A TWELVE-WEEK LESSON OVERVIEW, WITH IN-CLASS ACTIVITIES AND BETWEEN CLASS HOMEWORK ASSIGNMENTS
Week One:  
Introduction to the class syllabus - expectations for the course

1. Syllabus review/introduction to class
   Instructor will review syllabus with students and introduce goals and expectations for the semester. Topics to emphasize include:
   - Expectations and scoring system for homework assignments
   - The two “take home” exams
   - Expectations for in class work
   - Planned topics
   - Class policies
   Instructor may also consider talking about themselves:
   - Their history as a learner; how they came to become an instructor for the course
   - How they work with students and what students may expect from them
   - When and how they will be available for office hours or other support

2. Growth mindset, Fixed mindset and college learning
   Students will be introduced to the topic of growth and fixed mindset and the idea that learning is a process of growth, both physically and in terms of knowledge and ability. The introduction will be brief, as homework will allow students to explore the topics further. Points the instructor can emphasize:
   - Learning is natural. We all do it all the time. Growth Mindset is a perspective grounded in the idea that when we engage in right forms of practice, learning is a process of neurological growth and change that occurs naturally. Anyone can learn, and the real issue involves strategizing how to learn what is assigned and demonstrate learning.
   - College learning is challenging mostly because of structural limitations: time and other constraints lead to circumstances that require you to learn a lot in a compressed period of time, across many topics. Much of the strategy involved in college learning focuses on how to make the most learning happen under these conditions.

3. Goal setting activity
   Students will begin completing a SMART goal setting rubric which will be carefully explained and modeled. Students will be told that they will monitor their progress and revise their goals as needed during the semester, and that the class will do a check-in on progress during the semester.
SMART Goals can be somewhat flexibly defined, as numerous versions of the acronym exist

S - specific
M - measurable, meaningful, motivational
A - attainable, achievable, acceptable, action-oriented
R - realistic, relevant, reasonable, rewarding, results-oriented
T - time-based, time-bound, timely, tangible, trackable

The instructor will ask students to choose one of the related terms for each letter. The will practice together writing up one smart goal in class. Two more will be assigned for homework.

### Assign homework for week two

1. Students will be instructed to read and make notes on the article, *You can grow your brain* and the pdf slides, *How we remember and why we forget.*

2. Students will watch and make notes on the videos *Unleash the Learning Machine* and *Why you need to fail.* Come to class prepared to share your notes and discuss the homework; your notes and ideas will be used in an activity in class.

End week one
Week two:  
How we learn: Learning in College

1. **Review of homework and introduction**

   Explain to the class that today they will be applying what they read and watched for homework to the topic, *learning in college*. To do this they will use the homework documents and their notes.

   Their task will be to put their ideas and questions into the creation of a concept map (Using the information processing model flow chart, make a quick, fun description of how the activity is going to generate learning).

2. **Activity: Learning in College concept maps**

   Working in groups of three to five, students will create concept maps on the core concept, *learning in college*. Examples of concept maps will be shown to illustrate how they are used to organize concepts by relationship and what the benefits to learning are. Their goal in applying the information to the map will be to make connections between the concepts and the college learning and studying context.

   - Show an example of a concept map and explain how it works.
   - Direct students to build their learning in college concept map by applying concepts they were introduced to in the in the *you can grow your brain* article, the *unleash the learning machine* video, and the *how we remember and why we forget* PDF.
   - Groups will briefly discuss their concept maps. Discussion questions will:
     - Focus on applying understanding of the information processing model, presented in the *How we remember and why we forget* slides.
     - Emphasize the concept that learning requires engaging in intentional and systematic thought processes, and making errors.
     - Focus on examples of study activity that generates targeted cognitive activity.

