

# 5 Pro-Tips for [Course Name]

Fill in each text box with a tip or trick you've used that has helped you create a great environment, explain a difficult concept, and – in general – run a good SI session.

1

Text

2

Text

3

Text

4

Text

5

Text

# 5 Pro-Tips for BIOL 110

Fill in each text box with a tip or trick you've used that has helped you create a great environment, explain a difficult concept, and – in general – run a good SI session.

1

When discussing saturated and unsaturated fats, bring butter and italian dressing to class to show a physical representation of how the differences in structure change the physical properties of the fats.

2

When the group is too big for you to learn everyone's names, at least take a second to have them introduce themselves to the people around them. That way the ice is broken for group work.

3

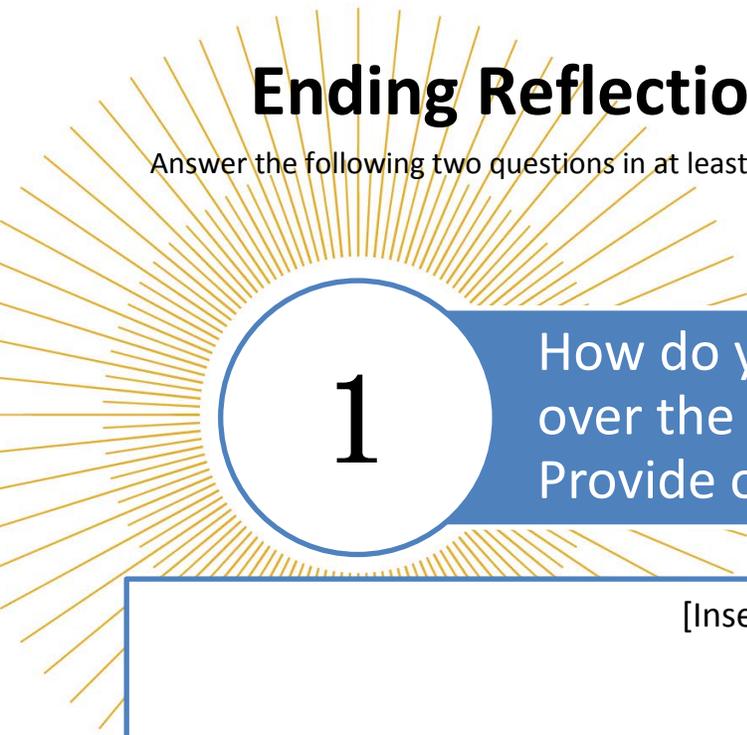
Stations with blank outlines at them work really well for exam review. That way, everyone can move at their own pace and focus on what they really need to know.

4

Use iClickers to quiz students at the beginning of the session and find out what they know. Most of them will have an iclicker with them. It really works for checking for understanding.

5

When groups are big, you have to really rely on small group work because you can't do everything yourself. Telling them to turn and work with the person next to them usually works, but keep an eye out for people who don't pair up.

A decorative sunburst graphic with many thin, golden lines radiating from a central point, positioned behind the title and the question number.

