

# Teaching & Learning: Learner-centered Course Design

2017 New Faculty Orientation

*Alan Green, Associate Professor and Chair of Economics*

*Alicia Slater, Professor and Chair of Biology, Director of  
Curriculum & Assessment*

STETSON UNIVERSITY  
BROWN  
CENTER  
FOR FACULTY INNOVATION  
AND EXCELLENCE

## **Set your intention:**

- I am looking forward to...
- I want to know more about ...

# Backward Course Design

*Design with the end in mind*

**Dilemma, Issue or Question (DIQ)**

What is the “big idea”?

**Sept 8,  
2:30-4pm**



**Essential Learning Goals**

What do you want  
your students  
to know and do?

**Oct 6,  
2:30-4pm**



**Nov 10,  
2:30-4pm**

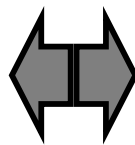
**High-impact  
Practices**

What will your  
students do?

**Dec 8,  
2:30-4pm**

**Authentic  
Assessment**

How will you know  
if your students are  
successful?



**Reflect**

What worked?  
What can be improved?

**Jan 19,  
2:30-4pm**

*Adapted from  
Understanding by  
Design by Wiggins  
& McTighe*

# STETSON UNIVERSITY

## Will this count toward my major???

### General Education Primer

At Stetson University, all three undergraduate units - The College of Arts and Sciences, The School of Business Administration, and The School of Music - share a core set of expectations for liberal learning. These expectations do not correspond exactly to a set of courses. Instead, they are a set of educational outcomes that we believe are essential for students embarking upon a career or post-graduate study in today's world, and they are achieved gradually as students advance through the University curriculum.

#### THE ESSENTIAL LEARNING OUTCOMES OF GENERAL EDUCATION

##### Writing

Students can compose and revise written texts that employ an appropriate voice to express coherently relationships between ideas from multiple sources, illustrating awareness of rhetorical context and purpose.

##### Information Fluency

Using technology as appropriate, students know when there is a need for information and are able to locate, evaluate, and effectively and responsibly use that information for the task at hand.

##### Speaking

Students can speak in an understandable, organized, and audience-appropriate fashion to explain their ideas, express their feelings, or support a conclusion.

##### Critical Thinking

Students, having identified a topic of inquiry and gathered relevant data, can synthesize and evaluate those data to reach an appropriate conclusion or conclusions.

##### Quantitative Reasoning

Students can apply quantitative techniques to solve problems or analyze data, or can apply mathematical or symbolic reasoning to move from a set of assumptions to a conclusion. Courses labeled Q.

##### Knowledge of Human Cultures and the Natural World

Students can apply relevant concepts to create, interpret, or explain a variety of cultural or natural phenomena. Courses labeled A, B, H, S, L, P.

##### Personal and Social Responsibility

Students can recognize a complex personal, professional, or public issue related to environmental responsibility, ethical or spiritual reflection, health and wellness, human diversity, or social justice; analyze that issue; and argue effectively for a personal position on it. Courses labeled R, E, W, D, J.

##### Integration of Learning

Students can make connections among ideas and experiences and synthesize ideas across perspectives.

# STETSON UNIVERSITY

## ACHIEVING ESSENTIAL LEARNING OUTCOMES

To achieve these essential learning outcomes, students will select a number of courses designed to provide an integrated academic experience.

<Some majors and special programs, such as our Honors Program, will have an alternate pathway to meet these essential outcomes.>

### FOUNDATIONS

---

- (1) Writing
- (2) First Year Seminar
- (3) Quantitative Reasoning (Q)

### KNOWLEDGE OF HUMAN CULTURES AND THE NATURAL WORLD

---

These courses enhance students' understanding of the world, encourage them to become more reflective about their own and others' beliefs and develop their capacities for aesthetic responsiveness and various forms of inquiry into human societies, systems, and the natural world. The College of Arts and Sciences, the School of Business Administration and the School of Music require a selection of courses from among the key areas of knowledge.

**Creative Arts (A)**

**Culture and Belief (B)**

**Historical Inquiry (H)**

**Individuals, Societies, and Social Systems (S)**

**Modern Languages (L)**

**The Physical and Natural World (P)**

### PERSONAL AND SOCIAL RESPONSIBILITY

---

These courses help students gain a greater sense of responsibility and develop their capacities for reflection and action as regards what they say, do, and believe in their personal, professional, and public lives. In most cases, students will take two courses from the areas described below, one of which will be a Junior Seminar.

