

# How to Create Learning Objectives and Course Outcomes

## The Importance of Having Learning Objectives and Outcomes

### Educator Accountability

- Academic program review requires faculty to report on student's achievement of course learning outcomes.
- Course grades do not serve this purpose because they can be affected by factors not directly connected to learning, such as classroom participation, absences, or missing assignments.
- Even when the program in which the course exists is not undergoing a review, faculty are accountable for assessing their students' achievement of the course's learning outcomes.

### Clarity and Focus

- Learning objectives help instructors design their teaching and align activities with specific goals.
- Clear objectives give students a sense of what to expect and what is important, allowing them to focus their efforts effectively.

### Motivation and Engagement

- Knowing the expected outcomes can motivate students by showing them the relevance and application of what they are learning.
- Clear outcomes encourage students to take ownership of their learning, setting personal goals that align with course objectives.

### Curriculum Development

- Well-defined objectives and outcomes support curriculum coherence, ensuring that courses align with broader educational standards and institutional goals.
- They enable connections between different subjects by highlighting transferable skills and knowledge.

### Inclusivity and Accessibility

- Clear objectives and outcomes help accommodate various learning styles and paces, allowing for differentiated instruction and assessment.
- By establishing clear learning objectives and outcomes, courses become more effective, focused, and responsive to the needs of both instructors and students.

## Outcomes vs Objectives: What's the Difference?

The words “objectives” and “outcomes” are used closely together, but they are not interchangeable. These words carry specific meanings and purposes that are different from one another.

### 🎯 Objectives answer the question: “What WILL students learn?”

- Course learning objectives indicate what a student will learn (future tense) in a course.
- They define a goal for the learning that will take place in a course or program.
- They state the educator’s intentions and plans for how students will achieve this goal.
- Normally, course learning objectives are written as, “students enrolled in this course will learn to...”
- The course should have 3-5 objectives but could have more.
- Objectives are essential because they design or shape the learning that will take place.

### 🎯 Outcomes answer the questions: “What CAN students do?” or “What DO students know?”

- Course learning outcomes indicate what a student can do as a result of their learning experience in a course. They are written in the present tense.
- Outcomes are important for assessment. We cannot measure what will happen in the future – we can only measure what has been achieved.
- Normally, course learning outcomes are written, “as a result of their learning experience, students successfully completing this course can:”
- Each course should have 3-5 outcomes.

## Examples:

### 🎯 Objective:

Students enrolled in this course will learn to **interpret** data analysis results and **effectively communicate** insights and ideas through written and oral reports (Evaluating, Creating).

### 🎯 Outcome:

**Communicate** data-driven findings effectively by **preparing** and **delivering** clear written reports and oral presentations (Creating, Evaluating).

### 🎯 Objective:

Students will **identify** ways to deal with change and stress and **develop** strategies for improving wellbeing.

### 🎯 Outcome:

As a result of their learning experience, students completing a first-year seminar course can:

- **Reflect** on responsibilities and **set goals** to enhance confidence and competence in adjusting to change, confronting challenges, managing stress, and improving wellbeing.
- **Apply** relevant skills and **access** resources to learn and communicate strategically.
- **Develop** an academic plan to attain academic and professional goals consistent with personal interests.