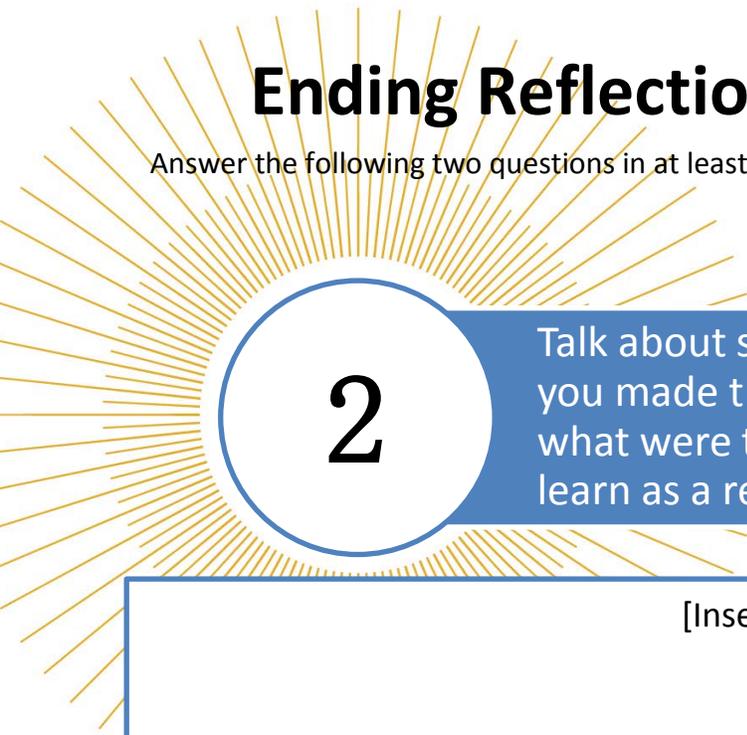
# Ending Reflection for [Course Name]

Answer the following two questions in at least one paragraph (5-7 sentences) or more if you'd prefer.

1

How do you feel you have improved over the course of the semester? Provide one specific example.

[Insert Text Here]

A decorative sunburst graphic with many thin, golden lines radiating from a central point, located in the upper left corner of the page.

# Ending Reflection for [Course Name]

Answer the following two questions in at least one paragraph (5-7 sentences) or more if you'd prefer.

2

Talk about some of the risks you took or mistakes you made this semester. What were the benefits, what were the consequences, and what did you learn as a result?

[Insert Text Here]

## CREATIVE THINKING RUBRIC

This rubric will evaluate the following items: 5 randomly selected session plans, a “5 Pro-Tips for My Course” worksheet, a “5 Best Activities for My Course” worksheet, observations, and 2 short reflection prompts administered at the end of the semester.

	<b>Proficient</b> 3	<b>Emerging</b> 2	<b>Developing</b> 1	<b>Lacking</b> 0
<b>Acquiring Competencies</b> Measurement: “5 Best Activities” worksheet	Each session activity is an original creation of the SI leader	Over 50% of the activities in the portfolio are an original creation of the SI Leader	Over 50% of the activities included in the portfolio are adaptations of previous leaders’ work	
<b>Taking Risks</b> Measurements: 5 randomly selected session plans; reflection prompts	Leader embraces challenge from week to week, and reflects on the outcome of those risks and mistakes in a way that consistently shows genuine introspection resulting in purposeful ideas for engaging students.	Leader embraces challenge in new ways most weeks, and usually reflects on those risks and mistakes in a way that shows genuine introspection.	Leader displays some risk taking, but these risks are small, relatively safe, and do not vary much from week to week	
<b>Solving Problems</b> Measurement: 5 randomly selected session plans	Session plans are consistent with the stated goal, and the leader displays significant critical thinking about why a session was successful/unsuccessful	Session plans are consistent with the stated goal, and the leader displays some critical thinking about why a session was successful/unsuccessful	Session plans are consistent with the stated goal of the session, and reflection on the session displays only surface-level observations	
<b>Embracing Contradictions</b> Measurement: “5 best activities” worksheet	Session activities incorporate a wide range of learning strategies or styles	Session activities vary and employ at least two learning strategies or styles.	Session activities are geared towards similar learners and learning styles, with little variation	
<b>Innovative Thinking</b> Measurement: “5 Pro-Tips” worksheet	Each of the 5 session tips displays the creation of novel and unique knowledge	Over 50% of the 5 Session Tips must show unique or novel qualities	5 Session Tips are useful, but fall short of being novel and unique	
<b>Connecting, Synthesizing, Transforming</b> Measurement: 5 randomly selected session plans; observations	Session plans and activities form a cohesive, thoughtful, collaborative session that displays creativity beyond the standard expectations for leaders	Session plans and activities form a cohesive, thoughtful, collaborative session	Session plans and activities do not form a cohesive, thoughtful, collaborative session	

