal microscopic anatomy.

LO4 PAA Learning Outcome #4

Providing Department: MS in Pathologists’ Assistant

Learning Outcome Description:
SLO #4: Graduates of the Pathologists’ Assistant program will demonstrate entry level competency in adult, neonatal, pediatric, and medicolegal autopsy pathology techniques.

LO5 PAA Learning Outcome #5

Providing Department: MS in Pathologists’ Assistant

Learning Outcome Description:
SLO #5: Graduates of the Pathologists’ Assistant program will demonstrate entry level competency in laboratory regulation, compliance, management, safety, and infection control operations associated with anatomic pathology.

BS, Radiation Therapy Technology

1 Learning Outcome 1 - Clinical Competency

Providing Department: BS, Radiation Therapy Technology

Learning Outcome Description:
Students will demonstrate clinical competency. “Equipment and treatment room activities” “Patient alignment skills”

2 Learning Outcome 2 - Oral Communication

Providing Department: BS, Radiation Therapy Technology

Learning Outcome Description: Students will demonstrate effective oral communication skills.
3 Learning Outcome 3 - written communication
Providing Department: BS, Radiation Therapy Technology
Learning Outcome Description: Students will demonstrate effective written communication skills.

4 Learning Outcome 4 - awareness of patient needs
Providing Department: BS, Radiation Therapy Technology
Learning Outcome Description: Students will demonstrate awareness of patient needs and concerns.

BS, Radiological Technological

Goal 1 Clinical Competence
Providing Department: BS, Radiological Technological
Learning Outcome Description: Students will demonstrate clinical competence.

Goal 2 Communication skills
Providing Department: BS, Radiological Technological
Learning Outcome Description: Students will demonstrate effective communication skills.

Goal 3 Problem Solving/Critical Thinking
Providing Department: BS, Radiological Technological
Learning Outcome Description: Students will demonstrate problem-solving and critical thinking skills in the clinical arena.

Goal 4 Professionalism
Providing Department: BS, Radiological Technological
Learning Outcome Description: Students will exhibit professionalism.

DNAP, Doctor of Nurse Anesthesia Practice

1 Comprehensive Assessment and Safe Practice
Providing Department: DNAP, Doctor of Nurse Anesthesia Practice
Learning Outcome Description: Students will accurately analyze preoperative patient data to devise a comprehensive anesthetic plan. The didactic foundation will be taught in semester I and II with integration in subsequent clinical rotations.

2 Technical Skills
Providing Department: DNAP, Doctor of Nurse Anesthesia Practice
Learning Outcome Description: Students will perform technical skills with competency and utilizing appropriate standards.

3 Communication
Providing Department: DNAP, Doctor of Nurse Anesthesia Practice
Learning Outcome Description: Nurse anesthesia students will demonstrate effective listening and communication skills when interacting with patients in preparation for surgical procedure.

4 Interprofessional Collaboration
Providing Department: DNAP, Doctor of Nurse Anesthesia Practice
Learning Outcome Description: Nurse Anesthesia students will demonstrate interprofessional collaboration when working with other healthcare professionals to provide patient-centered care.

DPT, Physical Therapy
1 Communication (Verbal)

Providing Department: DPT, Physical Therapy

Learning Outcome Description:
Graduates of the Doctor of Physical Therapy Program will be able to effectively use verbal communication while speaking in a culturally competent manner with peers and other interdisciplinary team members.

2 Physical Therapy Examination

Providing Department: DPT, Physical Therapy

Learning Outcome Description:
Graduates of the Doctor of Physical Therapy Program will be able to examine patients/clients using culturally appropriate and age-related tests and measure.

3 Physical Therapy Interventions

Providing Department: DPT, Physical Therapy

Learning Outcome Description:
Graduates of the Doctor of Physical Therapy Program will demonstrate the ability to appropriately select physical therapy interventions to achieve patient / client goals and outcomes and then administer these interventions in a manner that is sensitive to clients from of a variety of demographic backgrounds.

4 Safe Practice

Providing Department: DPT, Physical Therapy

Learning Outcome Description:
Graduates of the Doctor of Physical Therapy Program will practice physical therapy in a manner that minimizes risks to patient, self, and others. Sample behaviors are as follows: demonstrates awareness of of contraindications and precautions of patient interventions, establishes and maintains a safe working environment, and uses acceptable techniques for safe handling of patients.

5 Professional Behavior

Providing Department: DPT, Physical Therapy

Learning Outcome Description:
Graduates of the Doctor of Physical Therapy Program will practice physical therapy in a manner that demonstrates professional behavior in all situations. Sample behaviors are as follows: is punctual and dependable, demonstrates integrity in all interactions, accepts feedback without defensiveness, and values the dignity of patients as individuals.

6 Accountability

Providing Department: DPT, Physical Therapy

Learning Outcome Description:
Graduates of the Doctor of Physical Therapy Program will practice physical therapy in a manner that is consistent with established legal and professional standards and ethical guidelines. Sample behaviors are as follows: places patient’s needs above self interests, takes steps to remedy errors in a timely fashion, maintains patient confidentiality, and adheres to legal practical standards.

7 Situational Communication

Providing Department: DPT, Physical Therapy

Learning Outcome Description:
Graduates of the Doctor of Physical Therapy Program will practice physical therapy in a manner that demonstrates communication in ways that are congruent with situational needs. Sample behaviors are as follows: initiates communication in difficult situations, selects the most appropriate person(s) with whom to communicate, interprets and responds to the non-verbal communication of others, and adjusts style of language based upon target audience.

8 Clinical Reasoning

Providing Department: DPT, Physical Therapy

Learning Outcome Description:
Graduates of the Doctor of Physical Therapy Program will practice physical therapy in a manner that applies current knowledge, theory, clinical judgment, and the patient’s values and perspectives in patient management. Sample behaviors are as follows: presents a logical rationale for clinical decisions, makes a clinical decision without the context of ethical practice, demonstrates an ability to make clinical decisions in ambiguous situations, and assesses patient response to interventions using credible measures.

MOT, Occupational Therapy

1 Learning Outcome 1 - Occupational Therapy Process Knowledge
Providing Department: MOT, Occupational Therapy
Learning Outcome Description:
By the end of course work prior to Level II Fieldwork, students will demonstrate competency regarding factors that influence occupational performance with clients/patients throughout the occupational therapy process.

2 Learning Outcome 2 - Occupational Therapy Intervention Plan
Providing Department: MOT, Occupational Therapy
Learning Outcome Description:
By the end of course work prior to level II Fieldwork, students will demonstrate that they can formulate conclusions regarding client needs and priorities to develop and monitor an intervention plan throughout the occupational therapy process.

3 Learning Outcome 3 Service Learning
Providing Department: MOT, Occupational Therapy
Learning Outcome Description:
Service learning-students engage in several learning assignments at various physical disability and mental health settings for level 1 fieldwork experiences to fulfill program requirements. Courses OT 3200, OT 4280, OT 4600, OT 6000

4 Learning Outcome 4 Community Engagement
Providing Department: MOT, Occupational Therapy
Learning Outcome Description:
Community Engagement-students required to volunteer time in a variety of community mental health settings, clinical physical disability settings that provide services for underserved and vulnerable populations and write reflection pieces at the end of the course to enhance learning and address our urban mission. Courses OT 3200, OT 4400 and OT 5050

MS, Nurse Anesthesia

Learning Outcome 1 Pre-Operative Assessment
Providing Department: MS, Nurse Anesthesia
Learning Outcome Description:
Title: Nurse Anesthesia LO 1.0 Preparation of the Surgical Patient   Progress: In Progress   Providing Department: Nurse Anesthesia
Learning Outcome Description: Students will accurately analyze preoperative patient data to devise a comprehensive anesthetic plan.
Assessment Method: Data Source: A clinical instructor completes a daily, written evaluation of the student’s clinical performance utilizing the Performance Assessment Instrument (PAI). The PAI is a specific Nurse Anesthesia clinical evaluation tool. The tool is designed with different level of performance expectations ranging from simple to complex (Practicum II-IV). The PAI has four subsections to assess clinical performance, and preparation is one of the subsections for assessment. The following assessment criteria are stated on the PAI and used to assess preparation.
Preparation  • Routine equipment for case available and functioning: Yes No  • Machine check: Yes No  • Cart stocked and table top appropriately set-up: Yes No  • Specialized equipment for case available  • Preoperative assessment / selects appropriate ASA status  • ACP: Written Verbal  • Knowledgeably discusses and provides rationale for ACP  

Supporting Documentation: Performance Assessment Instrument (Practicum II-III)  Performance Assessment Instrument (Practicum IV-VI)  Data Scoring: The PAI is composed of a numerical scale, an area for written documentation by the clinical instructor and the Evaluation Scale (measurement for Performance criteria)  Evaluation Scale: 3 = The student’s clinical performance exceeds the practicum objectives 2 = The student’s clinical performance meets the practicum objectives and is commensurate with their levels in the program 1 = The student requires significant assistance in meeting the practicum objectives. Clinical performance is unsatisfactory. The Evaluation Chair of the WSU Nurse Anesthesia Program reviews the documentation from the clinical instructors on a weekly basis, rates the comments using the evaluation scale and uses the data from the PAI to complete a summary evaluation prior to meeting with each student at midterm evaluation. At midterm, the Chair reviews with each student their clinical performance and areas in need of improvement prior to completion of the practicum. The Program Director reviews all the evaluations to determine the effectiveness of program. Successful completion of the clinical practicum objectives must be demonstrated for advancement to the subsequent practicum. Students who are not successful in meeting the required clinical practicum objectives at the end of the practicum will receive an “I” (Incomplete) on their summative form with directions and guidelines for acceptable performance. Supporting Documentation: Performance Assessment Instrument (Practicum II-III) Performance Assessment Instrument (Practicum IV-VI)

Learning Outcome 2 Technical Skills
Providing Department: MS, Nurse Anesthesia
Learning Outcome Description:
Number: LO 2.0  Title: Nurse Anesthesia LO 2.0 Technical Skills  Progress: In Progress  Providing Department: Nurse Anesthesia
Learning Outcome Description: Students will perform technical skills with competency and utilizing appropriate standards.

Learning Outcome 3 Learning Outcome 3
Providing Department: MS, Nurse Anesthesia
Learning Outcome Description:
Identify and set up specialized anesthesia equipment according to the required surgical needs and as required for best patient outcomes.

Learning Outcome 4 Patient Data
Providing Department: MS, Nurse Anesthesia
Learning Outcome Description:
Use selective patient data to individualize and implement an anesthetic plan according to standard of care for best practice.

MS, Physician Assistant Studies

1 Evidence-based medicine and scientific principles
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description:
Physician assistant students will use evidence-based medicine and scientific principles when making management decisions in patient care. The foundation will be taught to students in the didactic year and they will demonstrate and apply these skills in the clinical rotations during the second year of the program.

1 Evidence-based medicine and scientific principles
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description:
Physician assistant students will use evidence-based medicine and scientific principles when making management decisions in patient care. The foundation will be taught to students in the didactic year and they will demonstrate and apply these skills in the clinical rotations during the second year of the program.

