I joined a very innovative course on Course era,
Called 'Learning how to learn’ – thank you Professor Terrence and Barbara!
The first week’s reading was wonderful.

**Focused versus diffuse mode** – our brain is beautiful!
Our professors teach us how to use our brain,
At last we have an Instruction Manual – for us to train.
Focused mode is when we the heavy lifting do
It’s like physically lifting weights – we gain ‘muscle’ too.

Focused thinking grows our neural scaffold,
To hang our thinking easily and hold.
Diffuse thinking is needed too,
Our subconscious takes over – in dream state too.
Answers to tough problems pop up in our brain,
When we relax in diffuse mode – how much we gain!
Every day of learning – helps our brains not fade,
In fact each morning we get up with an upgrade!

And it’s all for free – yes it’s true.
The only thing required–daily practice to do.

**Deliberate practice** is a concept – neat,
It helps change abstract concepts into neural structures – concrete.
This type of practice is about focusing on topics tough,
But studying thus for too long – your brain will ‘huff and puff.’
Our neural structure won’t have time to dry
And collapse in a heap – waste of time. Oh my!

Next, we are taught about ‘chunking’,
It’s about grasping key ideas – no joking!

**Working and long–term memory** here come to play
Each helps the other in marvelous ways.
The former is like a black board we are told,
But if we do not concentrate well – it won’t hold!
‘Metabolic vampires’ try to suck our memory away,
But concentration and repletion will make the memories stay.
Daily practice – even for an hour,
Will take our learning far.
Interleaving is a method not only for ‘geeks.’
We practice different approaches to improve in areas weak.

What is a ‘chunk’ you might wonder?
It is two to four ideas woven together.
Compare the chunk to a jigsaw piece – do
Fit the pieces together to get a lovely view.

Don’t despair at the start of a lecture
Chunk by chunk – you’ll see a clearer picture.
Everyone knows focus and concentration are great,
But most of us give up easily – blame our fate.
Concentration is a habit of great demand,
Since we only have 4 slots in working memory at our command.
These slots are needed to grasp our thoughts;
Distractions can really tie us up in knots!

‘Thought vampires’ are distracting thoughts;
Very often they win – and occupy these slots!
In our limited working memory of just 4 slots
Sits the ‘octopus of learning’ – fed by our thoughts!
Its 4 tentacles connect to other parts of our brain
To tie together ideas – in the focused mode lane.
When we are distracted or stressed–the tentacles don’t appear,
The octopus is sleeping – we are out of thinking gear!

So ensure that in focused mode style,
You compress abstract concepts into a zip – file!
The chunks in our zip file will sing in tune
Firing and wiring together – what a boon!
And when we employ spaced practice we have an edge,
This is especially true when learning a new language.
Scattered bits of new words and phrases
Turn into strong memory traces.
‘Transfer’ is another way
To make concepts permanently stay.
You see – my knowledge of English grammar
Helps me teach Russian grammar!
The path to mastery is built little by little,
Our learning foundation gets strong – not brittle.
The best chunks or bricks are used
Which have become ingrained with repetition – well-fused.

We often ‘illusions of learning’ create
When we don’t use learning techniques first-rate.
Mental retrieval of key ideas, please write and state,
Passive reading or listening won’t help before your exam date.
Make a list of 5 to 6 subjects you wish to study;
Plan your next day’s schedule and this will stop worry.
Cramming and mugging – is a farce;
In reaching expertise – wisely use your study hours!

Our light house of knowledge shines bright,
When we use creativity and persistence to get the concept right.
Persistence does not mean passive learning you know,
It means understanding and grasping – you’re in the flow.
Long-term memory is like a storage warehouse
Distributed over a large area – but I have a grouse!
It’s difficult to store ‘chunks’ in this place
If I don’t ‘Review and ‘Recall’ on weekdays!