### Scoring:

<i>Failing</i>	<i>0 - 10</i>	<i>Passing</i>	<i>11-14</i>	<i>Outstanding</i>	<i>15-18</i>
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*Adapted from AAC&U Core Value Rubric*

# CREATIVE THINKING RUBRIC

This rubric will evaluate the following items: 5 randomly selected session plans, a “5 Pro-Tips for My Course” worksheet, a “5 Best Activities for My Course” worksheet, observations, and 2 short reflection prompts administered at the end of the semester.

SI Leader: \_\_\_\_\_ Semester Submitted: \_\_\_\_\_ Course: \_\_\_\_\_

### Selected Session Plans

File Name	Date of Session	Number of Participants	Challenge Question Answered?

### Selected Observations

File Name	Date of Session	Number of Participants

### Score Totals

	Score
Acquiring Competencies	
Taking Risks	
Solving Problems	
Embracing Contradictions	
Innovative Thinking	
Connecting, Synthesizing, and Transforming	
<b>TOTAL</b>	

**Comments:**

Evaluator: \_\_\_\_\_

Date Assessed: \_\_\_\_\_

**FINAL DESIGNATION:** Outstanding  
 Passing  
 Failing

**Observation Form**  
**Supplemental Instruction**  
Student Success at Purdue

SI Leader: \_\_\_\_\_

Observer: \_\_\_\_\_

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

Date: \_\_\_\_\_

Room Location: \_\_\_\_\_

Time of Session: \_\_\_\_\_

Number of Attendees: \_\_\_\_\_

**Positive Feedback**

**Suggestions for Improvement**

**Goals for next session**

- 1.
- 2.
- 3.

## Observation Procedure

The items below describe skills and actions that every SI leader should demonstrate in their session. Please indicate whether the SI leader displays these skills or actions:

**1- Very Rarely 2- Rarely 3- Sometimes  
4- Often 5- Very Often**

Diagram of Interactions:

### Questioning Skills

Redirects questions to others before attempting to answer	1	2	3	4	5	N/A
Uses open-ended questions rather than Yes/No questions	1	2	3	4	5	N/A
Uses wait-time in a way that feels natural and comfortable	1	2	3	4	5	N/A
Checks for understanding beyond asking "Does that make sense?"	1	2	3	4	5	N/A
Asks follow-up questions to draw students deeper thinking	1	2	3	4	5	N/A

### Participant-Centered Practices

Provides explanations only when students are clearly stuck	1	2	3	4	5	N/A
Works among the students instead of lecturing at the board	1	2	3	4	5	N/A
Chooses activities that promote active, peer-to-peer learning	1	2	3	4	5	N/A

### Inclusiveness

Uses or attempts to learn student names	1	2	3	4	5	N/A
Appears relatable, friendly, and approachable	1	2	3	4	5	N/A
Encourages quieter students to get involved with conversation	1	2	3	4	5	N/A
Projects positive non-verbal communication (humor, smiling, etc.)	1	2	3	4	5	N/A
Offers encouragement and positive feedback to students	1	2	3	4	5	N/A
Handles incorrect answers in a way that does not embarrass the student	1	2	3	4	5	N/A

### Overall

Refers to the lecture, notes, or textbooks when appropriate	Yes	No
Uses relatable, real-life, or meaningful examples and problems	Yes	No
Incorporates visuals in a way that enhances the session	Yes	No
Weaves a discussion of study skills into the session	Yes	No
Employs a variety of activities suitable for different learning styles	Yes	No
Provides explanations that are clear and helpful	Yes	No
Adapts well to unexpected situations that arise in the session	Yes	No
Displays creativity in the design and implementation of the session	Yes	No
Uses an opening, main, and closing activity	Yes	No
Begins and ends the session on time	Yes	No
Session atmosphere is welcoming and relaxed	Yes	No
Students do the majority of the work in the session	Yes	No
Students talk with each other more often than the SI leader	Yes	No

# CREATIVE THINKING RUBRIC

## Definition

The capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by innovation and divergent thinking.