2 History, physical, and diagnostic findings to formulate differential diagnosis
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description:
Physician Assistant students will be able to take a medical history, perform appropriate physical examination, and use diagnostic findings to formulate a differential diagnosis.

2 History, physical, and diagnostic findings to formulate differential diagnosis
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description:
Physician Assistant students will be able to take a medical history, perform appropriate physical examination, and use diagnostic findings to formulate a differential diagnosis.

3 Communication with patients
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description:
Physician Assistant students will develop the skills to effectively communicate with patients. The basic skills will be developed during the first year of the program. During the clinical rotations students will be able to apply these skills to patient care.

3 Communication with patients
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description:
Physician Assistant students will develop the skills to effectively communicate with patients. The basic skills will be developed during the first year of the program. During the clinical rotations students will be able to apply these skills to patient care.

4 Interprofessional relations
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description:
Physician Assistant students will work with other healthcare professionals to provide patient-centered care
Physician Assistant students will work with other healthcare professionals to provide patient-centered care

5 Compassionate care
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description: Physician Assistant students will demonstrate compassion and respectful behaviors with patients.

6 Professional Relationships
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description: Physician Assistant students will maintain a positive professional relationship with other professionals

7 Professional integrity
Providing Department: MS, Physician Assistant Studies
Learning Outcome Description: Physician Assistant Students will demonstrate respect, compassion and integrity while providing patient care.

Post-master certificate, Pediatric Anesthesia (Fellowship)

1 Learning Outcome 1
Providing Department: Post-master certificate, Pediatric Anesthesia (Fellowship)
Learning Outcome Description: Learner Outcome: LO I: Patient Care Clinical Skills Integrate theoretical foundation of specific disease processes in infants and children to devise a practice care plan that will achieve the desired patient care outcomes following anesthesia for surgery Evaluate patient care outcomes to determine effectiveness of the choice of anesthetic plan for the specific case

2 Learning Outcome 2
Providing Department: Post-master certificate, Pediatric Anesthesia (Fellowship)
Learning Outcome Description: Learner Outcome: LO II: Interpersonal and Communication Skills Use specific language and or terms to facilitate clear understanding of the anesthetic plan by the child and parent during the peri-operative period of patient assessment and preparation for surgery Demonstrate professionalism in discussing anesthetic plans with the supervising instructor for the case

3 Learning Outcome 3
Providing Department: Post-master certificate, Pediatric Anesthesia (Fellowship)
Learning Outcome Description: Select and implement an anesthetic plan according to the patient disease process, and the extent of the surgical intervention.

4 Learning Outcome 4
Providing Department: Post-master certificate, Pediatric Anesthesia (Fellowship)
Learning Outcome Description:
Demonstrate effective listening and communication skills when interacting with age appropriate adolescent in preparation for surgical procedure.

**Transitional DPT, Physical Therapy**

1 **Professional Duty**
   - **Providing Department:** Transitional DPT, Physical Therapy
   - **Learning Outcome Description:**
     Graduates of the Doctor of Physical Therapy transitional program will develop a self-exploration portfolio to improve the effectiveness of patient/client care.

2 **Evidence-Based Practice**
   - **Providing Department:** Transitional DPT, Physical Therapy
   - **Learning Outcome Description:**
     Graduates of the Doctor of Physical Therapy transitional program will critically evaluate sources of information related to physical therapy practice, research, or education and apply knowledge from these sources to appropriate populations. Each student will select practice, research, or education based upon their practice setting.

3 **Clinical Reasoning Skills**
   - **Providing Department:** Transitional DPT, Physical Therapy
   - **Learning Outcome Description:**
     Graduates of the Doctor of Physical Therapy transitional program will demonstrate clinical reasoning skills in the area of diagnostic procedures as evident in the written case study reports submitted in PT 8400 consisting of appropriate physical therapy intervention plan based on interpretation of test results.

4 **Differential Diagnosis**
   - **Providing Department:** Transitional DPT, Physical Therapy
   - **Learning Outcome Description:**
     Graduates of the Doctor of Physical Therapy transitional program will demonstrate knowledge and decision making skills in the area of differential diagnosis as evident by a clinical patient case presented in PT 8300 consisting of historical and/or physical findings that implicate a systemic and neuromusculoskeletal impairment.

**MS, Pharmaceutical Sciences**

1 **Explain basic principles in each discipline**
   - **Providing Department:** MS, Pharmaceutical Sciences
   - **Learning Outcome Description:**
     Explain basic principles of each of the three subdisciplines: medicinal chemistry, pharmaceutics, and pharmacology/toxicology. Updated 12/2020.

2 **Demonstrate advanced knowledge and comprehension in major.**
   - **Providing Department:** MS, Pharmaceutical Sciences
   - **Learning Outcome Description:**
     Demonstrate advanced knowledge and comprehension in major. Updated 12/2020.

3 **Demonstrate technical and analytical proficiency in experimental approaches**
   - **Providing Department:** MS, Pharmaceutical Sciences
   - **Learning Outcome Description:**

4 **Clearly articulate, communicate, summarize and present research data and concepts.**
   - **Providing Department:** MS, Pharmaceutical Sciences
   - **Learning Outcome Description:**
     Clearly articulate, communicate, summarize and present research data and concepts. Updated 12/2020.

5 **Operate within a culture of safety and responsible conduct of research.**
   - **Providing Department:** MS, Pharmaceutical Sciences
   - **Learning Outcome Description:**
     Operate within a culture of safety and responsible conduct of research. Updated 12/2020.

6 **Interpret scientific literature**
Providing Department: MS, Pharmaceutical Sciences
Learning Outcome Description: Interpret scientific literature within the discipline major. Updated 12/2020.

7 Evaluate questions using the scientific method.
Providing Department: MS, Pharmaceutical Sciences
Learning Outcome Description: Evaluate questions using the scientific method. Updated 12/2020.

8 Use appropriate experimental designs
Providing Department: MS, Pharmaceutical Sciences
Learning Outcome Description: Use appropriate experimental designs and inferential statistics to analyze outcomes and test hypotheses. Updated 12/2020.

PharmD, Pharmacy Practice

1.1 Learner
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
1.1. Learner (Learner) - Attain, integrate, and apply knowledge from the foundational sciences (i.e., pharmaceutical, social/behavioral/administrative, and clinical sciences) to evaluate biomedical literature, explain drug action, solve therapeutic problems, and advance population health and patient centered care.

2.1 Patient Centered Care-Caregiver
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
2.1. Patient-centered care (Caregiver) - Provide patient-centered care as the medication specialist (obtain and interpret evidence, formulate and prioritize assessments of health related problems, develop and implement care plans and recommendations, monitor and adjust care plans, and document activities).

2.2 Medication use systems management -Manager
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
2.2. Medication use systems management (Manager) - Manage human, financial, technological, and physical resources to optimize the safety and efficacy of medication use systems to meet patient healthcare needs.

2.3 Health and wellness -Promoter
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
2.3. Health and wellness (Promoter) - Design prevention, intervention, and educational strategies for individuals and communities to improve health and wellness and to manage chronic disease.

2.4 Population-based care -Provider
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
2.4. Population-based care (Provider) - Describe and apply principles of how population-based care influences patient centered care and influences the development of practice guidelines and evidence-based best practices.

3.1 Problem Solving-Problem Solver
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
3.1. Problem Solving (Problem Solver) – Identify problems; explore and prioritize potential strategies; and design, implement and evaluate a viable solution.

3.2 Educator-Educator
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
3.2. Educator (Educator) – Educate all audiences by determining the most effective and enduring ways to impart information and assess understanding.

3.3 Patient Advocacy-Advocate
Providing Department: PharmD, Pharmacy Practice

Learning Outcome Description: 3.3. Patient Advocacy (Advocate) - Assure that patients’ best interests are represented.

3.4 Interprofessional Collaborator-Collaborator
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
3.4. Interprofessional collaboration (Collaborator) – Actively participate and engage as a healthcare team member by demonstrating mutual respect, understanding, and values to meet patient care needs.

3.5 Cultural sensitivity-Includer
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
3.5. Cultural sensitivity (Includer) - Recognize social determinants of health to diminish disparities and inequities in access to quality care.

3.6 Communicator-Communicator
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
3.6. Communication (Communicator) – Effectively communicate verbally and nonverbally when interacting with an individual, group or organization.

4.1 Self-awareness-Self-aware
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
4.1. Self-awareness (Self-aware) – Examine and reflect on personal knowledge, skills, abilities, beliefs, attitudes, motivation, and emotions that could enhance or limit personal and professional growth.

4.2 Leadership-Leader
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
4.2. Leadership (Leader) - Demonstrate responsibility for creating and achieving shared goals, regardless of position.

4.3 Innovation and Entrepreneurship-Innovator
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
4.3. Innovation and Entrepreneurship (Innovator) - Engage in innovative activities by using creative thinking to envision better ways of accomplishing professional goals.

4.4 Professionalism-Professional
Providing Department: PharmD, Pharmacy Practice
Learning Outcome Description:
4.4. Professionalism (Professional) - Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society.

PhD, Pharmaceutical Sciences

1 Explain basic principles in each discipline
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description:
Explain basic principles of each of the three subdisciplines: medicinal chemistry, pharmaceutics, and pharmacology/toxicology. Updated 12/2020

2 Demonstrate advanced knowledge and comprehension in major
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description: Demonstrate advanced knowledge and comprehension in major. Updated 12/2020

3 Demonstrate technical and analytical proficiency
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description: Demonstrate technical and analytical proficiency in experimental approaches. Updated 12/2020

4 Clearly articulate, communicate, summarize and present research data and concepts
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description: Clearly articulate, communicate, summarize and present research data and concepts. Updated 12/2020

5 Operate within a culture of safety and responsible conduct of research.
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description: Operate within a culture of safety and responsible conduct of research. Updated 12/2020

6 Interpret scientific literature
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description: Interpret scientific literature within the discipline major. Updated 12/2020

7 Evaluate questions using the scientific method.
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description: Evaluate questions using the scientific method. Updated 12.20

8 Use appropriate experimental design and inferential statistics
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description: Use appropriate experimental designs and inferential statistics to analyze outcomes and test hypotheses. Updated 12/2020.

9 Synthesize research outcomes
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description: Synthesize research outcomes. Updated 12/2020

10 Support scientific knowledge through original research publication
Providing Department: PhD, Pharmaceutical Sciences
Learning Outcome Description: Support scientific knowledge through original research publication. Updated 12/2020.

Bachelors of Social Work

1 Ethical and Professional Behavior
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 1: Demonstrate ethical and professional behavior.

2 Diversity in Practice
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 2: Engage diversity and difference in practice.

3 Human Rights and Justice
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 3: Advance human rights and social, economic, and environmental justice.

4 Informed Practice and Research
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 4: Engage in practice-informed research and research-informed practice.

5 Policy Practice
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 5: Engage in policy practice.

6 Engage with Clients
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 6: Engage with individuals, families, groups, organizations, and communities.
7 Assess Clients
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 7: Assess individuals, families, groups, organizations, and communities.

8 Intervene with Clients
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 8: Intervene with individuals, families, groups, organizations, and communities.

9 Evaluate Practice with Clients
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 9: Evaluate practice with individual, families, groups, organizations, and communities.

