

COR Outcomes and Objectives Guide

Questions? Contact:

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COR Outcomes and Objectives

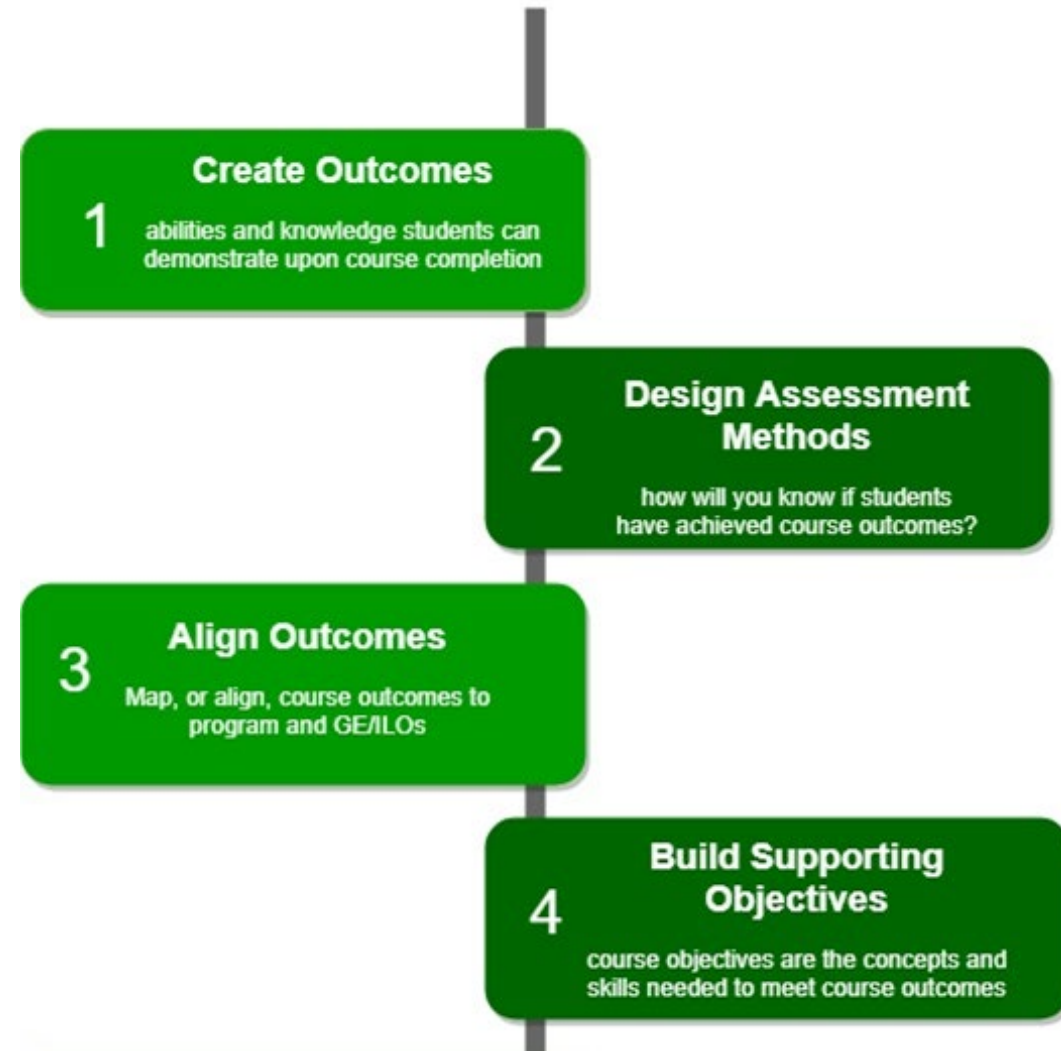
“One of the most significant aspects of a COR is the inclusion of student learning outcomes (SLOs). SLOs can be a driver of many, if not all, elements of a course outline of record.” [Academic Senate for California Community Colleges](#)

Course Outline of Record (COR)

- A legal document containing required elements specified in §55002
 - Legal contract between faculty, student, and college
 - Basis for articulation agreements and statewide course identification number (C-ID)
 - Ensures quality and consistency of course delivery for faculty
 - Ensures instructional integrity, content and rigor across all section offerings
 - Identifies a body of knowledge that distinguishes one course from another
 - Justifies unit credit
 - Approval: Curriculum Committee, Board of Trustees, Chancellor's Office