3. **Introducing Time management and Planning**

   The instructor will explain that much of what students will focus on in our learning about learning is grounded in understanding when, where, and how much work should be done, as well as what kind. Time management is not simply a scheduling practice. It involves estimating and planning work and requires an understanding of how one learns. Instructor will explain that while later lessons will bring out important concepts, it is important to start planning and estimating right away in order to improve at it.
Assign Homework for week three

The focus of the homework is on taking a learning-focused approach to planning your work. This homework has two parts to it:

- Read the brief guide to a big-to-small planning process called *Time Management Made Easy*, and the .pdf on *Using Google Calendar*. They will follow the steps in the Calendar document to pull all deadline dates from their syllabi and install them as a calendar.
- Watch the 9 minute *Crash Course* video on *Planning and Organization*, and bring notes to class to be used in class activity.

End week two
Week three:
Planning to make learning happen

1. Review of homework and introduction
   Students will be asked to take out their semester at a glance worksheets. Review the "Big to Small" concept introduced in Time Management Made Easy. Points to emphasize include:
   - *Big-to-Small* is an anti-procrastination planning strategy. Reducing large, unclear projects (e.g., "study for test") to small, specific ones ("do additional practice problems for Unit 7") helps make work seem less vague, less complex, less confusing - which in turn raises the likelihood of engagement.
   - The method also ensures students won’t forget priority items or lose track of objectives.

2. Video: *Can procrastination be a good thing?*
   Students will watch a four minute video together, *Can procrastination be a good thing?* The video emphasizes the fact that many people orient their work time and their motivation according to deadlines and that it is not uncommon to begin working on something as close to a deadline as possible, rather than plan steps estimate how long they will take, and set a deadline for completion, this approach starts with a pre-set deadline and estimates when work will need to begin in order to finish on time.

3. Discussion: *Making big things small through planning*
   Class discussion will follow the video. Students will be asked to discuss the strengths and drawbacks for this model are discussed, with emphasis given to the problems of estimating without planning. In class students will discuss approaches to "planning to avoid procrastination and keep from falling behind."
   Points to draw out and discuss:
   - Procrastination is part of a natural, universal phenomenon that needs to be accounted for in planning
   - A widely asserted planning strategy for reducing the likelihood of procrastination key is to take work that is large, complex, and vague and break it down to portions that are smaller, less complex, and more clearly delineated.
   - Strategies introduced will include making incremental deadlines, specifying chapters covered, and using the syllabus as a regular planning reference.

4. Activity: *Going big to small by setting incremental deadlines*
   As a classroom activity, students will be asked to review their Semester at a Glance (SAG) calendar and the syllabi they drew deadlines from. For each marked deadline on
their calendars, students will plan incremental deadlines and mark those. Again, the concept emphasized will be breaking work down from big and undefined to smaller, better defined steps.

**Assign Homework for week four**

The topic for this week is Making a weekly work plan using SAG to prioritize. For homework, students will complete a weekly study plan using the guide, Time management made easy. Instructor will first model the worksheet used by putting examples of good weekly plans and not-so-good ones. Directions for completing the planner are in the *Time Management Made Easy document*. An introduction to the activity, however, should emphasize:

- Planning is a skill that takes time to develop; it may feel hardest to do at first.
- Planning involves reflection: each weekly plan should begin with a review of how last week’s plan worked, and what would make this week work better.
- The weekly plan method is about Isolating “unstructured time” and scheduling study sessions that make sense for your learning.
- Your weekly plan should make both for the day-to-day studying for all your classes, as well as the more intensive studying for classes that have exams coming up.
- Planning in *detail* is necessary to making big things small and specific.

End week three
1. **Review of homework and introduction**

Review the weekly planning assignment that was done for homework and prepare students for this week’s lesson by making the following connections:

- A goal in making a weekly plan is to make sure that you are thinking in specific terms about what you need to accomplish from day to day.
- The strategy allows you to take something big, like “I have a test two weeks from tomorrow,” and convert it to small tasks, like “finish making notes from chapter 3.”
- Doing this helps ensure you are managing your progress in a way that will help you learn incrementally.
- It will also help you think more in terms of day-to-day studying for each class: using the Study Cycle.
- Today we are going to start a lesson on the first part of the study cycle, which is getting the best information out of a lecture through taking notes effectively.
- We will begin with a note taking and note making exercise. The exercise will give us each a personal baseline work as we learn how to use note making to speed up our studying.