10 Analyze Impact of Urban Context
Providing Department: Bachelors of Social Work
Learning Outcome Description: Competency 10: Analyze the impact of the urban context on a range of client systems including practice implications.

Bachelors of Social Work – Where Online Works (WOW)!

1 Ethical and Professional Behavior
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description: Competency 1: Demonstrate ethical and professional behavior.

2 Diversity in Practice
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description: Competency 2: Engage diversity and difference in practice.

3 Human Rights and Justice
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description: Competency 3: Advance human rights and social, economic, and environmental justice.

4 Informed Practice and Research
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description: Competency 4: Engage in practice-informed research and research-informed practice.

5 Policy Practice
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description: Competency 5: Engage in policy practice.

6 Engage with Clients
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description: Competency 6: Engage with individuals, families, groups, organizations, and communities.

7 Assess Clients
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description: Competency 7: Assess individuals, families, groups, organizations, and communities.

8 Intervene with Clients
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description: Competency 8: Intervene with individuals, families, groups, organizations, and communities.

9 Evaluate Practice with Clients
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description: Competency 9: Evaluate practice with individuals, families, groups, organizations, and communities.

10 Analyze Impact of Urban Context
Providing Department: Bachelors of Social Work – Where Online Works (WOW)!
Learning Outcome Description:
Competency 10: Analyze the impact of the urban context on a range of client systems including practice implications.

Clinical Scholarship Track (Ph.D. in Social Work)

1 Theory
Providing Department: Clinical Scholarship Track (Ph.D. in Social Work)
Learning Outcome Description:
Outcome 1: Describe and appraise essential concepts in key bodies of advanced clinical social work theory.

2 Social Work Practice
Providing Department: Clinical Scholarship Track (Ph.D. in Social Work)
Learning Outcome Description:
Outcome 2: Demonstrate advanced competencies in application of advanced clinical social work practice principles to student’s own clinical case material.

3 Advanced competencies in clinical social work practice
Providing Department: Clinical Scholarship Track (Ph.D. in Social Work)
Learning Outcome Description: Outcome 3: Demonstrate advanced competencies in advanced clinical social work practice.

4 Assess theory
Providing Department: Clinical Scholarship Track (Ph.D. in Social Work)
Learning Outcome Description:
Outcome 4: Assess the value of major theories in understanding social work practice, social problems, human systems, human behavior

5 Apply theoretical frameworks
Providing Department: Clinical Scholarship Track (Ph.D. in Social Work)
Learning Outcome Description: Outcome 5: Apply relevant theoretical frameworks to a domain of knowledge in social work

Dual Title in Social Work and Infant Mental Health (Ph.D.)

1 Theory and research
Providing Department: Dual Title in Social Work and Infant Mental Health (Ph.D.)
Learning Outcome Description:
Outcome 1: Synthesize knowledge about theories and research relevant to infant mental health practice, including pregnancy and early parenting, infant development, relationship-based practice, attachment, and disorders of infancy and early childhood.

2 IMH service delivery
Providing Department: Dual Title in Social Work and Infant Mental Health (Ph.D.)
Learning Outcome Description:
Outcome 2: Demonstrate expertise related to the Infant Mental Health service delivery model and its use in clinical and classroom-based intervention and research.

3 Observation and assessment
Providing Department: Dual Title in Social Work and Infant Mental Health (Ph.D.)
Learning Outcome Description:
Outcome 4: Demonstrate expertise in observation and assessment of infants/young children, caregivers, and caregiver-infant/young child relationships to identify capacities, risks, and relationship disturbances.

4 Research design
Providing Department: Dual Title in Social Work and Infant Mental Health (Ph.D.)
Learning Outcome Description:
Outcome 5: Demonstrate competence in research design and methods relevant to the field of infant mental health.

PhD in Social Work

1 Describe theory
Providing Department: PhD in Social Work
Learning Outcome Description:
Describe and appraise essential concepts in key theories across micro, mezzo and macro levels of practice and research.

2 Assess theory
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 2: Assess the value of major theories in understanding social work practice, social problems, human systems, human behavior.

3 Apply theory
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 3: Understand and apply theory for research design and social work practice.

4 Qualitative/quantitative research
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 4: Employ mastery of qualitative/quantitative and mixed methods research designs, including scientific theory supporting the design, to be ready to conduct research using these designs.

5 Observational vs. intervention research
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 5: Distinguish between observational vs. intervention/evaluation research designs.

6 Ethical issues related to research
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 6: Critique the ethical issues related to all designs and their application in urban practice and communities.

7 Apply data analysis
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 7: Students will apply the appropriate statistical tests and interpretation of results.

8 Qualitative data analysis
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 8: Appraise types of qualitative data analysis and be prepared to apply to appropriate research situations.

9 Computer applications for data analysis
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 9: Demonstrate proficiency in computer applications for data analysis.

10 Synthesis of research and practice literature
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 10: Review and synthesize research and practice literature that is relevant to a social work domain of knowledge.

11 Historical changes in practice
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 11: Identify historical changes in practice and policy for a social work field, including the trends in the fit with social work ethics and values.

12 Apply theoretical frameworks
Providing Department: PhD in Social Work
Learning Outcome Description:
Outcome 12: Apply relevant theoretical frameworks to a domain of knowledge in social work.

GC in Alcohol and Drug Abuse Studies (CADAS)
1 Substance use impact on society
Providing Department: GC in Alcohol and Drug Abuse Studies (CADAS)
Learning Outcome Description: Outcome 1: Apply social work ethical principles to guide professional practice.

2 Engage Diversity
Providing Department: GC in Alcohol and Drug Abuse Studies (CADAS)
Learning Outcome Description: Outcome 2: Engage diversity and difference in substance abuse practice- Research and apply knowledge of diverse populations (e.g., youth, women, older adults, racial and ethnic minorities, people of diverse sexual orientation, and individuals with co-occurring problems) to enhance client’s well-being.

3 Assess and intervene
Providing Department: GC in Alcohol and Drug Abuse Studies (CADAS)
Learning Outcome Description: Outcome 3: Assess and intervene with individuals with substance abuse disorders. - Demonstrate the use of appropriate clinical strategies for a range of concerns identified in the assessment.

4 Biological impact substance use
Providing Department: GC in Alcohol and Drug Abuse Studies (CADAS)
Learning Outcome Description: Outcome 4: Explain the biological impact of substances on the human body.

GC in Child Welfare

1 Need for child welfare
Providing Department: GC in Child Welfare
Learning Outcome Description: Define and explain the sequelae that lead to child welfare intervention.

2 Case Management Strategies
Providing Department: GC in Child Welfare
Learning Outcome Description: Differentiate strategies for case management of families engaged in the child welfare system.

3 Theory
Providing Department: GC in Child Welfare
Learning Outcome Description: Integrate theory and practice to explain and differentiate how human problems develop in a family context.

4 Best practice interventions
Providing Department: GC in Child Welfare
Learning Outcome Description: Identify best practice interventions that provide child services to vulnerable and/or oppressed individuals and families.

5 Evidence-based practice for trauma
Providing Department: GC in Child Welfare
Learning Outcome Description: Implement evidence based interventions for family members who have experienced trauma.

GC in Developmental Disabilities

1 Definition of “disability”
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 1. Describe current definitions of “disability” and their implications.

2 urban setting
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 2. Identify issues unique to disabilities in the urban setting.

3 Effects of poverty
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 3. Describe the effects of poverty in disabilities.

4 Historical perspective
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 4. Define the importance of the historical perspective of disability on current practice

5 Resources
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 5. Identify various resources to those living with disabilities.

6 Risks factors
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 6. Understand specific risks posed to persons with disabilities living in an urban setting.

7 Policy
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 7. Critically appraise how current policy, and legislation impacts persons with disabilities.

8 Quality of life
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 8. Define the importance of quality of life issues related to living with disabilities.

9 Current issues
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 9. Identify current issues and methods for research related to persons with disabilities.

10 Cultural self-awareness
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 10. Increase cultural self-awareness and intercultural sensitivity and its relationship to disability

11 Biases
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 11. Examine the nature of biases, prejudices, discrimination, and other behaviors that are detrimental to the growth of the human spirit, mind, or body.

12 Theory
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 12. Integrate theoretical, practical and research based knowledge to address a challenge experienced by individuals with disabilities

13 Intervention
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 13. Design an intervention, project or product that enhances the lives of individuals with disabilities

14 Evidence-based programs
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 14. Define the characteristics of evidence based programs for persons with disabilities

15 Program implementation
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 15. Increase understanding of how finance and budgetary guidelines influence program implementation

16 Work environment support
Providing Department: GC in Developmental Disabilities
Learning Outcome Description: 16. Increase student's opportunity to work with and support individual's with disabilities in a work environment
17 Service provision
Providing Department: GC in Developmental Disabilities
Learning Outcome Description:
17. Define likely role(s) of the (home) discipline in interdisciplinary team approaches to service provision

GC in Gerontology

1 Biological theory
Providing Department: GC in Gerontology
Learning Outcome Description: Relate biological theory and science to understanding senescence, longevity and variation in aging

2 Psychological theories
Providing Department: GC in Gerontology
Learning Outcome Description:
Relate psychological theories and science to understanding adaptation, stability and change in aging.

3 Gerontological perspective
Providing Department: GC in Gerontology
Learning Outcome Description: Develop a gerontological perspective through knowledge and self-reflection.

4 Promote strengths
Providing Department: GC in Gerontology
Learning Outcome Description: Promote strengths to maximize well-being, health and mental health.

5 Policies
Providing Department: GC in Gerontology
Learning Outcome Description: Identify, formulate & analyze policies that influence services for older adults

GC in Social Welfare Research and Evaluation

1 Quantitative Research Design
Providing Department: GC in Social Welfare Research and Evaluation
Learning Outcome Description:
Outcome 1: Students will be able to select and implement quantitative research designs that are appropriate and adequate for answering contemporary social work practice and social welfare policy research questions.

2 Research Methods
Providing Department: GC in Social Welfare Research and Evaluation
Learning Outcome Description:
Outcome 2: Students will be able to implement research methods including problem formulation, literature review, sample selection, sampling technique, formulation of design, development of instruments, data analysis, interpretation of results, and writing a research report.

3 Qualitative Research Design
Providing Department: GC in Social Welfare Research and Evaluation
Learning Outcome Description:
Outcome 3: Students will be able to select and implement qualitative research designs that are appropriate and adequate for answering contemporary social work practice and social welfare policy research questions.

4 Theory
Providing Department: GC in Social Welfare Research and Evaluation
Learning Outcome Description:
Student Learning Outcome #4: Student will be able to select, describe and apply social work relevant theories to research and evaluation.

Temporary Approval for Michigan School Social Workers (Certificate

https://wayne.campuslabs.com/planning reports/view/18384/year/0670/unit/44855
1 Theoretical foundations

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 1: Knowledge of theoretical foundations and history of the school social work profession and service delivery.

2 Legal and ethical standards

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 2: Knowledge of legal and ethical standards necessary for social work practice in school setting.

3 Special education law

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 3: Knowledge of federal and state special education laws and other legal aspects of the role of school social worker.