## Backward Design

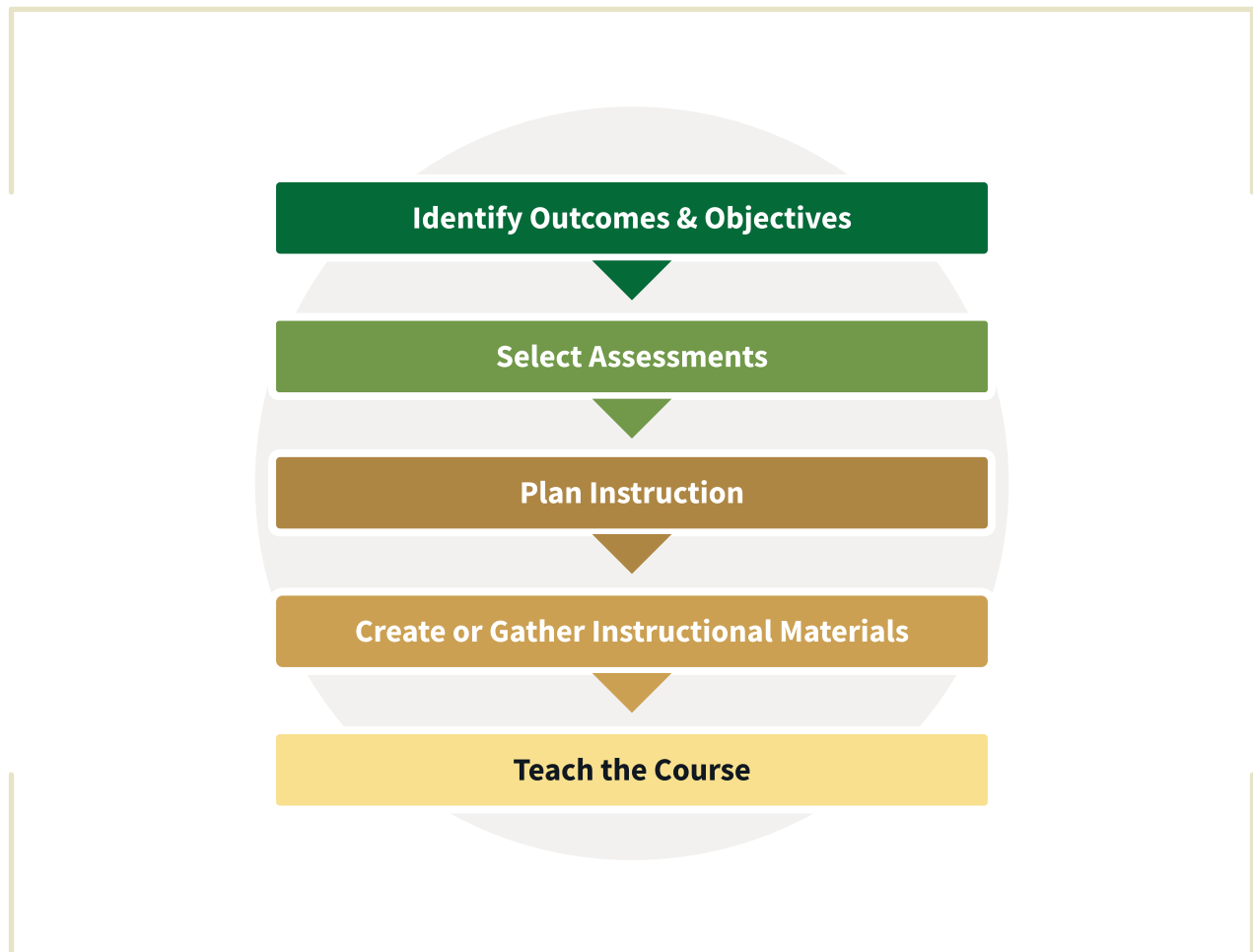
A reliable method of creating alignment in your course is to use **backward design**. The backward design approach is to begin with the end goal.

**Start** by setting clear outcomes and objectives to determine what students should know, or understand, by completing this course.

**Next**, plan the assessments that will determine how you will measure your students' understanding. This could include **tests, projects, essays, performances**, etc.

**Finally**, design specific lessons and activities that will guide students to achieve the outcomes and perform well on the assessments.

### Backward Design



# I Writing Learning Outcomes

Learning outcomes must meet a certain set of expectations and convey pertinent ideas concisely.

## Step 1: Gather Basic Resources

**Locate the course description in the university catalog and a copy of the course's current or most recent syllabus.** If the course is part of a program that has disciplinary accreditation (AACSB, ABET, CIDA, NASM, NCATE, etc.), locate the appropriate handbook or guide.

**IMPORTANT:** Changes to the course's catalog description require a multi-step process involving approval by departmental curriculum committees and academic affairs. Therefore, learning outcomes must align with the catalog description as written.

## Step 2: Define the Course Context

### Why do students take this course?

- General education requirement
- Major/minor requirement
- General elective
- Major/minor elective

### How does this course fit into students' educational experiences?

- What are the prerequisites?
- What is the course's level? (Introductory, intermediate, advanced, graduate)
- What is the course's primary purpose?
- Convey general knowledge or skill
- Impart disciplinarily specific knowledge or skill
- Provide professional preparation/experience

## Step 3: Go Deeper

**Look for essential concepts or elements in each of these sources, noting keywords and core ideas:**

- University mission
- College, school, or department mission
- Course description in university catalog
- Disciplinary accreditation requirements or standards
- Professional norms and standards
- Program requirements
- Disciplinary knowledge and expertise

### Disciplinary Accreditation Organizations

In some academic disciplines, course outcomes primarily depend upon accrediting organizations, which set forth expectations for student learning such as ABET (Accreditation Board for Engineering and Technology) or AACSB (Association to Advance Collegiate Schools of Business).