STEPS TO DESIGNING OUTCOMES AND OBJECTIVES

- 1. Define Outcomes** – What are the abilities and knowledge students can demonstrate upon course or program completion?
 1. Create at least 2 outcomes for each course and program.
 2. Use language that students can understand.
- 2. Design Assessment Methods** – How will you know if students have achieved the outcomes?
- 3. Align Outcomes** – Course outcomes should be aligned to program outcomes AND college outcomes (i.e. general education/institutional outcomes).
- 4. Build Supporting Objectives** – Objectives on the COR state the concepts or skills needed to meet the outcomes. Objectives are the means, not the ends. They are the building blocks designed to help students to achieve the course learning outcomes.



Learning Outcomes are the Start and Finish

What are the abilities and knowledge students can demonstrate upon course or program completion?



Step 1: Develop Course Learning Outcomes

ID 170: Complete an interior from a given building core and shell with a full wall layout, electrical service overlay that is organization (business type) specific.

BIO 125: Apply knowledge of osmosis, diffusion and membrane transport to conduct and analyze laboratory experiments that explore molecular transport in plants.

WELD 108: Select the correct mathematical systems and equations to solve common industrial problems.

Step 2: Design Assessment Methods

How will you know if students have achieved the outcomes?

BIO 125 Outcome: Apply knowledge of osmosis, diffusion and membrane transport to conduct and analyze laboratory experiments that explore molecular transport in plants.

Assessment: Lab Laboratory experiments that may be selected as part of this assessment include:

1. Conducting experiments that measure rates of diffusion through different mediums.
2. Conducting and analyzing molecular movement through semi-permeable membranes (dialysis bags) to demonstrate the principles of diffusion and osmosis.
3. Preparing, observing, and analyzing living plant cells in solutions of various tonicities.

Record detailed assessment methods in Nuventive Improve (TracDat)

Step 3: Align Outcomes

- Course outcomes should be aligned to program outcomes AND college outcomes (i.e. general education/institutional outcomes).
- Document this in Nuventive Improve

Step 4: Build Supporting Objectives

Objectives on the COR state the concepts or skills needed to meet the outcomes. Objectives are the means, not the ends. They are the building blocks designed to help students to achieve the course learning outcomes.

[Academic Senate for California Community Colleges Curriculum Guide](#)

Outcomes, Objectives, and Content

CSCI 260, Video Game Programming I

Student Learning Outcomes

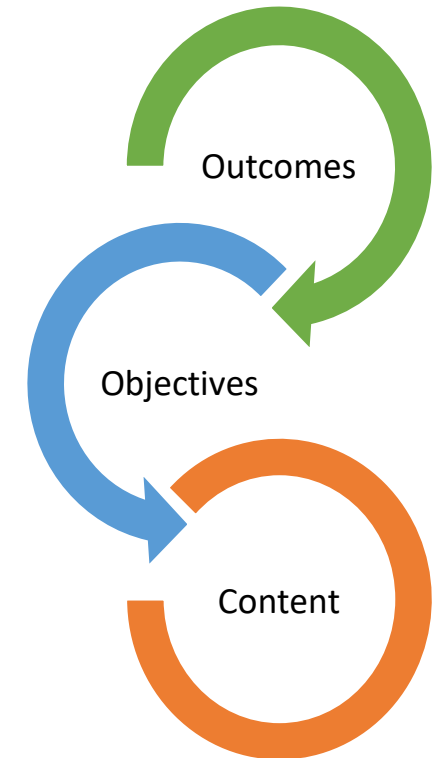
Upon successful completion of the course, the student will be able to:

- Develop a basic 3D video game from scratch using Microsoft DirectX.
- Maintain and upgrade existing video game programs.

Specific Course Objectives

Upon successful completion of the course, the student will be able to:

- Understand all the math required to properly construct a 3D game;
- Compile applications using the current version of DirectX;
- Write an application that moves 3D objects on the screen;
- Modify the application to detect and respond to collisions with the screens edges;
- Utilize graphics techniques to give objects different appearances;
- Query user-input devices to control objects on screen;
- Design complex 3D special effects;
- Understand proper terrain rendering;
- Design particle systems;....