**Environmental Responsibility (R)**

**Ethical or Spiritual Inquiry (E)**

**Health and Wellness (W)**

**Human Diversity (D)**

**Social Justice (J)**

### JUNIOR SEMINARS

---

These courses invite students to consider complex questions that foster the development of personal or social responsibility by working within a discipline but incorporating perspectives outside that discipline. Junior Seminars advance students' abilities in critical analysis, coherent reasoning, effective expression, and integrative learning. They are writing intensive and discussion-based. Every Junior Seminar is open to students in all majors, whether within or outside of the discipline in which it is being taught. The only prerequisite is junior status. Junior Seminars may not be taken pass/fail.

### CULTURAL EVENTS & CAMPUS ENGAGEMENT

---

Students will join Stetson's intellectual and creative life outside the classroom by attending a number of designated events such as performances, lectures by distinguished visitors, plays, art shows, and films.

# Why do I have to take that class?

## THINK – PAIR - SHARE

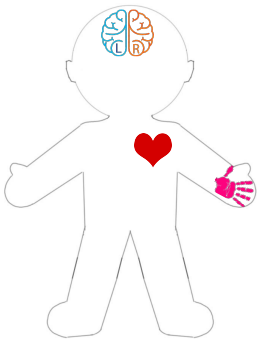
### THINK:

Describe two or three “big ideas” that first ‘turned you on’ to your subject.

***General Education** at Stetson is comprised of a set of educational outcomes that we believe are essential for students embarking upon a career or post-graduate study in today’s world. These outcomes derive from emphasize broad knowledge of the wider world (e.g., science, culture, and society) as well as in-depth achievement in a specific field of interest. Students develop a sense of social responsibility; strong intellectual and practical skills that span all major fields of study, such as communication, analytical, and problem-solving skills; and the demonstrated ability to apply knowledge and skills in real-world settings.*

How are your “big ideas” connected to Stetson’s general education program?

Envision a well-rounded student who that encounters your subject as part of their general education (i.e., not a major). How will this student use what they learned five or ten years in the future? indicate what they will learn intellectually (head), their dispositional learning (heart), and the skills they will gain (hands).



**PAIR:** Share your responses with a partner NOT from your discipline.

**SHARE:** Share a “highlight” with the larger group.

# Design with the end in mind

**Dilemma, Issue or Question (DIQ)**  
What is the “big idea”?



**Learning Goals**  
What do you want your students to know and do?



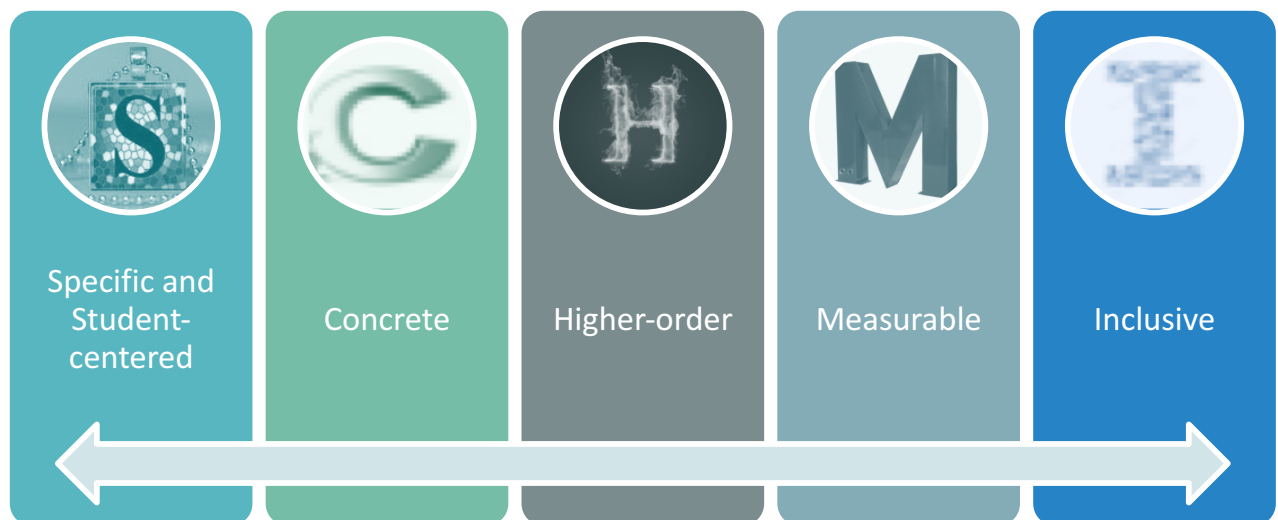
**Tasks**  
What assignments/activities will your students do?