4 Organization and structural components

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 4: Knowledge of organization components and structural dynamic of public school agencies at local, state, and national levels, as well as identification of methods useful to analyze and influence these in order to maximize student success.

5 Collaboration

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description: Outcome 5: Knowledge of other professional educational roles to promote successful collaboration.

6 Influences of student learning

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 6: Knowledge of a broad range of experiences, personal characteristics, and background variables that influence student learning and development, including reciprocal and diverse influences of home, school and community.

7 Educational factors

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 7: Knowledge and skills for identifying factors that enhance strengths, resilience, and protection from adversity, and that diminish educational and developmental risks.

8 Crisis management

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 8: Knowledge and skills to provide crisis prevention, planning, and interventions services, and the impact of trauma on development, learning, and school performance.

9 Positive behavior supports

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 9: Knowledge and skills to promote positive behavior supports for individuals and school wide programs.

10 Behavior intervention plans

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 10: Knowledge and skills in development of behavior intervention plans collaboratively with family members, educational staff, and outside resources, personal, and agencies.

11 Problem-solving

Providing Department: Temporary Approval for Michigan School Social Workers (Certificate

Learning Outcome Description:
Outcome 11: Knowledge and skills in mediation, conflict resolution, and collaborative problem-solving models.
12 Assessment
Providing Department: Temporary Approval for Michigan School Social Workers (Certificate
Learning Outcome Description: Outcome 12: Knowledge and skills in comprehensive and systematic assessment and evaluation.

13 Service delivery
Providing Department: Temporary Approval for Michigan School Social Workers (Certificate
Learning Outcome Description: Outcome 13: Knowledge and skills in effective written communication of the assessment and evaluation results that include educationally relevant recommendations and, where appropriate, measurable goals, and anticipated outcomes from service delivery.

14 Normative developmental expectations
Providing Department: Temporary Approval for Michigan School Social Workers (Certificate
Learning Outcome Description: Outcome 14: Knowledge of normative expectations for infant, child, adolescent, and young adult emotional, behavioral, social, cultural, communicative, cognitive, learning, and physical development.

15 Clinical and educational differences
Providing Department: Temporary Approval for Michigan School Social Workers (Certificate
Learning Outcome Description: Outcome 15: Knowledge regarding similarities and differences between clinically-based definition of psychiatric disorders and educational disabilities.

16 Evaluation
Providing Department: Temporary Approval for Michigan School Social Workers (Certificate
Learning Outcome Description: Outcome 16: Knowledge and skills to evaluate effectiveness of programs and services and modify these based upon individual student need.

17 Empirically-supported intervention methods
Providing Department: Temporary Approval for Michigan School Social Workers (Certificate
Learning Outcome Description: Outcome 17: Knowledge and skills for locating, selecting, and applying empirically-supported, evidence-based prevention and intervention methods appropriate for use with individual s, groups, families, school personnel, and communities to enhance student learning , development, and school success.

18 Facilitate student access
Providing Department: Temporary Approval for Michigan School Social Workers (Certificate
Learning Outcome Description: Outcome 18: Knowledge and skills to facilitate and coordinate student access to medical, health, mental health, social services, and other community resources, and to promote collaboration among school personnel and other community agencies.

19 Verbal communication
Providing Department: Temporary Approval for Michigan School Social Workers (Certificate
Learning Outcome Description: Outcome 19: Ability to verbally communicate in terms understandable to students, parents, school staff, and agencies.

20 Awareness
Providing Department: Temporary Approval for Michigan School Social Workers (Certificate
Learning Outcome Description: Outcome 20: Awareness of curriculum, teaching theories, and methodologies.

Dual Title in Social Work and Infant Mental Health (MSW)

1 Theory and research
Providing Department: Dual Title in Social Work and Infant Mental Health (MSW)
Learning Outcome Description: Outcome 1: Synthesize knowledge about theories and research relevant to infant mental health practice, including pregnancy and early parenting, infant development, relationship-based practice, attachment, and disorders of infancy and early childhood.
2 Observation and assessment
Providing Department: Dual Title in Social Work and Infant Mental Health (MSW)
Learning Outcome Description:
Outcome 4: Demonstrate expertise in observation and assessment of infants/young children, caregivers, and caregiver-infant/young child relationships to identify capacities, risks and relationship disturbances.

3 IMH service delivery model
Providing Department: Dual Title in Social Work and Infant Mental Health (MSW)
Learning Outcome Description:
Outcome 2: Demonstrate knowledge and skills related to the IMH service delivery model and their use in clinical and intervention and clinical research.

4 Reflective practice
Providing Department: Dual Title in Social Work and Infant Mental Health (MSW)
Learning Outcome Description:
Outcome 5: Students will demonstrate reflective practice skills consistent with best-practice in the IMH field

Innovation in Community, Policy and Leadership (I-CPL)

1 Ethical and Professional Behavior
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)
Learning Outcome Description: Competency ICPL1: Demonstrate ethical and professional behavior.

2 Diversity in Practice
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)
Learning Outcome Description: Competency ICPL2: Engage diversity and difference in practice.

3 Human Rights and Justice
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)
Learning Outcome Description: Competency ICPL3: Advance human rights and social, economic, and environmental justice.

4 Informed Practice and Research
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)
Learning Outcome Description: Competency ICPL4: Engage in practice-informed research and research-informed practice.

5 Policy Practice
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)
Learning Outcome Description: Competency ICPL5: Engage in policy practice.

6 Engage with Clients
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)
Learning Outcome Description: Competency ICPL6: Engage with individuals, families, groups, organizations, and communities.

7 Assess Clients
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)
Learning Outcome Description: Competency ICPL7: Assess individuals, families, groups, organizations, and communities.

8 Intervene with Clients
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)
Learning Outcome Description: Competency ICPL8: Intervene with individuals, families, groups, organizations, and communities.

9 Evaluate Practice with Clients
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)
Learning Outcome Description: Competency ICPL9: Evaluate practice with individuals, families, groups, organizations, and communities.

10 Analyze Impact of Urban Context
Providing Department: Innovation in Community, Policy and Leadership (I-CPL)

Learning Outcome Description:
Competency ICPL10: Analyze the impact of the urban context on a range of client systems, including practice implications.

Interpersonal Concentration (IP)

1 Ethical and Professional Behavior
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP1: Demonstrate ethical and professional behavior.

2 Diversity in Practice
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP2: Engage diversity and difference in practice.

3 Human Rights and Justice
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP3: Advance human rights and social, economic, and environmental justice.

4 Informed Practice and Research
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP4: Engage in practice-informed research and research-informed practice.

5 Policy Practice
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP5: Engage in policy practice.

6 Engage with Clients
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP6: Engage with individuals, families, groups, organizations, and communities.

7 Assess Clients
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP7: Assess individuals, families, groups, organizations, and communities.

8 Intervene with Clients
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP8: Intervene with individuals, families, groups, organizations, and communities.

9 Evaluate Practice with Clients
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP9: Evaluate practice with individuals, families, groups, organizations, and communities.

10 Analyze Impact of Urban Context
Providing Department: Interpersonal Concentration (IP)
Learning Outcome Description: Competency IP10: Analyze the impact of the urban context on a range of client systems, including practice implications.

General Education Program

Competency LO1A Written Communication: Basic Composition
Providing Department: General Education Program
Learning Outcome Description:
Basic Composition Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will be able to demonstrate their ability to: Use reading strategies in order to identify, analyze, evaluate, and respond to arguments, rhetorical elements, and genre conventions in college-level texts and other media. Learn flexible research methods in order to effectively identify, select, evaluate, and apply secondary research that is appropriate to the scope and topic of a persuasive argument. Develop critical literacy strategies to effectively and responsibly quote, paraphrase, summarize, and synthesize secondary
research sources in order to compose persuasive arguments. Learn theories and practices of written composition and rhetoric related to the writing process, including genre conventions of public and/or academic discourse communities and strategies for reading, drafting, writing, rewriting, and editing. Apply rhetorical knowledge to develop persuasive research-based written arguments intended for public and/or academic audiences, including techniques of rhetorical analysis of written texts and rhetorical strategies for composing arguments. Compose persuasive arguments using a flexible writing process that includes instructor and peer feedback through multiple drafts of writing projects that incorporate varied writing media. Use reflection and reflective writing to develop metacognition on the writing and research processes to plan, monitor, and evaluate one's own learning and writing.

Competency LO1B Written Communication: Intermediate Composition

Providing Department: General Education Program

Learning Outcome Description:
Intermediate Composition Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will be able to demonstrate their ability to: Learn how to develop appropriate, relevant, and compelling primary research that responds to a text's audience, context, and purpose within a professional discourse community. Synthesize primary and secondary research in order to develop ideas and compose written arguments and/or analyses that respond to issues in a professional discourse community. Investigate, analyze, and compose texts for professional discourse communities as related to a concentration of study (i.e., a student's major). Develop and adjust reading strategies to analyze and evaluate genres within and beyond the student's discipline and profession, including their associated professional discourse community, audience(s), rhetorical situations, purposes, and strategies. Compose written texts that respond to the expectations of audiences inside and outside of students' professional discourse community in terms of content, claims, evidence, organization, format, style, rhetorical situation, persuasive strategies, and language effects. Develop an awareness of how written genre conventions are social, and how genre and professional discourse communities change and shape each other over time. Use reflective writing and metacognition as part of the planning, monitoring, and evaluation of one's research and writing processes.

Competency LO2 Oral Communication

Providing Department: General Education Program

Learning Outcome Description:
Oral Communication Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will be able to demonstrate their ability to: Apply public speaking skills and concepts to speech presentations. Prepare and deliver four different types of well-organized, context-specific speeches. Create and present a well-designed presentational aid complementing a message in an informative speech. Employ persuasive strategies in a persuasive speech. Collaborate in a group in order to complete tasks for a group presentation. Incorporate credible research into an informative and persuasive speech. Critically reflect on the organization, content, and delivery of public speaking performances. Perform an audience analysis to create a speech that is appropriate for and respectful of a diverse audience.

Competency LO3 Quantitative Experience

Providing Department: General Education Program

Learning Outcome Description:
Quantitative Experience Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will be able to demonstrate their ability to: Apply mathematical models to real-world problems. Carry out and justify calculations. Draw conclusions based on quantitative evidence. Communicate arguments supported by quantitative evidence.

Group LO4 Cultural Inquiry

Providing Department: General Education Program

Learning Outcome Description:
Cultural Inquiry Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will be able to demonstrate their ability to: Describe artistic or cultural form(s) or philosophical ideas. Identify and define basic concepts in artistic or humanistic analysis. Analyze artistic practices, cultural forms, artifacts, or philosophical ideas.

Group LO5 Natural Scientific Inquiry

Providing Department: General Education Program

Learning Outcome Description:
Natural Scientific Inquiry Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will be able to demonstrate their ability to: Describe the natural world using physical laws Identify and define the basic concepts and methods of scientific inquiry. Analyze data based on mathematical and/or scientific methods. Apply the scientific method through experiments.

Group LO6 Social Inquiry

Providing Department: General Education Program

Learning Outcome Description:
Social Inquiry Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will
be able to demonstrate their ability to: Describe the behaviors, practices, institutions, and/or systems that define a society or social group. Identify and define basic concepts in social analysis. Analyze social institutions and social interactions.