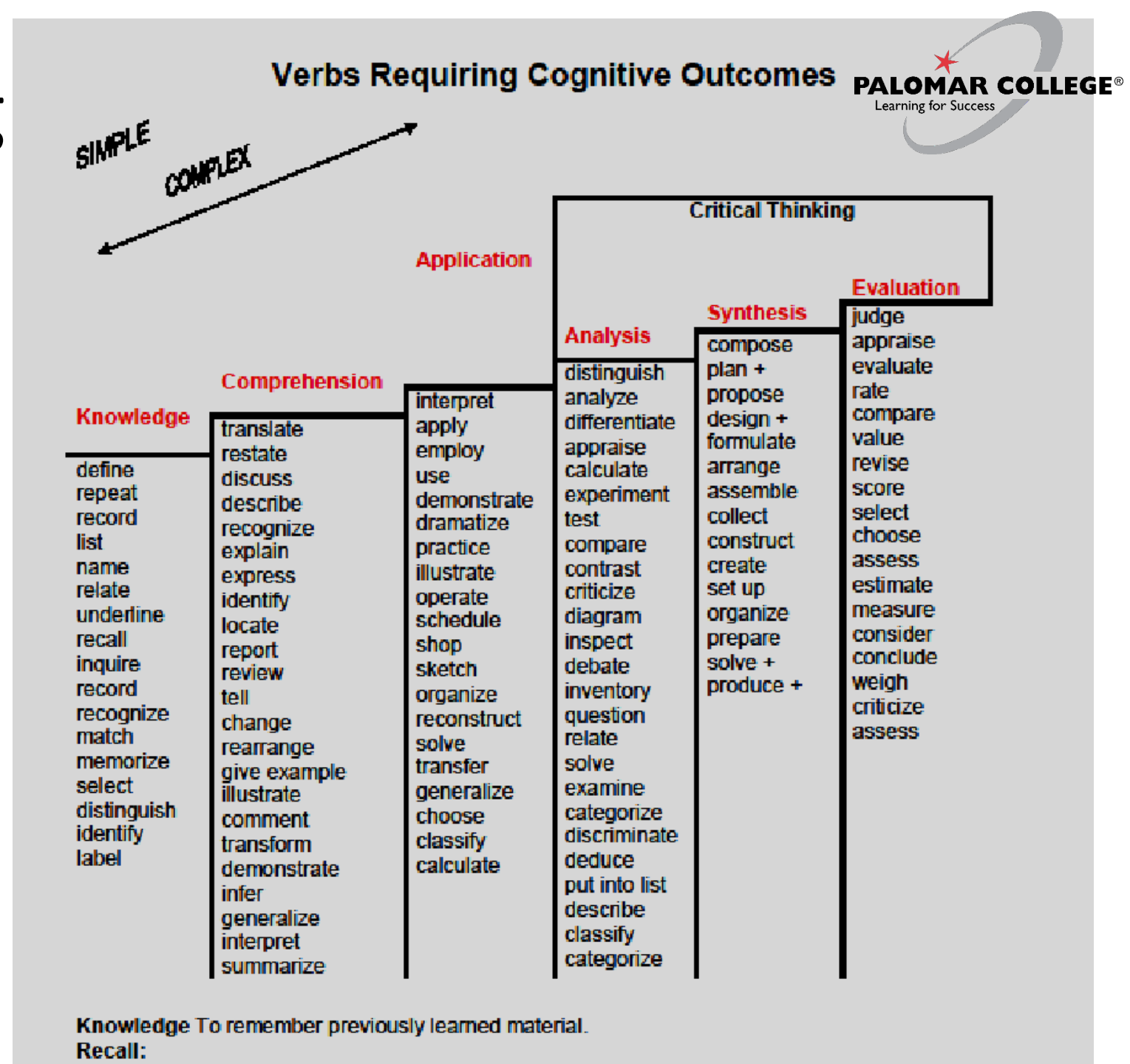


Outcomes Wording

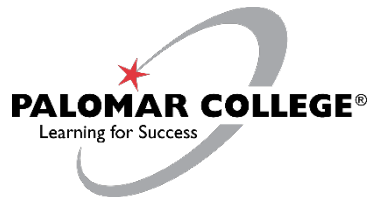
Learning outcomes and objectives using begin with critical thinking behavioral verbs

