Co-curricular Program Based Learning Outcomes Nomination Form

Criteria to include when nominating a co-curricular program with embedded learning outcomes:
- Program name and Department.
- Participant capacity (is there a set participation limit?)
- Narrative description of which embedded learning outcomes are addressed, and how.
- Description of learning activities to be used to achieve the learning outcomes.
- Description and specific examples of assessment methods used.
- Description of how the assessments will be used to determine if the criteria for the learning outcomes have been met.
- Description of how program experiences and assessment methods will be consistent from year to year and from section to section if multiple sections are used.
- Evidence of support by the department nominating the program.

<table>
<thead>
<tr>
<th>Name of Department/Unit nominating the program</th>
<th>Student Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title of the Program or Activity being nominated</td>
<td>Supplemental Instruction Leaders</td>
</tr>
<tr>
<td>Targeted group of students (or is it open to all Purdue students?)</td>
<td>SI Leaders (approx 25 per semester)</td>
</tr>
<tr>
<td>Participant capacity (students/year)</td>
<td>25-50 per year, depending on number of returning students</td>
</tr>
</tbody>
</table>
| Activity offering frequency | ☒ Fall  
| | ☒ Spring  
| | ☐ Summer |
| Embedded learning outcomes addressed in the nominated program/activity | ☒ Creative Thinking  
| | ☐ Critical Thinking  
| | ☐ Ethical Reasoning  
| | ☐ Global Citizenship and Social Awareness  
| | ☐ Intercultural Knowledge  
| | ☐ Leadership and Teamwork  
| | ☐ Quantitative Reasoning  
| | ☐ Integrative Knowledge  
| | ☐ Written Communication (levels 2 and/or 3)  
| | ☐ Information Literacy (levels 2 and/or 3) |
Please describe the specific assessment methods by which it will be determined if the student has completed the program/activity to a level of success that indicates achievement of this learning outcome. (Remember: It is not the program that achieves the learning outcome, but the student demonstrates achievement of the outcome by successful completion as measured by the assessment.)

| The SI Leaders will submit a portfolio of the semester's materials that include their session plans, a "5 Pro-Tips" worksheet, a "5 Best Activities" worksheet, their staff and peer observations, and their end of the semester reflections. All of these materials will be evaluated by an overall rubric and scored as failing, passing, or outstanding. |
| How will you ensure students receive a consistent degree of engagement with the program/activity and an equitable opportunity to achieve the embedded learning outcome(s) across multiple offerings/sections? |
| Since it is a long term portfolio project, students will be building the materials over many months and incorporating several styles of evaluation and reflection (writing, planning, external observations, etc.) The materials are designed so that they are flexible to accommodate the variety of subjects that leaders instruct (BIOL, MA, MGMT, etc.) |

Please attach documentation for the nominated program/activity that illustrates how the learning outcome(s) and its associated performance criteria (see VALUE rubrics) will be achieved by successful completion of the nominated program/activity.

Submitted by:

Name: Maggie Konich
Department: Student Success

Signature of department head/director recommending that this program/activity be considered for approval as meeting an embedded outcome of the Outcomes-based Core Curriculum

Jared Tippets
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.
SI Session Plan
Student Success at Purdue

SI Leader: ____________________________  Course: ____________________________
Time & Date of Session: _________________  Location: ____________________________
Number of expected students: __________

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

Study Skill(s): __________________________________________________________________________
How will you weave this in? __________________________________________________________________

How will you arrange the room? (circle, small groups, around a table, etc) _______________________
What levels of Bloom’s Taxonomy does this session use? (Remember, understand, apply, analyze, 
evaluate, create) _______________________________________________________________________

<table>
<thead>
<tr>
<th>Content/ Information (include Chapters, page numbers, problem numbers, etc)</th>
<th>How will you go over it? (Activities/ facilitation processes)</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening Activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Main Activities 1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
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<tr>
<td>3.</td>
<td></td>
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<tr>
<td>Closing Activity</td>
<td></td>
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</tbody>
</table>

Reflection: How did the session go? What challenges or problem areas did the students encountered?

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

Actual Number of Attendees: _________

Student Success at Purdue Supplemental Instruction Program, West Lafayette, IN. 2014
Objective (What do the students need to accomplish in this session?)

Students will understand the molecules and steps involved at the various cell division checkpoints. They will analyze different scenarios and determine what caused the errors in the cell cycle.

Study Skill(s): ___Using the key concepts provided by Dr. Bos to guide their studying.

How will you weave this in? I will keep the key concepts up on one of the projectors. As we go through the session, students will mark off which key concepts each activity covered. This will also show them how SI sessions are planned around the material the professor finds most important.