2. **Activity: The why and how of taking and making notes**

Class will discuss purposes and strategies for *note-taking in class*, and *note-making right after class*. Emphasis will be on:

- building a plan of what is to be studied
- Focusing on larger categories and related concepts
- Knowing to not write everything, and that these notes should form an outline that you will need to fill in as you study
- Using “slow” moments to write marginalia: if you don’t need to be putting down any information, use the opportunity to comment to on your notes
- The importance of fixing notes *later, soon after class, using writing*

Students will take notes during a 15 minute lecture with slides on the topic of *The Forgetting Curve and the 24 Hour rule: Why day-to-day studying is so important.*

Once the lecture is finished, class will pause and reflect on what the observed as they worked, e.g., What did they try to do? Why did they approach it as they did?

Students will then work in pairs to review each other’s notes as well as the slides, using the “explain what your notes mean” technique (Talking about what the notes you’ve
written represent, by focusing on recalling or reasoning out what is not there. The students work together to clarify meaning).

Students will be encouraged to add anything to their notes that would help them to better explain what they mean. They will be encouraged to reference the slides as well as one another to build a more complete overview.

3. Discussion
A summary discussion will debrief on the value of the note taking and making activities undertaken, emphasizing how much stronger the memories created through such engagement is, and how this will make test preparation easier down the road. Points to ask about:

- What was hard about making the notes during the lecture?
- How did you approach the work (e.g., did you copy the slides? Did you write down what the professor was saying?)
- Compare the notetaking you just did to how you take notes in another class. What makes this easier or more difficult?
- When you did the follow-up work with classmates and the reading, was it useful to developing a more informative set of notes? Cite example of how stronger memories were created through engagement.

Assign homework for week five
In a class of their choosing, students will practice making an effort to stay focused and take notes for the entire period. They will then report on what occurred.

Students will be given a list of tips on focusing and notetaking in class and watch a five minute video by Thomas Frank on note taking techniques. They will reminded not to worry if they aren’t already good at taking notes in class: the goal is actually to notice what helps and what hinders the attention and info gathering process.

Directions will instruct students to:

- Choose a class to take notes in
- Decide on a note-taking approach
- In selected class, attempt to make notes. Be prepared to bring the following into a discussion of what happened:
  - Context: describe how information is presented in class. Note things like whether there are slides, whether the professor writes on the board, sticks to the slides, etc.
  - Challenges: Did you find yourself stopping, or losing focus? Did you feel pressure about missing information? Did you listen well?
  - Students will bring to class a one-page description of what they did
Week five:
From Note taking to Note making

1. Review of Homework, introduction
   Begin by asking students to discuss their experience taking notes in another class. Ask especially what they tried to do, and what they found challenging, and what they are doing to improve.

2. Introduction to Studying by making notes
   Recall how last week the class moved from taking lecture notes to building a more robust and organized set of notes by consulting text and other people.
   Review how the note-making process causes the “Wheel turning” -- the cognitive processing needed to build knowledge.
   Explain that both discussion and text referencing are active learning strategies and explain how people read differently when they are using a text to find information as opposed to using it passively.
   Explain that the homework will include reading from Thomas Franks’ chapter on five note taking methods and selecting a method to try on their own, in a class or in a study session.
   Explain that in class we are going to look at criteria for knowing if our notes are as useful for studying as we can make them.

3. Activity: Discuss the chart “reading vs. reading with making notes”
   Give each student a copy of the chart, and or post a copy on screen.
   Working in groups of three, students discuss the chart and develop an explanation of what they think the chart explains.
   Have students report out until the class has interpreted the chart.
   Points to emphasize:
   - Note making is a learning activity (wheel turning)
   - When studying from notes, students want to continue writing as driver of learning
   - Discussing their notes (i.e. teaching from them) is also good learning activity

4. Activity: Using the COIN Method
   Students will be introduced to the COIN rubric, which provides guidelines for assessment of content, organization, interaction (i.e., critical reflection), and neatness.
Working in small groups, they will analyze several examples of student notes (which will be provided), using the COIN rubric to guide their critique. They will make a report on their analysis using a worksheet provided.