	<b>Proficient</b> 3	<b>Emerging</b> 2	<b>Developing</b> 1
<b>Acquiring Competencies</b> <i>This step refers to acquiring strategies and skills within a particular domain.</i>	Reflect: Evaluates creative process and product using domain-appropriate criteria.	Create: Creates an entirely new object, solution or idea that is appropriate to the domain.	Adapt: Successfully adapts an appropriate exemplar to his/her own specifications.
<b>Taking Risks</b> <i>May include personal risk (fear of embarrassment or rejection) or risk of failure in successfully completing assignment, i.e. going beyond original parameters of assignment, introducing new materials and forms, tackling controversial topics, advocating unpopular ideas or solutions.</i>	Actively seeks out and follows through on untested and potentially risky directions or approaches to the assignment in the final product.	Incorporates new directions or approaches to the assignment in the final product.	Considers new directions or approaches without going beyond the guidelines of the assignment.
<b>Solving Problems</b>	Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.
<b>Embracing Contradictions</b>	Integrates alternate, divergent, or contradictory perspectives or ideas fully.	Incorporates alternate, divergent, or contradictory perspectives or ideas in a exploratory way.	Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.
<b>Innovative Thinking</b> <i>Novelty or uniqueness (of idea, claim, question, form, etc.)</i>	Extends a novel or unique idea, question, format, or product to create new knowledge or knowledge that crosses boundaries.	Creates a novel or unique idea, question, format, or product.	Experiments with creating a novel or unique idea, question, format, or product.
<b>Connecting, Synthesizing, Transforming</b>	Transforms ideas or solutions into entirely new forms.	Synthesizes ideas or solutions into a coherent whole.	Connects ideas or solutions in novel ways.

*Adapted from AAC&U Core Value Rubric*



# SI Session Plan

## Student Success at Purdue

SI Leader: Mack Romolecule Course: ME 200  
 Time & Date of Session: 4:30 2/25/14 Location: HICKS B853  
 Number of expected students: 23

Objective (What do the students need to accomplish in this session?)

Students will understand the open system energy balance equation and be able to apply it to examples

Study Skill(s): Understand why certain terms in the equation go to zero, not just that they go to zero

How will you weave this in? We will be discussing each term individually and the assumptions made with each one

How will you arrange the room? (circle, small groups, around a table, etc) Groups of 4-5 at the round tables

What levels of Bloom's Taxonomy does this session use? (Remember, understand, apply, analyze, evaluate, create) Understand and apply

	<b>Content/ Information (include Chapters, page numbers, problem numbers, etc)</b>	<b>How will you go over it? (Activities/ facilitation processes)</b>	<b>Time</b>
Opening Activity	Assumptions that go with the open system energy balance  Beginning of Chapter 4	Students will work individually to write down the assumptions that they normally see in the class. After a couple of minutes, they will work with their table to make a list on the white board at their table. As a class we will then make a list on the front board	10
Main Activities 1.	How to change energy of system	I'll lead a quick discussion on the ways to change energy (these will be heat transfer, work, and mass transfer).	15
2.	The open system energy balance equation  Section 4.4	Pick your victim - I'll one student from each table to come up and write one term of the equation on board. These will not be explained yet!	5
3.	What do the terms mean?  Section 4.4 still	I'll give each table a term of the equation (terms can be repeated if there are too many tables). With that term, the table will define the term and give a couple of examples of how it is used. After all groups are done then they will present their "findings" to the rest of the class.	10

Closing Activity	Vapor Power Plants	Each table will tell me about one component of a vapor power plant as review.	10
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**Reflection: How did the session go? What challenges or problem areas did the students encounter?**

This session was a little bit slow because it was conceptual in nature. The students seem to dislike the conceptual sessions and get more involved in the group work sessions where they are actually working on problems. During the pick your victim activity, students didn't want to get up from their tables so I let them yell their answers to a student who was at the board. As for problem topic areas, there was only one major topic covered in this session and it was covered pretty thoroughly so there weren't too many problems that I could see. However, over the next few sessions I want to cover applications of the open system energy balance so they can see how this equation is used in real life.