How will you arrange the room? (circle, small groups, around a table, etc) ___around the tables____

What levels of Bloom’s Taxonomy does this session use? (Remember, understand, apply, analyze, evaluate, create) ___remember, understand, apply, analyze____

<table>
<thead>
<tr>
<th>Opening Activity</th>
<th>Content/ Information (include Chapters, page numbers, problem numbers, etc)</th>
<th>How will you go over it? (Activities/ facilitation processes)</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lecture Material from Thurs 1/16 Slides covering G1 and G2 Checkpoints and cell division</td>
<td>Five Minute Quiz. Students will answer the questions using their iClickers, on their own, without their notes.</td>
<td>10</td>
</tr>
<tr>
<td>Main Activities 1.</td>
<td>Chromosome Review Figure drawn during lecture</td>
<td>In pairs, students will make a figure of a chromosome before and after replication. They will provide the functions of the various structures. Given the number of chromosome in a cell, they will determine how many chromosomes are present during each phase of cell division.</td>
<td>10-15</td>
</tr>
<tr>
<td>2.</td>
<td>Cell Division Checkpoints Lecture Slides</td>
<td>In their pairs, students will put the statements related to the G1/S checkpoint in the correct order. Using the cut out molecules I provide, students will work together to work out the steps of the spindle checkpoint.</td>
<td>5-15</td>
</tr>
<tr>
<td>Closing Activity</td>
<td>Spindle Checkpoint</td>
<td>What went wrong?</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>I will provide them with an error and they will decide what went wrong in order to produce the effect.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

**Reflection:** How did the session go? What challenges or problem areas did the students encounter?

They did awful with the opening quiz. On Tuesday, I will include an activity to review this material. However, they did very well with the newer material. After a few attempts, the students were able to run through the steps of the checkpoints very accurately. Because of this, the closing activity went very well.

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

The room in Hicks has a ton of resources that I want to utilize during my sessions. The room has the ability to put the doc cam on one projector and the computer on another. It also has whiteboards on the walls. During this session I put the key concepts up on one projector so we could refer to it throughout the session. I want to start using the whiteboards in upcoming sessions.

Actual Number of Attendees: **10**
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 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 to 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.)

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.)

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.
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

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

Adapted From: University of South Carolina Supplemental Instruction Program, Columbia, SC. 2011.
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.
**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.

<table>
<thead>
<tr>
<th>Acquiring Competencies</th>
<th>Proficient</th>
<th>Emerging</th>
<th>Developing</th>
<th>Lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement: “5 Best Activities” worksheet</td>
<td>Each session activity is an original creation of the SI leader</td>
<td>Over 50% of the activities in the portfolio are original creations of the SI Leader</td>
<td>Over 50% of the activities included in the portfolio are adaptations of previous leaders’ work</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Taking Risks</th>
<th>Proficient</th>
<th>Emerging</th>
<th>Developing</th>
<th>Lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurements: 5 randomly selected session plans; reflection prompts</td>
<td>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.</td>
<td>Leader embraces challenge in new ways most weeks, and usually reflects on those risks and mistakes in a way that shows genuine introspection.</td>
<td>Leader displays some risk taking, but these risks are small, relatively safe, and do not vary much from week to week</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solving Problems</th>
<th>Proficient</th>
<th>Emerging</th>
<th>Developing</th>
<th>Lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement: 5 randomly selected session plans</td>
<td>Session plans are consistent with the stated goal, and the leader displays significant critical thinking about why a session was successful/ unsuccessful</td>
<td>Session plans are consistent with the stated goal, and the leader displays some critical thinking about why a session was successful/ unsuccessful</td>
<td>Session plans are consistent with the stated goal of the session, and reflection on the session displays only surface-level observations</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Embracing Contradictions</th>
<th>Proficient</th>
<th>Emerging</th>
<th>Developing</th>
<th>Lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement: “5 best activities” worksheet</td>
<td>Session activities incorporate a wide range of learning strategies or styles</td>
<td>Session activities vary and employ at least two learning strategies or styles.</td>
<td>Session activities are geared towards similar learners and learning styles, with little variation</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Innovative Thinking</th>
<th>Proficient</th>
<th>Emerging</th>
<th>Developing</th>
<th>Lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement: “5 Pro-Tips” worksheet</td>
<td>Each of the 5 session tips displays the creation of novel and unique knowledge</td>
<td>Over 50% of the 5 Session Tips must show unique or novel qualities</td>
<td>5 Session Tips are useful, but fall short of being novel and unique</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connecting, Synthesizing, Transforming</th>
<th>Proficient</th>
<th>Emerging</th>
<th>Developing</th>
<th>Lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement: 5 randomly selected session plans; observations</td>
<td>Session plans and activities form a cohesive, thoughtful, collaborative session that displays creativity beyond the standard expectations for leaders</td>
<td>Session plans and activities form a cohesive, thoughtful, collaborative session</td>
<td>Session plans and activities do not form a cohesive, thoughtful, collaborative session</td>
<td></td>
</tr>
</tbody>
</table>

**Scoring:**

<table>
<thead>
<tr>
<th></th>
<th>Failing</th>
<th>Passing</th>
<th>Outstanding</th>
<th>15-18</th>
</tr>
</thead>
</table>

*Adapted from AAC&U Core Value Rubric*