**Assessment**  
How will you know if your students are successful?

**Reflect**  
What worked? What can be improved?

Adapted from *Understanding by Design* by Wiggins & McTighe



**SMART-H Outcomes**

# Student Learning Outcomes

When following the process of backward design, you first create the **course student learning outcomes (SLOs)** or review the SLOs that are assigned to your course.

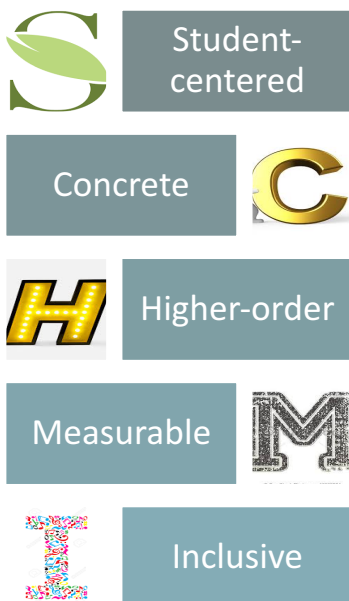
SLOs are the things that we want students to be good at doing by the end of the course. When you are considering your class, think about the concepts, skills, dispositions and abilities that a student who successfully completes the course will possess. These ideas form the basis for your SLOs. Consider the knowledge you use and the skills that you apply as a professional in your discipline and use these concepts as the foundation for your course goals. At a first glance SLO writing seems simple, but crafting solid, effective goals that can guide a course or a module within a course takes time.

**Goals? Objectives? Outcomes?** Different schools and different disciplines use different jargon. When we talk about student learning outcomes, we are referring to the course outcomes that you would list on your syllabus. Use whatever language is most appropriate for your situation.

## Alignment is important

As you are writing your outcomes, consider how your course-level outcomes align with higher-levels (program / institution / outside accreditors). A good way to insure alignment is through mapping.

All of your SLOs should be achievable, student-centered and measurable and some of your SLOs should focus on higher-order skills, rather than lower order skills (even in introductory classes).



## Alignment is important

As you are writing your outcomes, consider how your course-level outcomes align with higher-levels (program / institution / outside accreditors). A good way to insure alignment is through mapping.

All of your SLOs should be **achievable**, **student-centered** and **measurable** and some of your SLOs should focus on **higher-order** skills, rather than lower order skills (even in introductory classes).

Write outcomes that are **inclusive** of ALL the learners in your course. When appropriate separate the means from the end.

# S.C.H.M.I

**“S” is for Specific.** A specific outcome is well-defined and clear to anyone reading it.

**NOT Specific:** *Students will use good resources.*

**Specific:** *By the end of this course, students will be able to evaluate an information source to determine its quality.*

**“S” is also for Student-centered.** A learning outcome doesn’t describe what you plan to do in a course. It indicates what you expect your students to be able to do upon successful completion of the course.

**“C” is for Concrete.** Something students can accomplish at the level it is being taught, within the availability of resources, knowledge and time in your class.

**NOT Concrete:** *Upon completion of this course, students will be able to use APA style citations in all papers. (but you do not teach anything on APA and this is there first discipline-specific course)*

**Concrete:** *Upon completion of this course, students will be able to use APA style citations in all papers. (you teach a section on APA usage and how to adapt MLA to APA style citations and references).*

**“M” is for Measurable.** A measurable outcome is one that you could design an assessment for that would allow you to determine whether students have met the outcome or not. Avoid using the verbs “know” or “understand” in your learning outcomes since you can’t easily measure if a student knows or understands something. On their own, these verbs indicate internal mental states that are not automatically accessible to outsiders. For example, I can’t assess if you understand a concept just by looking at you. Instead, students must demonstrate their knowledge, learning, and understanding in some way to make assessment possible.