**Group LO7 Diversity, Equity and Inclusion Inquiry**

**Providing Department:** General Education Program

**Learning Outcome Description:**
Diversity, Equity and Inclusion Inquiry Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will be able to demonstrate their ability to: Compare complex categories of social group memberships as they relate to our local and national contexts, democratic traditions, and contemporary struggles. Recognize the relationship between contemporary diversity-related issues and U.S. history, institutions, practices, and policies. Examine the roots of individual cultural values and prejudices and how they influence behavior. Identify the ethical and moral issues present in complex domestic situations and articulate informed responses to ambiguity and disagreement. Demonstrate understanding of the key issues of the course by analyzing, proposing, or engaging in strategies that promote equity at the local or national level.

**Group LO8 Global Learning Inquiry**

**Providing Department:** General Education Program

**Learning Outcome Description:**
Global Learning Inquiry Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will be able to demonstrate their ability to: Compare one’s own position, core values, and biases to those in other national and global communities. Identify and examine historical legacies that have created the dynamics and tensions of the world. Analyze how perceptions and beliefs are created by differing historical, scientific and cultural contexts. Exhibit the intercultural competencies necessary to move across boundaries and unfamiliar territory, see the world from multiple perspectives, and/or sustain difficult conversations in the face of highly emotional and perhaps uncongenial differences. Use analytical reasoning skills to articulate informed and humane solutions to complex global concerns.

**Group LO9 Civic Literacy Inquiry**

**Providing Department:** General Education Program

**Learning Outcome Description:**
Civic Literacy Inquiry Learning Outcomes from the Undergraduate Bulletin: After successful completion of this requirement, students will be able to demonstrate their ability to: Exhibit knowledge of U.S. history, political institutions, and democratic principles; Define the meaning and significance of citizenship and national identity, past and present; Identify examples of effective forms of participation by individuals and groups; Explain the economic, historic, political, and social bases for conflict and cooperation between groups; Apply concepts from the course to critically evaluate differences related to race, ethnicity, and gender.

**WE Wayne Experience**

**Providing Department:** General Education Program

**Learning Outcome Description:**
Wayne Experience Learning Outcomes as approved by the GEOC on April 9, 2019: LO 1: Students describe meaningful connections with Wayne State peers, faculty, staff, and resources. LO 2: Students describe the purpose of a liberal education. LO 3: Students describe the relationship between theory, research, and practice within the context of a diverse, inclusive academic community. LO 4: Students describe Wayne State’s role in public service. LO 5: Students describe the university’s effect on Detroit’s culture and history. LO 6: Students map strategies for personal and academic success that incorporate student support services.

**Academic Pathways to Excellence Program**

**1 Advisor Meeting Compliance**

**Providing Department:** Academic Pathways to Excellence Program

**Learning Outcome Description:**
APEX students will receive Advising from APEX Advisors by attending Advising appointments bi-weekly (or weekly for students on probation).

**2 Academic Progress**

**Providing Department:** Academic Pathways to Excellence Program

**Learning Outcome Description:**
The APEX Learning Communities (LC) assist first and second year APEX students with structured academic support led by peer tutors. The structured engagement and support work to promote a seamless and academically-enriched adjustment to college life. Students also enroll in two freshman level year courses which help them develop sound study habits, understand their academic responsibilities, and improve decision-making skills. Students will earn grades of “C” or better (or “S” in S/U courses) in each course each semester End of Semester grade report -% of students earning grades of C or better.
3 Study Hour Compliance  
**Providing Department**: Academic Pathways to Excellence Program  
**Learning Outcome Description**: Students will attend 8 hours of study on campus per week

4 Group Study Sessions  
**Providing Department**: Academic Pathways to Excellence Program  
**Learning Outcome Description**: APEX Instructional Support staff will schedule and assign weekly study sessions for the purpose of guiding course-related activity and behaviors.

## Academic Success Center

1.1 ASC Outcome FYS - Self as Learner  
**Providing Department**: Academic Success Center  
**Learning Outcome Description**: Through seminar discussions, activities and a common reading experience, FYS 1010 students will develop a greater awareness of themselves as learners.

1.2 ASC Outcome FYS - Skills and Habits  
**Providing Department**: Academic Success Center  
**Learning Outcome Description**: Through seminar discussions, activities and a common reading experience, FYS 1010 students will know the habits necessary for success in college.

2.0 ASC Outcome - Supplemental Instruction  
**Providing Department**: Academic Success Center  
**Learning Outcome Description**: Through Supplemental Instruction, students will learn to integrate course content with study skills in order to enhance understanding of material.

3.1 ASC Outcome Comerica Scholars Learning Community - Sense of Belonging  
**Providing Department**: Academic Success Center  
**Learning Outcome Description**: Active Comerica Scholars (those who meet with Project Manager twice per semester, communicate weekly with Peer Mentor and attend class sessions for FYS 1010, PS 1010 and COM 1010) will develop sense of belonging within the WSU community.

3.2 ASC Outcome Comerica Scholars Learning Community - Positive Experiences  
**Providing Department**: Academic Success Center  
**Learning Outcome Description**: Active Comerica Scholars will have positive academic experiences.

3.3 ASC Outcome Comerica Scholars Learning Community - Resources  
**Providing Department**: Academic Success Center  
**Learning Outcome Description**: Active Comerica Scholars will understand and take advantage of campus resources.

3.4 ASC Outcome Comerica Scholars Learning Community - Portfolios  
**Providing Department**: Academic Success Center  
**Learning Outcome Description**: Active Comerica Scholars will build portfolios reflecting development of personal, academic and professional growth.

## Career Services

1 On-Campus Student Employment - Invest in Student Success  
**Providing Department**: Career Services  
**Learning Outcome Description**: Student employment will increase students critical thinking skills to form opinions and solve problems through their on-campus student employment experience.

2 On-Campus Student Employment - Invest in Student Success
Providing Department: Career Services
Learning Outcome Description: Student employment will increase the development of effective time management skills through their on-campus student employment experience.

3 On-Campus Student Employment - Invest in Student Success
Providing Department: Career Services
Learning Outcome Description: Student will increase their oral communication skills through on-campus student employment.

4 On-Campus Student Employment - Invest in Student Success
Providing Department: Career Services
Learning Outcome Description: Student employment will increase students effectiveness in working with individuals from a variety of backgrounds, experiences, and cultures through their on-campus student employment experience.

5 Career Readiness
Providing Department: Career Services
Learning Outcome Description: Career Services will increase students ability to connect academic choices with career interests.

6 Career Readiness
Providing Department: Career Services
Learning Outcome Description: Career Services will increase students awareness of career-readiness.

7 Career Readiness
Providing Department: Career Services
Learning Outcome Description: Career Services will increase students knowledge of available career-readiness resources and services.

8 Career Readiness
Providing Department: Career Services
Learning Outcome Description: Career Services will increase my ability to prepare a professional resume.

Counseling and Psychological Services

1 Motivation for Self-Improvement/Personal Responsibility
Providing Department: Counseling and Psychological Services
Learning Outcome Description: Our clients will demonstrate motivation for self-improvement and personal responsibility.

2 Client-reported improvement
Providing Department: Counseling and Psychological Services
Learning Outcome Description: Our clients’ mental health will improve (e.g., they will exhibit stronger coping skills).

3 Better Academic Performance
Providing Department: Counseling and Psychological Services
Learning Outcome Description: Our clients’ academic performance will be enhanced.

4 Outreach Learning
Providing Department: Counseling and Psychological Services
Learning Outcome Description: CAPS provides a number of different outreach presentations to the campus community. Attendees will report on a brief evaluation that they learned skills or acquired information that would be of use to them. With some outreach presentation formats, attendees will be able demonstrate skills.

Dean of Students

1 Learning Outcomes for Student Organizations Services Area
Providing Department: Dean of Students
Learning Outcome Description:
The Student Organizations Services Area's learning outcomes will enable student organization leaders to: Recognize and identify student organization resources, policies, and funding opportunities; Employ organizational management practices that support positive organizational sustainability; Develop strategies to recruit, retain, and continually motivate contributing members to the organization; Develop collaborative relationships with student organizations and university departments; and Provide student involvement opportunities that supports the Dean of Students Office embracement of Astin's Theory of Involvement that leads to academic success. Learn how to navigate university resources so as to have successful organization operations and events. Begin to understand the connection of student organization involvement to academic success and student retention.

2 Learning Outcomes for Conduct and Care Area

Providing Department: Dean of Students

Learning Outcome Description:
The Conduct and Care Area's learning outcomes are to: Develop online resources to support students, faculty, and staffs reporting of student conduct issues; Establish students awareness of appropriate behavior; Provide informational programs designed to educate students on acceptable behavior with self and others. Enable faculty and staff to employ useful strategies to manage disruptive individuals; Encourage faculty and staff to utilize online conduct and care forms and resources to report disruptive students; and Intervene effectively when behavior violates the Code of Conduct. Implement processes that effectively administer federal compliance with Title IX as it relates to sexual misconduct on college campuses. Work to ensure entire campus community is aware of resources related to student conduct and Title IX.

3 Learning Outcomes for Student and Campus Activities Area

Providing Department: Dean of Students

Learning Outcome Description:
The Student and Campus Activities Area's learning outcomes are to enable students to: Identify a variety of social and cultural activities and events on campus; Feel connected to student activities whether they live on campus or commute from off campus residences Discover the benefits of attending campus social and cultural events; and Describe the importance of learning and engaging with others different from themselves through these activities. Recognize and employ leadership opportunities within campus programming and cultural events. Provide students with leadership learning opportunities.

4 Learning Outcomes for Fraternity and Sorority Affairs Area

Providing Department: Dean of Students

Learning Outcome Description:
The Fraternity and Sorority Affairs Area's learning outcomes will empower and educate students to: Learn and implement leadership and organizational management skills; Learn the importance of social responsibility; Illustrate the importance of collaboration within the academic fabric of the university through programs focused on academic success; and Implement social and activities programming that directly supports academic success and community involvement. Understand importance of organization's mission being in line with, and supportive of, university mission.

5 Learning Outcomes for Gay, Lesbian, Bisexual, Transgender, Queer/Questioning, and Allies (GLBTQA) Area

Providing Department: Dean of Students

Learning Outcome Description:
The Gay, Lesbian, Bisexual, Transgender, Queer/Questioning, and Allies Area’s learning outcomes will help campus community members: Recognize GLBTQA services available on-campus; Participate in campus activities focused on GLBTQA awareness; and Become trained as allies to GLBTQA students, faculty, and staff. Successfully transition this student life program to Office of Multicultural Student Engagement.

6 Learning Outcomes for Student Community Service Area

Providing Department: Dean of Students

Learning Outcome Description:
The Student Community Service Area’s learning outcomes will help students: Identify opportunities to become involved in community service activities; Analyze and evaluate current community needs; Articulate an understanding of various ways to contribute to social change; and Describe knowledge and skills gained as a result of participation in community service activities. Identify how community service involvement supports students' academic success and retention. Identify how community service involvement connects students' to institutional affinity.