You see—to gain mastery of a subject new
We must the matter – refresh and ‘re-chew.’
Even if our motivation engine is weak,
We must switch to recall mode week after week.
Recall is a concept great
Where we visit our long-term memory – bring it up-to-date!
We do this by retrieving a ‘chunk’ of long-term memory,
And then sending it to short-term memory.
Here it is refreshed and honed,
Then sent back to long-term memory – well-toned!
The above process is called ‘Reconsolidation’ –
A great way to gain knowledge in any study situation!
Recall keeps the matter firmly fixed
If we often ‘review and recall’ – we can never get ‘mixed’.
Yes, if we don’t practice and repeat
Our warehouse will deplete!

**Visual and spatial skills** come into play,
To grasp abstract concepts in science – our teachers say
Some of us cannot understand math and physics,
We need to develop our spatial ‘muscles’ – not for athletics!
Convert the abstract concept into something you can view.
This will help in grasping the difficulty – try it, do!
An electrical circuit can be converted into pipes with water
So said Mr. Scott in his video lecture!

And to remember difficult names in medicine,
We can create meaningful groups of information.
Here is an **acronym** I got from the internet
I thank Enid and Philip Yim – I am in debt!
“Hi! He Lies Because Boron Can Not Oxide Fluorine.
A great way to store information in our memory bin!
It’s easy to remember the first 8 elements,
In the periodic table – ladies and gents!

H He Li Be Bo C N o – are the initial letters from Hydrogen to Fluorine,
The memory in our brains stays fresh and green.
**‘The Memory Palace’** taught in this course,
Helps retain concepts in our selected location – we open up doors!
We need to associate abstract ideas, even acronyms,
With a well–known location – so that memories don’t dim.
Picture vividly your son in the kitchen – not hall;
**Every Good Boy Deserves Fudge** – and this acronym you’ll recall.
The first letter mnemonic recalls the order of notes;
   The lines in treble clef – it denotes!
Procrastination and memory are closely intertwined,
‘Cause building solid chunks of long term memory takes time.
If there is no motivation to practice, we procrastinate;
Chunks of LT memory with ST memory–don’t cooperate!
Even half an hour devoted to each subject every day,
   Is better than many hours–prior to exam day.

When I first learnt the piano–how difficult it was,
   To combine both hands – I was at a loss.
   Slowly but surely I mastered the knack;
Today I like a ‘zombie’ – can play any track.
   The example above is needed I think,
   To tell everyone that habit is everythin’!
**The 4 parts of habit** are stated in this course –
The cue, the routine, the reward and belief of course.

The cue is the trigger that launches us into ‘zombie mode’;
Don’t react negatively to the cue – you’ll block growth’s road
   The Routine is our study habits good;
We sit down and concentrate – nourishing brain food.
The reward at the end of the session is a feeling of pleasure;
The feeling of triumph is also there and then it’s time for leisure.
   Our belief in our habits comes to us soon,
   When we look at the by-products – a boon!

To avoid **procrastination** do this:
Use the Pomodoro and a time limit fix.
Concentrate on the study **process** please,
   Since **product** will not make you feel at ease.
It’s the product – the end task that causes much pain
   That is why students postpone study hour – all in vain.
The only thing you need to do,
   Is put forth your best effort – be true.
And with the ‘Law of Serendipity’ you will find,
That the end product is within your grasp – a reward divine.
   If you the matter really master
   You can effortlessly explain it to another!
But if the matter is not firmly embedded in your brain
   You can’t teach it to another – or creatively explain!
   And in the end I will conclude,
   Not to take a set–back or failure badly, and brood.

   Treat a failure as a learning lesson, do!
   It will then strengthen concepts – precious to you.
   Don’t think some subjects are beyond your scope;
   Use the learning tips here and never call yourself a dope!
   Slow and steady wins the race,
   Even though there may be difficulties on the way – to face.
   This poem is a tribute to learners young and old
   Cheers to our learning power – our stronghold.