**NOT Measurable:** *Students will enrich their critical thinking skills.*

**Measurable:** *Students will demonstrate their critical thinking skills by interpreting experimental data and making conclusions based on these data..*

**“I” is for Inclusive.** Does the outcome represent and recognize the diversity of students? Is it inclusive of all types of learners? Does the outcome allow for multiple

**NOT Inclusive:** *Students will write a paragraph about how the circulatory system works.*

**Inclusive:** *Students will Write a paragraph about how the circulatory system works*



# “H” is for Higher-order

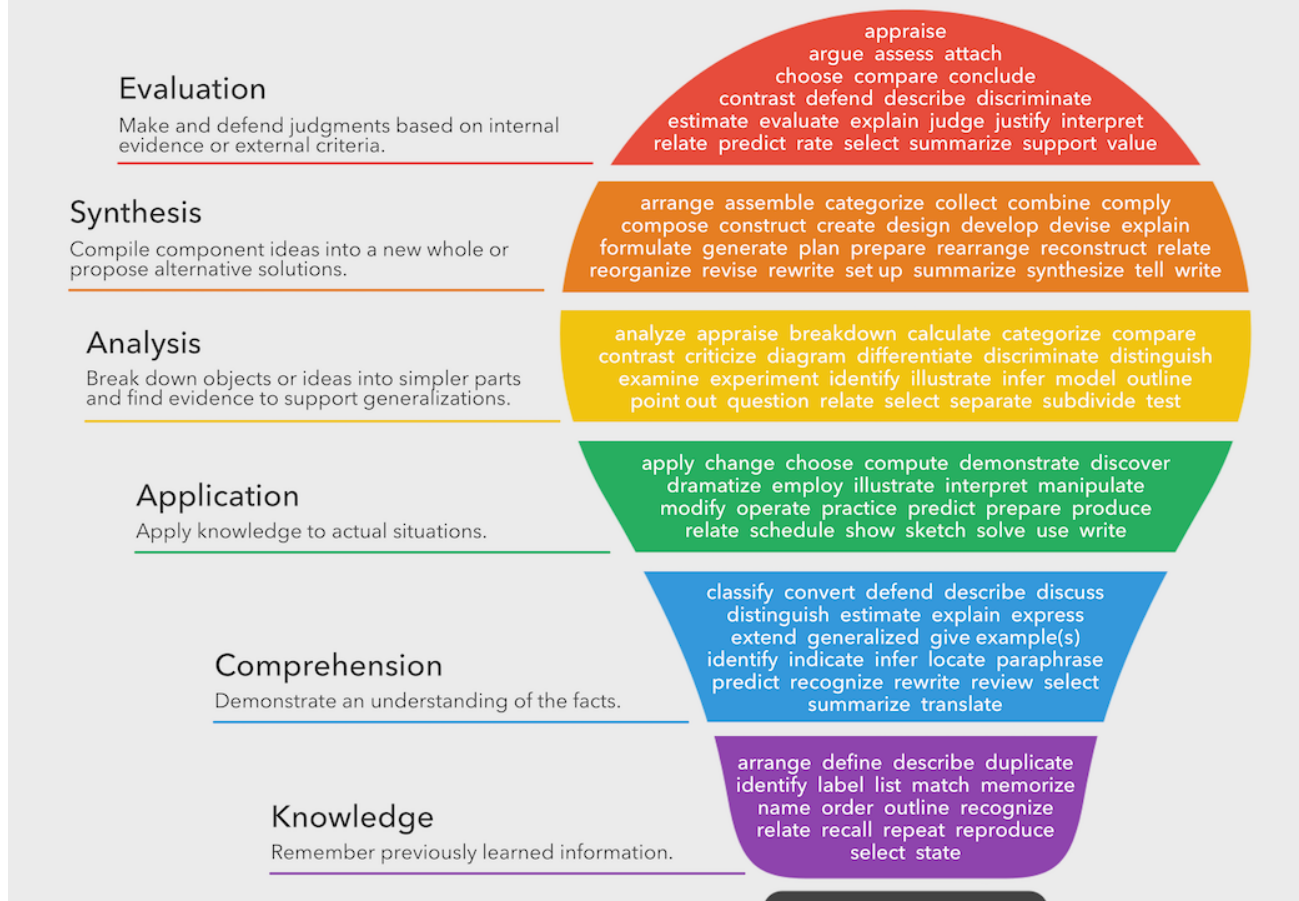
**“H” Higher-order.** Try to have many of your outcomes focus on higher-order thinking skills that include lower-order thinking skills. Many of our students, and many of us, are masters at memorizing and cramming information into our brains for a short period of time, taking the exams and then quickly forgetting what we just learning. We all want the learning that occurs in our classes to last beyond final exams. In order for that to occur, we need to move beyond lower-order skill (list, identify, classify) and move towards higher-order skills (predict, analyze, develop or evaluate). Students will acquire the lower-order skills as the move towards achieving the higher-order goals.