If time allows, one or more samples may be projected on screen. Students can share out on all is.

**Assign homework for week six**

Students will practice note making using a method of their choosing for one of their classes. They will report on their note making in an essay detailing what method they used, why, what the outcomes were, and what their next step is.

End week five
1. **Review of homework and introduction:**

   Revisit COIN method homework

   Begin by showing and discussing the *Notetaking to Study Guide* Graphic, a flowchart illustrating the process of transitioning from taking and making to *studying from* the notes we make.

   Transition to graphic of *common study methods vs. high impact ones*. Discuss:

   - How and why the two most common methods used by students are also considered the two least effective
   - How each of the high impact and moderate impact methods work and why they are so productive for learning
   - The need to think strategically about what methods work best to specific goals.

5. **Activity: Taking a questioning and quizzing approach to studying**

   Students will first practice using the *self-testing* method by reviewing a set of notes they have made for another class and developing two pairs of questions: one pair focusing on “researching what I don’t understand” and another on “Rehearsing what I do understand.”

   Instructor can explain the benefit of organizing one’s questions before researching in textbooks and online resources, and of quizzing oneself at all stages of studying as a means of rehearsing new knowledge and strengthening memory.

6. **Activity: Selecting a study strategy to practice**

   After reviewing the brief article on Low, medium and high utility study techniques, Students will take a few minutes to decide on an advanced study technique that they are going to either try out or build upon in the weeks ahead. They will be asked to write down what method they are going to apply, what course it is for, and why the method is useful.

7. **Discussion: Review rules for upcoming open-book exam and goal revision**

   Class will be reminded that the first open resource essay exam will be administered in class next week and completed as homework for week eight.
Instructor will briefly review directions for taking the test. They can emphasize the fact that while the test is open resource and therefore does not require studying, students should review all class resources in order to remember where content can be found and strengthen their understanding of concepts.

Instructor will also remind class that week seven will include a SMART Goals revision activity. Students will need to bring original goals statements to class, and should reflect on their current progress in preparation.

**Assign homework for week seven**

Remind class that exam will not require advanced study. Students will also complete a practical assignment during the week, applying one of their chosen study strategies to a study session they conduct for another of their classes.

They will:

- Review two short readings focused on specific techniques for studying: two short readings *If you want to learn, stop studying and take a test* and *High, Medium and Low Utility study techniques*
- Apply at least one study activity from a list generated during the previous class (e.g. Self-testing; summary statements: explaining their notes to someone) to their own studying
- Write a brief reflection on what they chose, why they thought it appropriate, what they did, and how it went.

End week six
Week seven
Revisiting and revising goals (and exam)

1. Review homework and introduction
   Class will be reminded that the test will be administered later in the class session, following two brief activities.
   - The first will focus on reviewing homework
   - The second will focus on goal revision

2. Activity: reviewing study strategies application to studying
   Instructor will ask students to debrief in small groups, with one student sharing their results with two others, who in turn will offer advice for taking a next step based on the first students’ analysis of their efforts.
   Students will make notes on advice offered, and use them in planning next steps.

3. Activity: Revisiting smart goals
   Students will be asked to review the SMART goals they developed during the first week of class. Using a rubric provided, they will reflect on:
   - What steps they have taken toward their goals
   - Whether they feel they are making progress toward their goal
   - What challenges they have experienced
   - What adjustments they may wish to make going forward
   Students will be asked to continue to reflect on goals during the week ahead as they review course content and answer several self-reflective exam questions. They will be told to submit a copy of their revision plans by the next class.

4. Activity: Starting the exam
   Instructor will hand out paper copies of exam questions in class.
   - Class will review questions together, allowing students an opportunity to ask clarifying questions.
   - Basic rules and expectations for answering questions and submitting exams will be reviewed.
   - Students may use any remaining time to begin exam.
Assign homework for week eight

Students will be assigned to complete the take home exam and the goal setting revision statement.