7 Learning Outcomes for Legacy and Affinity Programs Area

Providing Department: Dean of Students

Learning Outcome Description:
The Legacy and Affinity Programs Area’s learning outcomes will embrace students in: Participating in student activities focused on school spirit and pride; and Joining student organizations whose mission is to promote a respect and allegiance for Wayne State’s history and harnesses the energy of "school spirited" student leaders. Transition this area to Warrior Pride area.
8 Learning Outcomes for Parent and Family Programs Area

Providing Department: Dean of Students

Learning Outcome Description:
The Parent and Family Program Area’s learning outcomes will allow parents and family members to: Identify campus resources available to students and how to use them; Apply knowledge of campus resources by referring their students to them; and Be aware of student transitional issues. Identify parents and family members’ feeling of trust and connectedness to Wayne State.

9 Learning Outcomes for Marketing and Online Services Area

Providing Department: Dean of Students

Learning Outcome Description:
The Marketing and Online Services Area’s learning outcomes will enable current students to: Identify the Dean of Students Office as the university department to contact to learn how to get involved on-campus; Identify the Dean of Students Office as the university department to contact for assistance in promoting events, programs, activities, and opportunities; Recognize opportunities for attendance at and involvement in student and campus activities; In support of Astin’s involvement theory, students will feel “connected” to Wayne State because they will immediately know how to get involved on-campus and in the community; and Engagement outside the classroom will motivate students to utilize university resources to reach personal and organizational goals. Educating faculty and staff on student affairs issues and activities, and identifying the Dean of Students Office as the WSU student affairs office.

10 Learning Outcomes for Warrior Pride

Providing Department: Dean of Students

Learning Outcome Description:
The Warrior Pride’s learning outcomes will enable students to: Become involved in school spirit activities revolving around Wayne State athletics. Have a feeling of being “connected” to Wayne State. Learn ways to get involved on campus by joining student organizations, like the student cheering section-the Warrior Zone. Have a sense of school pride, called the Warrior Pride. Identify how school pride connects to the student’s academic success and retention.

LO1.1 _LO1.1 Connect to student life: Student orgs

Providing Department: Dean of Students

Learning Outcome Description: DOSO supports the development and activities of student organizations.

LO1.2 _LO1.2 Connect to student life: Community involvement

Providing Department: Dean of Students

Learning Outcome Description: DOSO connects students with community volunteer opportunities. Area: Student Community Involvement

LO2 Connect to wellness programs _LO2 Connect to wellness programs

Providing Department: Dean of Students

Learning Outcome Description: DOSO connects students to programs and resources that promote emotional and physical wellness, including basic needs. Areas: Warrior Life and Wellness, Parent and Family Programs

LO3.1 _LO3.1 Conduct, support and intervention: Conduct

Providing Department: Dean of Students

Learning Outcome Description: DOSO works with students to address conflicts between students’ behaviors and University values and policies. Area: Student Conduct, Support and Intervention

LO3.2 _LO3.2 Conduct, support and intervention: Support and intervention

Providing Department: Dean of Students

Learning Outcome Description: DOSO coordinates support and intervention for students in times of challenge or crisis. Area: Student Conduct, Support and Intervention

New Learning Outcome (Program-level) Item

Providing Department: Dean of Students

Learning Outcome Description:

Extension Centers
1-1 Produce clear pathways to complete programs for extension center students.

Providing Department: Extension Centers  
Learning Outcome Description: Utilize course matrix, enrollment reports, survey, transfer and degree plans to offer students the courses to finish academic programs at specific locations.

2-1 Establish a high level of service for extension center students, faculty and others.

Providing Department: Extension Centers  
Learning Outcome Description: Provide ongoing staff development opportunities, monitor services and improve learning resources.

3-1 Increase resources to extension center community partners.

Providing Department: Extension Centers  
Learning Outcome Description: Extend and market transfer pathways, collaborations, events and programming to local communities, community colleges, business leaders, and prospective students.

4-1 Improve extension center learning environment.

Providing Department: Extension Centers  
Learning Outcome Description: Provide tools for faculty and student feedback while aligning academic needs to building/center resources.

**Transfer Student Success Center**

1.0 Build Engagement with Community College Partners

Providing Department: Transfer Student Success Center  
Learning Outcome Description: Continual proactive communication with community college partners to create opportunities for engagement and to develop strategic partnerships. The Center provides excellent customer service to our community college partners.

2.0 Create Opportunities for Transfer Students to Engage

Providing Department: Transfer Student Success Center  
Learning Outcome Description: Create and develop opportunities for transfer students to personally engage with Wayne State. These include in-person communication opportunities, electronic communications, events and other engagement activities.

3.0 Increase Number of Direct Student Contacts

Providing Department: Transfer Student Success Center  
Learning Outcome Description: Increase number of students who contact the TSSC for information. Students may use multiple communication channels, including in-person, e-mail, and telephone, and the TSSC is prepared to respond.

4.0 Evaluate Customer Service Satisfaction

Providing Department: Transfer Student Success Center  
Learning Outcome Description: The TSSC will provide excellent customer service to fulfill its mission. Service will be excellent across all communication channels used by students. Winter 2020 survey was suspended due to pandemic.

**Housing and Residential Life**

1 Resident Assistants inform residents of campus resources relevant to their needs.

Providing Department: Housing and Residential Life  
Learning Outcome Description: Resident Advisors inform residents of campus resources that are relevant to their needs.

2 Resident Assistants build rapport with their residents.

Providing Department: Housing and Residential Life  
Learning Outcome Description: Resident advisors build rapport with their residents.

3 Student participation in housing programs increases persistence.
4 Judicial process is an educational process
Providing Department: Housing and Residential Life
Learning Outcome Description: Judicial process changes resident behavior.

5 FTIAC residents perform well academically
Providing Department: Housing and Residential Life
Learning Outcome Description: Residents who are FTIACs living in the residence halls outperform their counterparts who do not live in the residence halls.

6 Guests who visit the residence halls and apartments are predominately Wayne State University students.
Providing Department: Housing and Residential Life
Learning Outcome Description: Guests who visit the residence halls and apartments are predominately Wayne State University students.

7 Resident Advisors talk with their residents about their academics.
Providing Department: Housing and Residential Life
Learning Outcome Description: Resident Advisors talk with their residents about their academics.

8 Residents will exhibit more Warrior Pride through their engagement with the Residential Curriculum.
Providing Department: Housing and Residential Life
Learning Outcome Description: Residents will exhibit more Warrior Pride through their engagement with the Residential Curriculum.

Learning Communities

1 Learning Outcome 1
Providing Department: Learning Communities
Learning Outcome Description: Learning Communities will create a community of learners, where, students have a strong sense of membership in a diverse community, whose purpose they understand and value, and with whom they engage.

2 Learning Outcome 2
Providing Department: Learning Communities
Learning Outcome Description: Learning Communities will develop three specific learning outcomes, experiences designed to meet the learning outcomes, and an assessment plan to measure student success.

3 Learning Outcome 3
Providing Department: Learning Communities
Learning Outcome Description: Learning Communities will incorporate characteristics of High Impact Practices (HIPs), as outlined by the AAC&U, for improved student success. They will offer students opportunities to increased connection to the subject matter; provide students with both independence and support; and they will provide opportunities for students, faculty, advisers, and peer mentors to interact together.

4 Learning Outcome 4
Providing Department: Learning Communities
Learning Outcome Description: Learning Communities will train responsible peer mentors to lead academic study sessions, demonstrate effective study methods to LC students, appropriately respond to challenges, and build a sense of community among participants.

Libraries

1 Learning and Research Support: Locate Information Sources
Providing Department: Libraries
Learning Outcome Description: Undergraduate students will be able to locate books and journal articles on a given topic through tools (e.g., catalog, Quick Search,
databases) on the Libraries' website. Means of measurement and criteria for success to be identified.

2 Learning and Research Support: Evaluate Information Sources
Providing Department: Libraries
Learning Outcome Description:
Undergraduate students will be able to evaluate the books and articles they identify in library searches for reliability and relevance. Means of measurement and criteria for success to be identified.

3 Learning and Research Support: Undergraduate Instruction
Providing Department: Libraries
Learning Outcome Description:
Provide first-year undergraduate students with the instruction necessary to locate and evaluate information for their assignments and studies. Library instruction will be provided to 25% of the members of each cohort of entering first year students within three semesters of their entering the University.

4 Learning and Research Support: Instructor Assistance
Providing Department: Libraries
Learning Outcome Description:
Provide instructors with the assistance necessary to compose “library assignments” that will encourage students to explore information resources and develop library research skills. The subject specialist/liaison librarians will document at least 100 collaborations with faculty members on assignments each academic year.

5 Learning and Research Support: Reference Services
Providing Department: Libraries
Learning Outcome Description:
Provide reference services and research consultations to assist students with their projects and research needs. 30% of undergraduate and graduate students surveyed will report that they have “Consulted with or asked a question of a Library staff member” at least once a semester.

7 Library Collection Development: Books
Providing Department: Libraries
Learning Outcome Description:
7. Provide students with books that contribute to learning and growth. 60% of students surveyed will rate their satisfaction with ebooks above 5 on a 7-point Likert scale. The use of ebooks will exceed 1,480,000 uses per fiscal year.

8 Library Collection Development: Streaming Media
Providing Department: Libraries
Learning Outcome Description:
Provide students with the streaming videos that contribute to learning and growth. 60% of students surveyed will rate their satisfaction with digital journals above 5 on a 7-point Likert scale.

9 Library Collection Development: Journals
Providing Department: Libraries
Learning Outcome Description:
9. Provide students with the digital journals/articles that contribute to learning and growth. 60% of students surveyed will rate their satisfaction with digital journals above 5 on a 7-point Likert scale. Use of digital journals will exceed 2,870,000 downloads/uses per fiscal year.

10 Access Services: Circulation of Resources
Providing Department: Libraries
Learning Outcome Description:
Provide students with circulation and reserve services that contribute to learning and growth. 50% of students will report satisfaction with circulation and reserve services above 5 on a 7-point Likert scale.

11 Access Services: Interlibrary Loan
Providing Department: Libraries
Learning Outcome Description:
Provide interlibrary loan/document delivery services that contribute to learning and growth. 60% of students will report satisfaction with interlibrary loan and document delivery services above 5 on a 7-point Likert scale.
12 Discovery Services: Library Website
Providing Department: Libraries
Learning Outcome Description:
Provide a website that students use easily and efficiently to meet their study and research needs. 60% of students surveyed will report that they use the library’s website at least once a semester. 60% of surveyed students will report satisfaction with the Libraries’ website above 5 on a 7-point Likert scale.

13 Access Services: Individual Study Space
Providing Department: Libraries
Learning Outcome Description:
Provide individual study space that students find conducive to study and academic work 70% of students surveyed will rate their satisfaction with individual study space above 5 on a 7-point Likert scale.

14 Access Services: Group Study Space
Providing Department: Libraries
Learning Outcome Description:
Provide the group study space that students will find conducive to study and academic work. 70% of students will rate their satisfaction with group study space above 5 on a 7-point Likert scale.

Office of Financial Aid
L01 Administrative Capability
Providing Department: Office of Financial Aid
Learning Outcome Description:
Wayne State University can demonstrate to the U.S. Department of Education (ED) that it is capable of adequately administering the Title IV programs, using the standards established in 34 CFR 668.16 as a guide.