**NOT Higher Order:** *Students will list the enzymes used in the process of photosynthesis.*

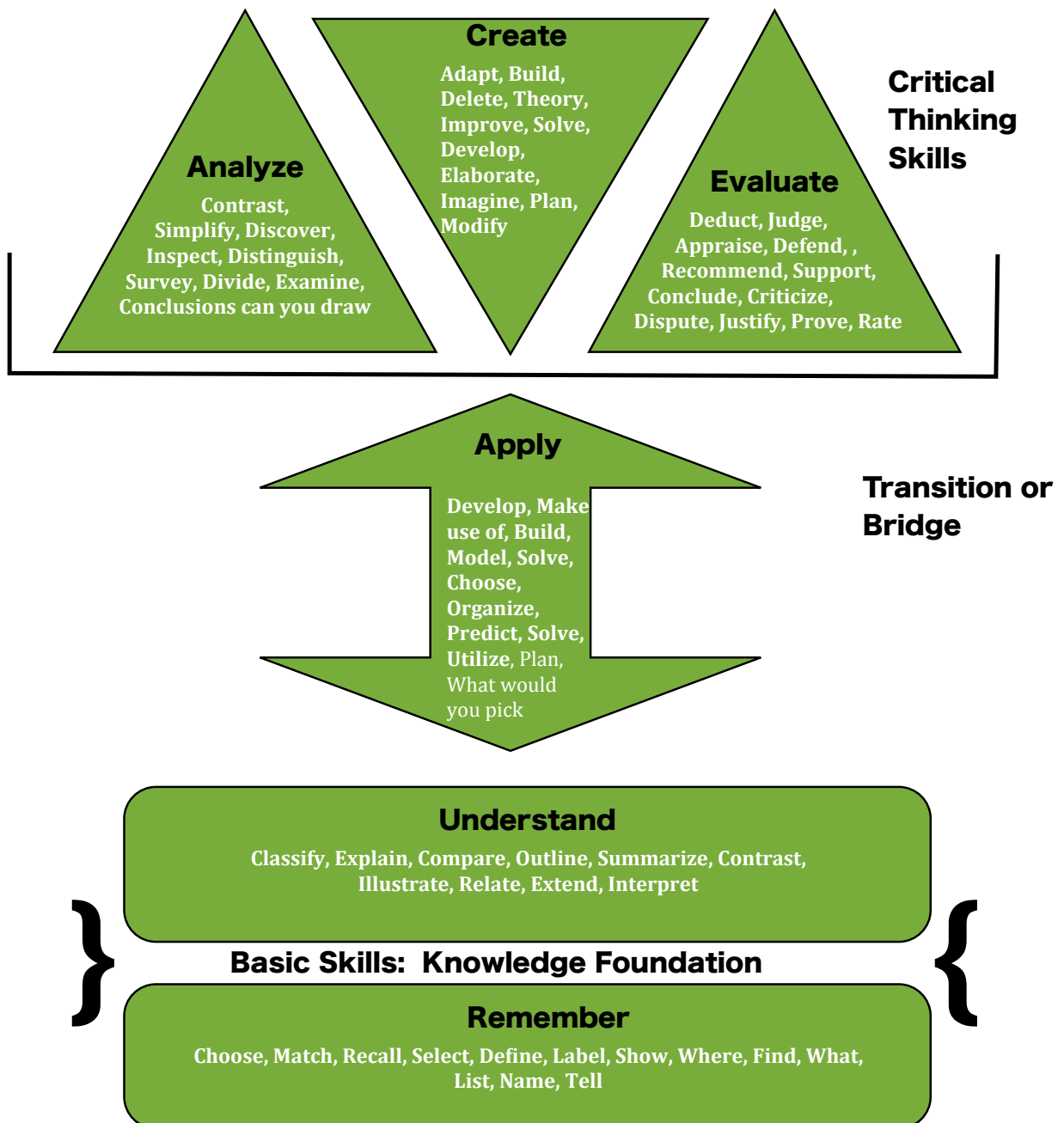
**Higher Order:** *Students will compare and contrast the processes of respiration and photosynthesis.*