### Other Information Sources

Look at professional organizations in your discipline, considering their published guidelines, goals, mission statement, or professional standards. What unifying ideas are present at the professional level? Find and compare goals and objectives published by similar academic programs at peer institutions. How do these relate to professional standards and your prior teaching?



## Step 4: Analyze and Evaluate

**Look over the notes you took from the sources you examined.**

- Identify areas of commonality, significant terminology, and overarching concepts.
- Consider the course's content and its context within the program.
- Synthesize this information into three to five “big ideas” that describe what students should know and be able to do as the result of their experiences in the course.
- These “big ideas” are the basis of the Student Learning Outcomes you will write.

### **Characteristics of Well-Written Student Learning Outcomes:**

- Written in present tense (students can...)
- Reflective of disciplinary norms
- Aligned with university standards and expectations
- Limited in number (generally between 3 and 5)
- Distinctive, specific, and simple
- Measurable by more than one assessment method

*Clearly indicative of:*

- Knowledge, skills, and abilities students must demonstrate
- Depth of knowledge or skill students must achieve

### **Sentence Construction**

**Learning Outcomes should have three components:**

- An active verb from Bloom's Taxonomy (more on page 7) indicating what students should know or be able to do
- An indication of the knowledge or skill being measured
- Connection to the student product or performance that will be measured

*Examples:*

- Know and follow proper procedures and regulations for safe handling and use of chemicals in laboratory procedures.
- Examine connections between historical periods within discussions of theatre, art, culture, and society.

## I Writing Learning Objectives

The process of writing objectives is a bit different from writing learning outcomes. We do not need as much background information, but we must still align these statements with the course content and student learning outcomes.

### Step 1: Gather Basic Resources

You'll need:

- The course description from the university catalog
- A copy of the course's current or most recent syllabus
- A copy of the course's student learning outcomes

**REMEMBER:** Changes to the course's catalog description require a multi-step process involving approval by departmental curriculum committees and academic affairs. Therefore, learning outcomes and objectives must align with the catalog description as written.

### Step 2: Map the Route

Consider the content of your course and compare it to the learning outcomes you already wrote. Think of where (most) students begin – what is their level of existing skill and knowledge? Utilize the course map (link below) to build alignment of course objectives, assignments, assessments and outcomes.

### Step 3: Analyze and Evaluate

List three or more checkpoints (benchmarks, milestones) leading to each learning outcome. Determine how you will assess student learning at each of those checkpoints.

*Example:*

To write a summary and analysis of a professional journal article (learning outcome) students must first learn how to:

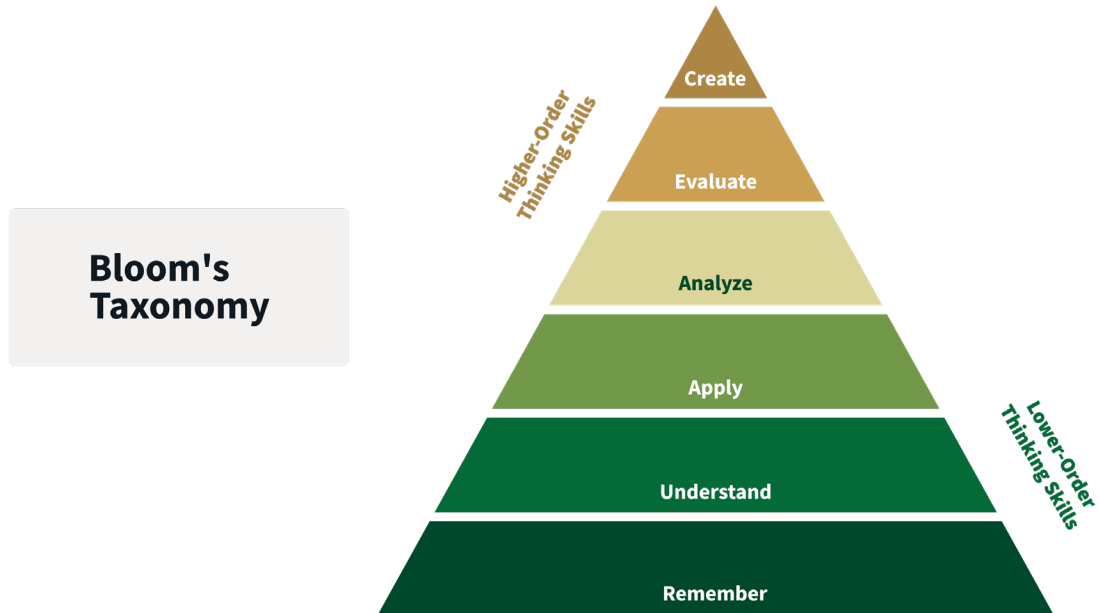
- Read a professional article (short quiz)
- Summarize its important points (exit slip)
- Analyze the author's statements (quiz)
- Compose a coherent response paper, and
- Follow the professor's formatting guidelines (assignment, graded with rubric)