**Talk about one way that you challenged yourself this week. (You only need to answer this for one session per week)**

To use the random item from training is my session. My item was a container of spherical Christmas ornaments (COVERED IN GLITTER THAT GOT ON EVERYTHING). I used the ornaments to represent molecules moving in and out of an open system (the container). The students had to tell me what energy interactions were needed to move the ornaments into the system, around the system, and out of the system.

It was interesting trying to use a random object in your session. It definitely makes you think of new ways to explain things. At the point I got my object, I already had my session planned so I had the added challenge of having to go back and change the session plan.

Actual Number of Attendees:     36

# Top 5 Activities for [Course Name]

Detail 5 or more of your most successful, interesting, creative, or effective SI activities. Include the name of the activity, the unit/concept connected to it, a detailed description of the activity (a future SI leader in your area should be able to replicate it), and any accompanying materials (diagrams, worksheets, slides, drawings, etc.)

1

**Name:**  
**Type:**  
**Unit/Concept:**  
**Optimal Group Size:**  
**Style of Learning:**  
**Materials Needed:**

[Step-by-Step Activity Description]

[Comments]

# Top 5 Activities for [Course Name]

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2

**Name:**  
**Type:**  
**Unit/Concept:**  
**Optimal Group Size:**  
**Style of Learning:**  
**Materials Needed:**

[Step-by-Step Activity Description]

[Comments]

# Top 5 Activities for [Course Name]

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3

**Name:**  
**Type:**  
**Unit/Concept:**  
**Optimal Group Size:**  
**Style of Learning:**  
**Materials Needed:**

[Step-by-Step Activity Description]

[Comments]

# Top 5 Activities for [Course Name]

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4

**Name:**

**Type:**

**Unit/Concept:**

**Optimal Group Size:**

**Style of Learning:**

**Materials Needed:**

[Step-by-Step Activity Description]

[Comments]

# Top 5 Activities for [Course Name]

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5

**Name:**

**Type:**

**Unit/Concept:**

**Optimal Group Size:**

**Style of Learning:**

**Materials Needed:**

[Step-by-Step Activity Description]

[Comments]

# Top 5 Activities for ME 200

Detail 5 or more of your most successful, interesting, creative, or effective SI activities. Include the name of the activity, the unit/concept connected to it, a detailed description of the activity (a future SI leader in your area should be able to replicate it), and any accompanying materials (diagrams, worksheets, slides, drawings, etc.)

1

**Name:** Snowball

**Type:** Closing

**Unit/Concept:** Boundary Work (Section 2.2)

**Optimal Group Size:** Any

**Style of Learning:** Kinesthetic, Auditory

**Materials Needed:** Paper and pens

- Have each student get out a scrap piece of paper and write one thing down on it that they still don't understand.
- Students will crumble that piece of paper up and throw it to another area of the room (all the paper being thrown will resemble a snowball fight) where another student will pick it up and unfold it.
- One student will volunteer read the question on the piece of paper they picked up, and the other students will chime in with responses.
- Do this until all the snowball questions have been answered, or until time runs out.

Works really well to get students talking to one another, and they seem to enjoy throwing it around the room. It also provides a completely random way to ask a question, since no one knows who threw what paper, and is a fun way to wrap up.

# Top 5 Activities for CHM 129

Detail 5 or more of your most successful, interesting, creative, or effective SI activities. Include the name of the activity, the unit/concept connected to it, a detailed description of the activity (a future SI leader in your area should be able to replicate it), and any accompanying materials (diagrams, worksheets, slides, drawings, etc.)