**A word of caution** – don’t blindly replace lower-order verbs with higher order verbs in an attempt to have better sounding course goals *without also changing what you do in the course*. If you expect students to be able to “correctly identify all the bones in the human skeletal system” (a lower order skill, which does not necessarily mean that it is an easy task) and you lecture on the skeletal system, have students label a skeleton in class and then assess this goal by having students label bones on an exam, then it would be disingenuous to describe this course goals as “Students will be able to analyze the human skeletal system.”

## Bloom’s Taxonomy Verbs

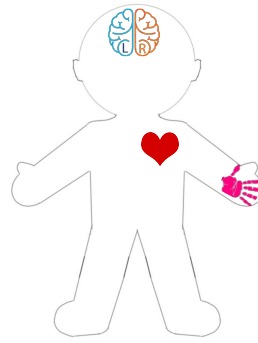


# Bloom's Taxonomy for course design



Modified by Anton Tolman, Ph.D. Based on Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). A taxonomy for learning, teaching and assessing: A revision of Bloom's Taxonomy of educational objectives: Complete edition, New York : Longman and the original: Bloom B. S. (Ed). (1956). [\*Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain\*](#). New York: David McKay Co Inc.

# Evaluate & Improve



S – Student centered  
C – Concrete  
H – High-order  
M – Measurable  
I – Inclusive

*Knowledge of human cultures and the physical and natural world:*

Students will understand the theory of relativity

head



*Personal and Social Responsibility:*

Students will apply ethical principles to their own decision making

heart



*Intellectual and Practical Skills:*

Students will become good critical thinkers

hands



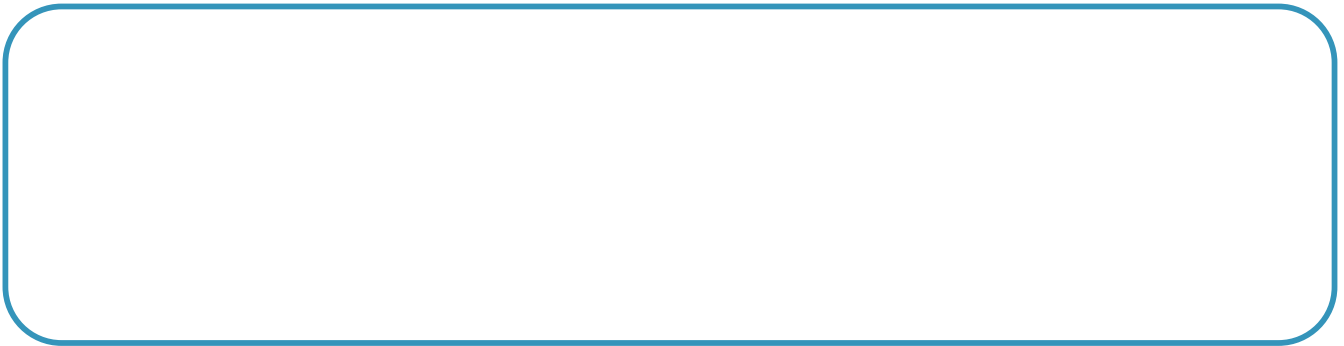
# Think | Reflect | Grow

Course Title: \_\_\_\_\_

**Nuts & Bolts** – elements to consider

- Does your course fulfill a general education requirement? If so, which one?
- Does your course have prerequisites? Does your course serve as a prerequisite?
- Does your course prepare students to take a standardized exam?
- How many students? How is your classroom arranged?
- Are students majors and/or non-majors?

What challenges and opportunities arise?



**Current Student-learning Outcome:**

\_\_\_\_\_

**Is it?**


S – Student centered

C – Concrete

H – High-order

M – Measurable

I – Inclusive



**Revised Student-learning Outcome:**

\_\_\_\_\_