End week seven
Week eight:
Planning Test Prep using the Five Day Test Prep Plan

1. Review homework and introduction
   Instructor will introduce “part two” of course by explaining that next two lessons will focus on improving productivity when studying - first by having a solid plan for covering course content, and second by applying methods to improve focus and productivity and reduce distractibility.

2. Discussion: Introducing the five day test prep plan
   Instructor will introduce class to the five day test prep plan - a model for breaking down what needs to be studied into daily units that allow for ongoing review and self-testing in addition to studying new content each day. Instructor will highlight:
   - The fact that five days is arbitrary; it can be more but shouldn’t be less
   - The basic structure which allows for targeted review of prior days content
   - The fact that the plan allows better monitoring of progress
   - The planning of a full review/self testing session

3. Activity: Making a five day plan
   Students will be asked to identify an upcoming exam - ideally, one that is coming up within a week or two. They will begin outlining their five day plan using the model provided and their syllabus. The basic steps will include:
   - Identifying what needs to be covered
   - Breaking content into more-or-less equal portions (students will be encouraged to make a preliminary estimate, but to also review course materials when possible and revise accordingly)
   - Planning study times (Students will be encouraged to schedule these study times into their planners to make sure they know when they will be able to do the work)
   - Adjusting for scheduling issues (e.g. times when 2-3 hours are not available.

Assign Homework for week nine:
For homework, students will revise and carry out their five day plan. Once the cycle is finished, students will write a written reflection evaluating the efficacy of their plan. Since not all students will have the same schedule, this assignment may take an additional week to complete. Students will be expected to turn in both a copy of the plan and the written reflection.
Week nine

Studying more productively: Improving focus and avoiding distraction

1. Review of homework and introduction

Students will be reminded of the two parts of their current homework assignment. Instructor may ask questions and allow for preliminary discussions of how individual five day plans have been going. Any updates on exam grading can be shared at this time as well.

Instructor will introduce this week’s topic, making study sessions more productive by explaining that while planning time and using effective techniques are part of the formula for success, being consistent and focused when studying is another big part.

Instructor can ask class to discuss distractions as a warm up, asking questions such as:

● What are some of the challenges you face when trying to stay focused and avoid distractions when studying?
● What are some of the tactics you already use (e.g. music, location, company, timing)

2. Video and discussion: Strategies for improving focus and avoiding distractions

Students will watch and discuss ten minute Crash Course video, Focus and Concentration, which reviews several strategies for increasing focus and avoiding distraction (external and internal) when studying. Discussion will highlight the following areas for planning:

● Location
● Time (and timing)
● People
● Technology

Discussion will also highlight compulsive distraction behaviors, such as cell phone use, jumping to social media, etc.

3. Activity: Analyzing scenarios on distraction, focus, and optimizing study time

In groups, students will analyse written case scenarios which provide examples of student’s study activities that focus on things that impact their productivity.

● Work groups will analyze cases for issues with things like study location, time of day, and other external distractors.
● They will also focus on internal distraction issues, including unhelpful thoughts and compulsive or habitual behaviors (like jumping to social media as a form of distraction/stress relief).
Ultimately, student groups will develop advice for each case.

4. Discussion

Debriefing and discussing scenarios will be used to help highlight:

- External and internal sources of distraction
- The relationship between stress and distraction behaviors
- Information about what promotes or hinders one’s ability to stay focused
- Strategies for improving focus over time
- Changing bad habits over time

In particular, students will be encouraged to view this work in light of earlier lessons on growth and neuroplasticity, recognizing that they must change habits slowly over time.

Assign homework for week ten

For homework, students will develop and apply their own anti-distraction study plan to studying they do for another class. They will be asked to:

- Decide on two or three issues they would like to address (e.g., Staying on task longer; blocking out aural or visual distractions, avoiding notifications and pop up distractions)
- Plan how they will address the issues
- Study and monitor their efforts
- Write and submit a reflection analyzing how it went and indicating their planned next steps

End week nine
1. Review of homework and introduction

Instructor will ask students to discuss their anti-distraction study attempts by asking students to describe the strategies they tried and what they noticed.