- Analysis
- Synthesis
- Evaluation

Bloom's Taxonomy Higher and Lower Order Thinking Verbs



Write Outcomes & Objectives with Rigor



Before	After
Know the significant art achievements of Renaissance through Modern Europe	Compare and contrast the art works from various historical periods to ascertain their stylistic aesthetic and historical relationships.
Understand the skills needed to create a theatrical event for children.	Create and perform a theatrical event for children that demonstrates appropriate choice of style, language, and pace.
Know the major developmental theories and scientific methods used to study development.	Defend or dispute the major developmental theories used to study human development.
Describe the physical, cognitive, and socioemotional stages of development of children.	Distinguish and predict physical, cognitive, and socioemotional stages of children of different ages, including newborns, infants, preschool children, elementary age children, and adolescents.

Course Content & Alignment

A reviewer should be able to find a match between:

- the outcomes and the objectives that support the outcomes.
- an objective and the content that supports that objective.

Example of Alignment

Outcome	Objective	Content
<p>1. Develop a basic 3D video game from scratch using Microsoft DirectX.</p>	<p>1. Understand all the math required to properly construct a 3D game;</p>	<p>1. 3D Math required for creating 3D video games</p> <ul style="list-style-type: none"> a. Vector Algebra <ul style="list-style-type: none"> i. Vectors <ul style="list-style-type: none"> A. Vectors and Coordinate Systems B. Left Handed vs. Right Handed Coordinate Systems C. Basic Vector Operations ii. Length and Unit Vectors iii. Dot Product <ul style="list-style-type: none"> A. Orthogonalization iv. Vector Cross Product, etc.

Class Assignments

How do they support the development and assessment of course outcomes and assessments?

- The assignments section of the COR should be detailed enough to give instructors, students, and reviewers a clear understanding of the rigor of student work that is expected.
 - Should not be so restrictive that it limits the academic freedom of individual instructors, however.
 - Alternate assignments may be included in lieu of a field trip or theatre performance.
- Assignments must be described sufficiently to document independent work, critical thinking, and a level of difficulty consistent with college-level work.

Example of Integration

Course Outcomes <i>The student will be able to:</i>	Course Objectives The student will be able to:	Methods of Instruction	Methods of Evaluation	Assignments
<p>A.</p>	<p>A. Distinguish representative examples of architecture, sculpture, painting, and other artistic media.</p> <p>B. Analyze the formal elements of works of art and architecture.</p> <p>C. Relate stylistic trends to specific dates, periods, cultures, and artists.</p> <p>D. Critique the use of media, materials, and techniques applied in artistic production</p> <p>E. Apply relevant art historical vocabulary and methodologies to analyze representative examples of artistic media.</p> <p>F. Explain how works of art and social, religious, political, and economic contexts in which they were produced.</p>	<p>A. Slide lectures</p> <p>B. Large and small group discussion</p> <p>C. Documentary films and movie clips on art and artists</p> <p>D. Art Museum and gallery visits will be required.</p>	<p>A. Measure understanding of textbook concepts and class lectures with performance on objective and essay exams.</p> <p>B. Written essays and/or research projects to be graded on the student's ability to describe style, iconography, context, and meaning of works of art and architecture.</p> <p>C. Assess level of research skills, comprehension of subject matter and use of art historical methodology through evaluation of research paper.</p>	<p>A. Read assigned textbook chapters (approx. 40-50 pages per week).</p> <p>B. Museum and gallery visits will be the basis of written exercises in which students discuss and analyze works of art.</p> <p>C. Written assignments may include short analysis papers, response papers, reviews of films or exhibitions and abstracts of assigned articles.</p> <p>D. Reading from supplemental art history reader and/or scholarly journals will be assigned.</p> <p>E. Students will complete a research paper on a work or works of art viewed at a local museum.</p>

Questions? Contact Us

Learning Outcomes Coordinators and Nuventive Support

- LearningOutcomesHelp@palomar.edu

[Department SLO Facilitators](#)

More Resources

- [SLO Website](#)