L02 Default Rates
Providing Department: Office of Financial Aid
Learning Outcome Description:
Wayne State University takes steps to avoid excessive default rates in accordance with Subpart N of Section 668 of the Code of Federal Regulations (CFR).

L03 Satisfactory academic progress
Providing Department: Office of Financial Aid
Learning Outcome Description:
Satisfactory Academic Progress Policy is readily available to students, satisfies state or federal requirements and is being appropriately applied in individual student situations.

L04 Financial aid disclosure compliance
Providing Department: Office of Financial Aid
Learning Outcome Description:
Wayne State University completes Title IV responsibilities that include the legal obligation to disclose financial assistance information for students and to the public as outlined in 34 CFR 668.42 and 34 CFR 601.21.

Office of International Programs (OIP)
1.0 Increase and diversity our international student body
Providing Department: Office of International Programs (OIP)
Learning Outcome Description:
1. Increase international enrollments to at least 3000 students (at least 10% of student body) 1.2. Grow our undergraduate international enrollment numbers to 40% of total international student body 1.3. Develop a cohesive and comprehensive tuition and scholarship model for recruiting international student 1.4. Increase the number of sponsored students

2.0 Internationalize the curriculum
Providing Department: Office of International Programs (OIP)
Learning Outcome Description:
2.1. Work with schools and colleges to ensure that internationalization is part of their strategic plans 2.2. Facilitate the development
of global pathways within academic departments that provide students with the opportunity to gain global competencies regardless of their major. 2.3. Ensure global competencies are embedded in the university's general education requirements and support student success. 2.4 Develop opportunities for students to engage in global experiences locally and abroad.

3.0 Increase student and faculty global mobility

**Providing Department:** Office of International Programs (OIP)

**Learning Outcome Description:**

3.1. Double and diversify the number of WSU students studying abroad. 3.2. Increase the number of faculty engaged in teaching, researching or consulting abroad. 3.3. Increase the number of Fulbright (student and faculty) and other national and international fellowship awards. 3.4. Increase the number and diversity the study abroad experiences (by country and discipline) available to students. 3.5. In collaboration with the University Development, launch a campaign to secure funding support for study abroad. 3.6. Create resources for students and faculty to identify international opportunities.

4.0 Enhance WSU's global Profile

**Providing Department:** Office of International Programs (OIP)

**Learning Outcome Description:**

4.1. Continue to invest in developing strategic education and research partnerships with prominent international institutions across the globe. 4.2. Cultivate our network of international alumni. 4.3. Create opportunities for faculty to teach, conduct research, or consult at partner institutions across the globe. 4.4. Highlight and promote the work WSU Faculty are doing around the world. 4.5. Develop competitive awards to foster faculty's global engagement and participation.

### English Language Institute

1.1 Speaking Proficiency Outcome for Level 5 of the ELI

**Providing Department:** English Language Institute

**Learning Outcome Description:**

The student will be able to engage in academic discourse in a culturally-appropriate fashion with automaticity.

1.2 Listening Proficiency Outcome for Level 5 of the ELI

**Providing Department:** English Language Institute

**Learning Outcome Description:**

The student will be able to show detailed understanding of varied and lengthy academic listening passages.

1.3 Writing Proficiency Outcome for Level 5 of the ELI

**Providing Department:** English Language Institute

**Learning Outcome Description:**

The student will be able to write cohesive, readable academic essays.

1.4 Reading Proficiency Outcome for Level 5 of the ELI

**Providing Department:** English Language Institute

**Learning Outcome Description:**

The student will be able to analyze, critique, and deduce meaning in academic texts.

1.5 Grammar Proficiency Outcome for Level 5 of the ELI

**Providing Department:** English Language Institute

**Learning Outcome Description:**

The student will be able to generate extended and complex academic speech and writing with grammatical accuracy.

### OISS

**LO1 Advising Appointments**

**Providing Department:** OISS

**Learning Outcome Description:**

Students advising concerns are addressed and met in the fewest number of visits. Students are able to meet with an advisor during walk-in advising hours within 30 minutes of their arrival. Students are able to schedule advising appointments at convenient times.

**LO2 Completeness of documents**

**Providing Department:** OISS

**Learning Outcome Description:**

Student documents are timely and accurately prepared. Written information and instructions provided are accurate and understandable.
LO3 Provide accurate information about university and federal requirements, policies, and procedures

Providing Department: OISS

Learning Outcome Description:
Advisors will stay up to date with, and effectively communicate university and federal requirements, policies and procedures. Advisors will have easy access to changes in information relevant to the advising process. Advisors will regularly review their advising resources to ensure that they are accurate and accessible.

LO4 Student access and understanding of requirements

Providing Department: OISS

Learning Outcome Description:
Students will know how to access accurate information about requirements, policies and procedures. Students will be knowledgeable about academic regulations, policies and procedures.

Study Abroad

LO1 Foster Personal Growth - Program Impact

Providing Department: Study Abroad

Learning Outcome Description:
Students will develop an understanding of different cultures. Students will gain self-awareness, maturity and self confidence.

LO2 Develop Deeper Knowledge and Understanding of Cultures through Intercultural Engagement

Providing Department: Study Abroad

Learning Outcome Description:
Students will evaluate their preconceptions and stereotypes about other cultures. Students will be able to express the type and degree of engagement of their immersion into local culture.

LO3 Academic Development and Intellectual Growth

Providing Department: Study Abroad

Learning Outcome Description:
Students will gain a better understanding of the program goals and objectives. Students will be exposed to academic content not available on-campus. Students will improve their independent learning.

LO4 Global Competence Aptitude

Providing Department: Study Abroad

Learning Outcome Description:
Measure student readiness for the global workforce. Assess study abroad learning outcomes and validating curricula.

Office of Military and Veterans Academic Excellence

1415-2.1 Early VA Certification

Providing Department: Office of Military and Veterans Academic Excellence

Learning Outcome Description:
Our goal is to reduce the last minute certifications by 15% through increased awareness and by instilling a sense of urgency in our student veterans using multiple mediums to get the word out. Early registration and VA certification aids in avoiding future pay problems with the VA and is the first step in academic success for a student veteran. Currently, 37% of our student veterans certify within 30 days prior to the start of the semester and another 18% of our student veterans certify after the semester has begun. Waiting until the last minute creates opportunities for mistakes by the VA School Certifying Official due to the volume of requests that have to be completed at the last minute and demonstrates a lack of training or planning by the student.

1415-3.1 Student Veteran Resource Center Usage

Providing Department: Office of Military and Veterans Academic Excellence

Learning Outcome Description:
Our goal is to increase the monthly usage by at least 10% for AY2016-2017. Our Student Veteran Resource Center (SVRC) has grown from ~240 monthly users when we first opened the doors in SY 2011 to ~560 monthly users in SY13-14. The SVRC is the central point on campus where veterans/military can go to find out about the comprehensive support service that our department offers. In order to better serve our cohorts needs in the future, we must first get them to use the existing resources.

1516-1.1 Plan of Work Compliance
Providing Department: Office of Military and Veterans Academic Excellence

Learning Outcome Description:
Plan of Work Compliance: It is our goal to be 100% in compliance and maintain this for all future semesters as new student veterans are in processed. ABC Structure of Program Outcome: By informing and enforcing standards, 100% of VA Educational Benefit recipients will have a Plan of Work signed by their Academic Advisor on file in OMVAE before VASCO processes request for certification. Why: Having a Plan of Work (POW) signed by an Academic Advisor (AA) is not only an excellent way to ensure academic success but it is also a requirement if you are using VA Educational benefits. Most have a POW on file but for those that do not, we have been using the STARS Degree Audit and AA experience to verify that registered classes are eligible for certification. This method had worked thus far but it is not efficient and, more importantly, errors could affect student success and put us out of compliance with Federal regulations

1617-4.1 Academic Advising Compliance

Providing Department: Office of Military and Veterans Academic Excellence

Learning Outcome Description:
Academic Advising Compliance: Our goal is to encourage benefit recipients to meet their primary academic advisor at least once each semester. ABCD Structure of Program Outcome: Benefit recipients will meet with their primary academic advisor twice per academic year. Why: Academic advising is an essential element of academic success.

Ombudsperson

1 Information and Referral

Providing Department: Ombudsperson

Learning Outcome Description: The Ombuds Office provides relevant information, and/or or referral, to all who contact it.

2 Confidential Forum for Academic Concerns and Resolutions

Providing Department: Ombudsperson

Learning Outcome Description: The Ombuds Office provides a confidential forum where students can express their feelings and examine their concerns regarding academic issues, such as class and teacher problems, with a neutral party, and explore potential solutions. Faculty contact the Ombuds Office regarding problems with students as well.

3 Financial and Student Service Intervention and Learning

Providing Department: Ombudsperson

Learning Outcome Description: Assist students with financial and other student service issues that interfere with academic goal completion. Report systemic processing issues to appropriate departments.

4 Tuition and Fee Appeals

Providing Department: Ombudsperson

Learning Outcome Description: The Tuition and Fee Appeals Board (TFAB) is chaired by the Ombudsperson. The TFAB considers withdrawals and tuition cancellation requests from students due to medical issues and extenuating circumstances. It is the final arbiter of tuition and fee cancellation matters at the University, and, in many cases, a positive decision from the Board is the only way a student can financially continue toward graduation. The Ombuds staff assists the affected students in packet completion, and the Ombudsperson presents the appeal to the Board. For exception requests based on student error, trends are reported to the Registrar and other units for consideration of measures to mitigate factors that might contribute to such mistakes.

OMSE

1 New Learning Outcome: RISE & Network

Providing Department: OMSE

Learning Outcome Description: Develop learning outcomes grounded in high impact practices (HIPS) for the RISE and Network learning communities

2 New Learning Outcome: Workshops

Providing Department: OMSE

Learning Outcome Description: Collect and analyze feedback from trainings and workshops to revise and improve offerings.

Registrar
1 Improve Degree Reporting Times

Providing Department: Registrar

Learning Outcome Description:
Degrees are certified by departments and schools/colleges, and then reported to the Registrar. The Registrar, in turn, reports degrees to National Student Loan Clearinghouse. Federal law requires this be done within 30 days of the end of term in which student is completing. This is a completion date we need to meet. In addition, there are numerous university processes which wait for timely degree posting such as graduation rate calculations, and alumni development activities.

2 Reduce Course Withdrawal Rates

Providing Department: Registrar

Learning Outcome Description:
Course withdrawal rates have been historically high at WSU. This negatively impacts student success. Launch the “Smart Check” process for 2013-2014, to provide active intervention when students request course withdrawal. Intervention will include advising students of impact of course withdrawal on academic progress, time to degree, financial aid eligibility and student loan repayment status.

3 Reduce Contacts in the Student Services Center

Providing Department: Registrar

Learning Outcome Description:
Students visit the Student Services Center to request information and services for the Registrar’s Office. Through improvements in business processes and proactive communications, reduce the number of students who contact the SSC for our information and services.