Focus will be on whether strategies were useful in improving time on task and on how productive the learning may be.

Instructor will then explain that today we will be working on other strategies for making sure that they arrive at a test as prepared as possible to be successful.

2. Discussion: Bloom’s taxonomy and the Goldilocks example

Instructor will discuss Bloom’s revised taxonomy, focusing on the way in which the taxonomy reflects the kinds of learning professors expect and how they use the taxonomy as a rubric for developing questions. Points to emphasize:

- Answering higher-order questions usually requires lower-order learning as well; lower order questions are not necessary.
- When self-testing, it is important to consider what kind of questions students will be asked on an exam. Study activity should prepare them for thinking at the right level.
- Remind students of the relationship between study practice and what is expected on test performance: Students must “practice the performance,” giving their brains plenty of exercise at the types of cognitive activity a test requires (e.g., preparing for a math exam by studying past problems rather than solving new ones.)

Instructor will show Goldilocks Example, a rubric showing questions at different levels of Bloom’s taxonomy using Goldilocks as the content.

3. Activity: generating higher-order questions

Working together in groups, students will read prepared content provided on a handout. They will be asked to generate one question of each type.

Students will then combine questions, first within the group, then on a whiteboard as a whole class.

In reviewing the questions, instructor should emphasize the following:

- Predicting questions leads to practicing the right kind of thinking when studying.
- Students need to match their study activity to their expected test performance.
- Students should ask professors for insight - not into “what’s on the test” but on what kinds of questions they will be asked to answer.
- When students take tests, they can review the exam questions with their instructor to learn more about what was expected of them.
Assign homework for week eleven

For week eleven, students will be asked to do a small, individual research assignment. The topic of the research will be: *Strategies for avoiding or minimizing test anxiety.*

- Students will be asked to identify two useful online resources - either text based or video -- that address the issue of minimizing test anxiety and maximizing performance.
- For both resources, they will write up the key points they learned about, including techniques to try. These techniques will be shared in class.

End week ten
Week eleven:
Optimizing your test taking performance

1. Review of homework and introduction
   Instructor will explain that students are going to share strategies from their research in groups, and create a class list of strategies for reducing test anxiety

2. Activity: Minimizing test anxiety
   Students will be asked to combine what they have learned by creating a template for addressing issues of stress, anxiety, and overall wellness, focusing on the following
   - Regular, everyday practices
   - Practices for leading up to exam
   - Practices for during exam
   - Practices for mind and body (e.g. exercise)
   - Practices for quieting thoughts (e.g. breathing space, brain dump, self-talk)

   Once groups have made their own lists, they will combine lists with other groups’ on whiteboard or newsprint.

   Class will then review and discuss the items on the lists generated, which will be compiled and shared on sakai

Assign homework for week twelve:
Growing our own knowledge and skills. For homework this week, students will be asked to do another small bit of research. This week, they will explore additional information available online that addresses an area of study skills development that they are interested in learning more about.

   Students will be asked to identify at least two sources of information on their topic, and include in a brief report:
   - The topic they researched and why they chose it
   - What they read or watched
   - What new insights or ideas they learned
   - Whether they saw anything that reinforced what they were learning in class
   - Anything that contradicted or challenged something they learned in class

End week eleven
1. Review of homework and introduction

Instructor will explain that today students will begin by sharing some of their findings. They will then do an individual activity revisiting their goals from the beginning of the semester and using them to chart progress and plan next steps for the weeks and semesters ahead.

2. Activity: sharing new study strategies

In groups students will discuss the research they did and the additional strategies or concepts they felt were meaningful. Groups will develop a list of topics with brief descriptions and resources called for additional learning. Each group will be instructed to share their lists in the commons area of sakai, forming a master list.

3. Activity: revisiting goals

Working from a rubric provided, students will assess their progress for the semester according to the goals they set.

They will evaluate the progress they made toward their goals, then also ------

4. Activity: Administer exam two and wrap class

Class will review exam; instructor will review rules and expectations for submission. Exam questions, rules, scoring, submission guidelines will follow same format as exam one.