2

**Name:** Modeling

**Type:** Main

**Unit/Concept:** Lewis Structures

**Optimal Group Size:** 5-10

**Style of Learning:** Kinesthetic, Visual

**Materials Needed:** Paperclips, Buttons

- Divide students into groups of 3-4, and give each group Paperclips and Buttons. The paperclips will be bonding electrons, and the buttons will represent non-bonding electrons.
- First, do an example. Create a bonding structure of a specific molecule using the paperclips and buttons.
- Then, have the students create Lewis structures within their groups for a series of example molecules, helping them through if they need it. This will allow them to change the structures without constantly erasing and rewriting.

Make sure you keep count of the electrons somehow, either with post-it notes or by some other method.

## Top 5 Activities for MA 158

Detail 5 or more of your most successful, interesting, creative, or effective SI activities. Include the name of the activity, the unit/concept connected to it, a detailed description of the activity (a future SI leader in your area should be able to replicate it), and any accompanying materials (diagrams, worksheets, slides, drawings, etc.)

3

**Name:** Graphing Relay

**Type:** Main

**Unit/Concept:** Transformation of Graphs

**Optimal Group Size:** 8+

**Style of Learning:** Kinesthetic, Visual

**Materials Needed:** Whiteboard, Markers, Candy

- Divide the class into two or three even teams (around 4 students to each team)
- Each student will be given an equation and a graph to draw, but each team member can only draw one change in the graph at a time.
- Once the first team member has drawn their point on the graph, they hand the marker to the next team member until the graph is complete.
- Whatever team finishes first wins candy.

This activity can also be done with one person if necessary; the SI leader just needs to step in and be a part of the relay. Works best in HICKS-type rooms with multiple whiteboards, but can be used at a room with a large chalkboard as well.

# Top 5 Activities for CS 158/9

Detail 5 or more of your most successful, interesting, creative, or effective SI activities. Include the name of the activity, the unit/concept connected to it, a detailed description of the activity (a future SI leader in your area should be able to replicate it), and any accompanying materials (diagrams, worksheets, slides, drawings, etc.)

4

**Name:** Diagram

**Type:** Opening

**Unit/Concept:** Format String

**Optimal Group Size:** 4-6

**Style of Learning:** Visual

**Materials Needed:** Chalkboard, Whiteboard

- Write an example format string on the chalkboard or whiteboard, circling or underlining specific parts that the students need to be able to label.
- Have the students come up the board as a group and label the parts of the format string.
- Make sure the students explain how they know how to label each part.

This activity should take approximately 10 minutes. It's a good opening activity because you can refer to it if they get stuck on practice problems later on.

# Top 5 Activities for MGMT 200

Detail 5 or more of your most successful, interesting, creative, or effective SI activities. Include the name of the activity, the unit/concept connected to it, a detailed description of the activity (a future SI leader in your area should be able to replicate it), and any accompanying materials (diagrams, worksheets, slides, drawings, etc.)

5

**Name:** Tennis Toss

**Type:** Main/Closing

**Unit/Concept:** Any

**Optimal Group Size:** 8+

**Style of Learning:** Auditory, Kinesthetic

**Materials Needed:** 2 tennis balls, list of questions

- On one tennis ball, draw a "Q;" on another tennis ball, draw an "A." Print out a list of questions students should be able to answer at this point in the semester as well.
- Have the students get into a circle and toss the tennis balls around to one another.
- When about 10 seconds have passed, say "Stop."
- Whoever is holding the Q will read the next question from the worksheet. Whoever is holding the A will be responsible for trying to answer the question.
- This activity continues until all questions on the worksheet have been answered.

This is a great activity to do right before an exam or quiz, or even when the lecture hasn't covered enough new material for a full session. Students seem to enjoy the activeness of throwing the tennis balls around and are more willing to help each other out answering questions. Make sure you have at least 15 questions so that everyone in the group gets a chance to participate.