4 Reduce Number of Missing Grades After Final Exam Period

Providing Department: Registrar

Learning Outcome Description:
Missing grades after the final exam period has historically been a problem at WSU, requiring much effort to collect. The Registrar reaches out to faculty, chairs, deans, and then finally the Provost’s Office to get missing grades posted. Missing grades impacts our ability to certify students for graduation, process repeated coursework, run financial aid satisfactory academic progress processes, as well as notify students whether or not they are in academic difficulty. By reducing the number of missing grades, we can speed up other end of term processes and better serve students.

5 Assess impact of centralizing use of LEVEL override

Providing Department: Registrar

Learning Outcome Description:
For years, the use of the LEVEL override has been problematic for students, academic units, and the Office of the Registrar. The override was originally developed to allow highly qualified undergraduate students take a masters level course that could be applied to their undergraduate. However, the override has also been used to account for coding errors on a student record. This can result in: misassessed tuition wrongly transcripted courses degree certification problems    The override was applied almost 600 times. Through assessment, we hope to identify the root causes of why people use this override and cut back on the number of overrides being required.

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Student Disability Services

1 SDS LEARNING OUTCOME 1 Registration

Providing Department: Student Disability Services

Learning Outcome Description: Students with disabilities will choose to register with SDS.

2 SDS LEARNING OUTCOME 2 TESTING
Providing Department: Student Disability Services
Learning Outcome Description:
Students with disabilities approved for testing accommodations will make requests for testing accommodations using the online student request process.

3 SDS LEARNING OUTCOME 3 ACCOMMODATIONS THAT ENHANCE STUDENT SUCCESS
Providing Department: Student Disability Services
Learning Outcome Description:
Students registered with Student Disability Services will use accommodations that support their academic success.

4 SDS LEARNING OUTCOME 4 RESOURCE AND INFORMATION NEEDS
Providing Department: Student Disability Services
Learning Outcome Description:
Student Disability Services will identify resource and information needs that will enhance student satisfaction with SDS support services and effectiveness of its resources and services.

Student Services Center

1.0 Provide Excellent Customer Service
Providing Department: Student Services Center
Learning Outcome Description:
The Student Service Center will provide excellent customer service to make students feel welcome and appreciated by the University.

2.0 Provide First Contact Resolution
Providing Department: Student Services Center
Learning Outcome Description:
The Student Service Center will provide accurate and timely information to students to help them make well-informed decisions that support their educational success. We will answer questions and resolve issues at the first point of contact with a student, parent, or community member.

3.0 Subject Matter Expert
Providing Department: Student Services Center
Learning Outcome Description:
Students will recognize enrollment service specialists as an expert source of information about financial aid, undergraduate admissions, records and registration, and student accounts receivable.

4.0 Knowledgebase Development
Providing Department: Student Services Center
Learning Outcome Description:
Create a searchable intranet version of our training that employees find easy to use and informative, which will eventually be available for students also.

Testing, Evaluation and Research Services

1 Student Evaluation of Teaching Learning Outcome
Providing Department: Testing, Evaluation and Research Services
Learning Outcome Description: How do faculty and students perceive a new online system of evaluating classes?

1 Testing Learning Outcome
Providing Department: Testing, Evaluation and Research Services
Learning Outcome Description:
What are the best ways to maintain service quality and responsiveness using online methods during a pandemic?

2 Student Evaluation of Teaching Learning Outcome
Providing Department: Testing, Evaluation and Research Services
Learning Outcome Description: Are evaluations of teaching linked to the method of administration?

3 Student Evaluation of Teaching Learning Outcome
Providing Department: Testing, Evaluation and Research Services
Learning Outcome Description: How do response rates vary over the years using different evaluation methods?

TRIO/Access Program

1 Research
Providing Department: TRIO/Access Program
Learning Outcome Description:
McNair Scholars will demonstrate understanding of the fundamentals of research design and research communication.

2 Graduate School Application Preparation
Providing Department: TRIO/Access Program
Learning Outcome Description:
McNair Scholars will apply seminar curriculum in the development of graduate school centered post-graduate plans.

3 Wellness
Providing Department: TRIO/Access Program
Learning Outcome Description:
McNair Scholars will be able to identify and utilize campus resources that support academic wellness.

4 Retention and Matriculation
Providing Department: TRIO/Access Program
Learning Outcome Description:
McNair Scholars will demonstrate a sense of belonging at Wayne State University, persist, and graduate.

Undergraduate Admissions

1 Strategically Recruit New Students
Providing Department: Undergraduate Admissions
Learning Outcome Description:
Program Goal Enhance the Office of Undergraduate Admissions’ strategic recruitment efforts by leveraging technology that includes: Common Application, Slate Application, Slate/CRM, Cherwell, Admit Hub, Enrollment Management/Admissions reports, Portara and Social Media. The ability to create, implement, monitor and revise technology tools as needed are essential in helping to strategically recruit and enroll new students.

2. New Student Yield Events and Activities
Providing Department: Undergraduate Admissions
Learning Outcome Description:
The Office of Undergraduate Admissions collaborates with the Schools/Colleges and Student Services Departments to develop, implement and evaluate strategies and programs to increase new student enrollment.

3. Technology Usage for Recruitment
Providing Department: Undergraduate Admissions
Learning Outcome Description:
Enhance the Office of Undergraduate Admissions’ strategic recruitment efforts by leveraging technology to utilize data sources and communication mediums to measure recruitment outcomes.

4. Strategic Communication Outreach with Targeted Populations
Providing Department: Undergraduate Admissions
Learning Outcome Description:
The Office of Undergraduate Admissions engages prospective students, parents and school counselors through mailings, emails, phone calls, newsletters and other communication campaigns to strategically increase new student enrollment. Communication messages are targeted to specific audiences and provide a call to action for the various audiences in the admission/enrollment process.

Undergraduate Research

1 LO1: Presentation of Research
Providing Department: Undergraduate Research
Learning Outcome Description:
Through opportunities provided by the Undergraduate Research and Opportunities program undergraduates will be able to clearly communicate research or creative project results to a general audience.

2 LO2: Retention
Providing Department: Undergraduate Research
Learning Outcome Description:
Undergraduate students who receive a UROP award will be retained at higher levels than those who do not receive a UROP award.

3 LO3: Research or Creative Question
Providing Department: Undergraduate Research
Learning Outcome Description:
After students participate in the UROP program they will be able to articulate and refine a research question and gather evidence appropriate to the question by using credible sources that provide and enable comprehensive analysis and/or synthesis.

4 LO4: Critical Assessment of Assumptions
Providing Department: Undergraduate Research
Learning Outcome Description:
After students participate in the UROP program they will be able to assess the validity of key assumptions and critically question viewpoints of previous scholarship.

University Advising Center

UAC LO 1.1 Progress Towards Degree--Return Rates and Academic Probation
Providing Department: University Advising Center
Learning Outcome Description:
Students will demonstrate progress towards degree by enrolling in and completing classes with appropriate grades by 30 credit hours to meet requirements for an undergraduate degree and/or for admission to their respective professional programs. Areas included in this learning outcome will include probation rates, and return rates.

UAC LO 2-1 Exploratory Student Program
Providing Department: University Advising Center
Learning Outcome Description:
Students will identify and declare a major or officially commit to pursuing a specific professional program by the time they have earned 30 credit hours.

UAC LO 3.1 Pre-Professional Student Program
Providing Department: University Advising Center
Learning Outcome Description:
Pre-professional students will enroll in the appropriate courses and maintain a competitive grade point average (gpa) to apply for admission to their respective professional programs.

UAC LO 5:1 Wayne Experience-WE Requirement
Providing Department: University Advising Center
Learning Outcome Description:
Wayne Experience became a new requirement for incoming FTIAC students Fall 2019. The expectation is that every freshman would complete the course within their first year of enrollment. The purpose of the course is to provide information and strategies to acclimate students to WSU and the prepare them for University course work. Only students who had earned MTA while in high school would be exempt from the requirement.

UAC LO: 4-1 Competency Requirements
Providing Department: University Advising Center
Learning Outcome Description:
Completing the Basic Composition and Quantitative Experience courses are key to a student’s progress towards degree. As a result, we will track and follow up with students re: completing competency requirements BC and QE in a timely way.

random Pre-Nursing Essentials Workshop
Providing Department: University Advising Center
Learning Outcome Description:
Essentials Workshop Learning Outcomes 1. Students can identify required prerequisite courses. 2. Student understand the application timeline.

New Learning Outcome (Program-level) Item
Providing Department: University Advising Center
Learning Outcome Description:

New Student Orientation

1.0 NSO_LO 1.0
Providing Department: New Student Orientation
Learning Outcome Description: Students will be able to identify at least one person or resource on campus whom they plan to utilize to support their success in college.

2.0 NSO_LO 2.0
Providing Department: New Student Orientation
Learning Outcome Description: Students will recognize their perceived sense of belonging to Wayne State.

3.0 NSO_LO 3.0
Providing Department: New Student Orientation
Learning Outcome Description: Students will know how to schedule an academic advising appointment.

4.0 NSO_LO 4.0
Providing Department: New Student Orientation
Learning Outcome Description: Incoming students will understand how to access their financial records, including financial aid information, and the resource to contact if they have questions about their specific information.

WSU Assessment

LO1 Identify the assessment cycle
Providing Department: WSU Assessment
Learning Outcome Description: WSU faculty and staff from academic and co-curricular programs identify the program assessment cycle’s stages, purposes, and benefits.

LO2 Compose mission statements
Providing Department: WSU Assessment
Learning Outcome Description: WSU faculty and staff from academic and co-curricular programs compose mission statements that reflect best practices.

LO3 Compose learning outcomes
Providing Department: WSU Assessment
Learning Outcome Description: WSU faculty and staff from academic and co-curricular programs compose learning outcomes that reflect best practices.

LO4 Select sustainable assessments
Providing Department: WSU Assessment
Learning Outcome Description: WSU faculty and staff from academic and co-curricular programs select sustainable assessments that provide useful data for understanding whether their stakeholders are achieving their program’s learning outcomes.

LO5 Use data for decision-making
Providing Department: WSU Assessment
Learning Outcome Description: WSU faculty and staff from academic and co-curricular programs use their assessment data to make logical decisions about what to
retain or change in their program.

**LO6 Carry out action plan**
**Providing Department:** WSU Assessment
**Learning Outcome Description:**
WSU faculty and staff from academic and co-curricular programs carry out their data-driven decisions to improve their program.

**LO7 Close the loop**
**Providing Department:** WSU Assessment
**Learning Outcome Description:**
WSU faculty and staff from academic and co-curricular programs close the loop by re-assessing whether their improvements efforts had the desired effect.

**PG10 Believe efforts are valued**
**Providing Department:** WSU Assessment
**Learning Outcome Description:**
WSU faculty, staff, and administrators from academic and co-curricular programs believe that program assessment efforts are valued.

**PG8 Meet documentation requirements**
**Providing Department:** WSU Assessment
**Learning Outcome Description:**
WSU faculty, staff, and administrators from academic and co-curricular programs meet annual assessment plan documentation requirements.

**PG9 Expand participation**
**Providing Department:** WSU Assessment
**Learning Outcome Description:**
WSU faculty, staff, and administrators from academic and co-curricular programs expand the number of individuals engaging in program assessment.