Articulating manageable, meaningful, and measurable SLOs

Program-level SLOs

**Definitions:** Short statements describing what students should know or be able to do upon completing a program. Program-level outcomes should reflect what is expected of students completing a 200-level course or a capstone course/project.

**Guiding questions**

- What does your “ideal graduate” look like? What does he/she know? What can he/she do? What does he/she care about?
- What knowledge, attitudes, values, or skills should your graduates have acquired to perform well in future classes or jobs?

**How to craft good SLOs?**

- Start with an action verb (use the Bloom’s Taxonomy verbs list) that describes exactly what students should be able to do upon completion of the program.
- **Avoid verbs that are too vague or have multiple interpretations (know, be aware of, appreciate, learn, understand, comprehend, become familiar with, think critically)**
- Action verbs should appropriately reflect the expected level of learning. Verbs such as “describe” or “identify” are well suited for 100-level courses. Verbs reflecting application (e.g. apply, research), analysis (e.g. compare, explain), evaluation (e.g. judge, evaluate) and synthesis (e.g. design, produce) are well suited for upper level courses.

**Characteristics of good SLOs**

- **Manageable:** Is the SLO realistically attainable for students? Does your department have the resources to assess this SLO?
- **Meaningful:** Does the SLO reflect an important concept or skill? Will measuring this SLO produce results that can drive course or program improvements?
- **Measurable:** Is there at least one method the department can use to assess the extent to which students have achieved this SLO?

**Tips**

- Keep your SLOs short and simple.
- Limit the number of program-level SLOs to 5 - 8 statements
- Make sure you have other people (faculty, students) review your SLOs
- Make sure your assessment instruments (exams, projects) align with your SLOs

**Why reinvent the wheel?** Google “Learning outcomes + [program]” to help you get started!
Examples

Upon completing [program], students should be able to:

- Articulate the foundational assumptions, central ideas, and dominant criticisms of the psychoanalytic, Gestalt, behaviorist, humanistic and cognitive approaches to psychology
- Write a research paper in the appropriate scientific style
- Use fundamental engineering techniques, skills, and tools for engineering practice
- Analyze and interpret scientific data to produce meaningful conclusions and recommendations
- Explain the theoretical bases of various dramatic genres and illustrate them with examples from plays of different eras
- Critically examine a variety of business concepts, models and principles and recommend logical actions in order to address hypothetical or real-world business issues
- Apply basic computational, statistical and quantitative reasoning skills in collecting, analyzing, and interpreting numerical information to make and justify evidence-based business decisions
- Use computer hardware, software, the internet, cloud computing and other technological tools
- Work effectively in both leadership and support roles as part of diverse teams to achieve a variety of business-related tasks
- Demonstrate effective teamwork in managing simulated emergency scenarios
- Apply ethical principles and logical reasoning to make and justify business decisions
- Perform an adequate patient assessment and formulate and implement a treatment plan for patients with a variety of medical and traumatic emergencies
- Successfully perform welding operations using appropriate processes on various metals and in various situations
- Exercise professional and ethical responsibility as a member of the dental profession
- Interpret infection control guidelines in relation to disinfecting, sterilizing and antiseptic procedures
- Demonstrate safe work habits that reflect concern and care for self, others and the environment
- Process a medication order completely, accurately, and efficiently
- Accurately perform mathematical computation of ingredient amounts, doses, infusion rates, or any relevant calculation encountered in an Outpatient and Inpatient setting