## Characteristics of Well-Written Objectives:

- Written in future tense (Students will ...)
- Clearly supports one of the course's student learning outcomes
- Connects to an assessment mechanism (quiz, assignment, exit slip, etc.)
- Measurable by utilizing vocabulary from Bloom's Taxonomy
- Specific and simple
- Indicates the knowledge, skills, and abilities expected

## Improving Your Outcomes and Objectives

**Bloom's Taxonomy** represents a hierarchy of cognitive processes, starting with the simplest and building up to the most complex. It helps educators plan lessons and assessments that move students from basic knowledge to higher-order thinking.



**There are six levels listed from lower to higher-order thinking:**

### **Remembering:** Recalling facts and basic concepts

Example verbs: *Define, List, Memorize, Recall, Duplicate, State*

### **Understanding:** Explaining ideas or concepts

Example verbs: *Describe, Explain, Summarize, Classify, Discuss, Identify, Locate, Recognize, Select, Translate*

### **Applying:** Using information in new situations

Example verbs: *Implement, Solve, Use, Demonstrate, Execute, Interpret, Operate, Schedule, Sketch*

### **Analyzing:** Breaking down information into parts to explore relationships

Example verbs: *Compare, Contrast, Differentiate, Examine, Distinguish, Organize, Question, Test, Experiment*

### **Evaluating:** Justifying a decision or course of action

Example verbs: *Critique, Assess, Argue, Support, Defend, Appraise, Judge, Select, Value, Weigh*

### **Creating:** Producing new or original work by combining elements in novel ways

Example verbs: *Design, Formulate, Construct, Invent, Conjecture, Develop, Author, Investigate, Assemble*

### Specific and Challenging

- Use specific language appropriate to the discipline of the course.
- Even in an entry-level course, it is acceptable to reach higher than the lowest levels of the taxonomy.
- Challenge your students and build rigor into your courses through the wording of your learning outcomes.
- Outcomes are written in present tense.

### Examples:

#### **Biology:**

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**Too generic:** Learn fundamental theories of biology.

★ **More specific:** Write knowledgeably about theoretical aspects of biology, using appropriate scientific references and examples.

#### **Philosophy:**

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**Too generic:** Understand a variety of philosophical positions.

★ **More specific:** Develop relevant arguments and examples in order to discuss a variety of philosophical positions.

#### **History:**

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**Too generic:** Know the difference between primary and secondary sources.

★ **More specific:** Appropriately utilize primary and secondary sources in their written work, demonstrating knowledge of sound disciplinary practices in historical scholarship.



## Summary

### Aligning Courses to Programs

**Objectives and Outcomes are the building blocks for course alignment.**

#### *Clarifying Questions:*

- What is the purpose of the course?
- How does the course serve students specific to the discipline?
- How does the course support the program’s mission?

#### *Working Questions:*

- How does the course incorporate one or more components of the program and university’s mission?
- Which components of these elements are delivered through the course?
- How does the course serve students’ educational needs?

**When creating outcomes and objectives for your course, remember to tie it back to Wright State’s mission.**

#### **University Mission Components:**



### Assessment Connection

**Crafting outcomes and objectives is only half the equation.**

- An assessment lets us know if students have achieved the outcome.
- Every outcome should be linked to a pre-determined assessment.
- One assessment and its measurement tool (such as a rubric) can be used to assess multiple objectives.

### Resources:

**•WSU Office of the Provost Accreditation and Assessment Student Learning Outcomes:**

<https://www.wright.edu/office-of-the-provost/accreditation-and-assessment/student-learning-outcomes>

**•Course Map:**

<https://www.wright.edu/office-of-the-provost/accreditation-and-assessment/student-learning-outcomes>