

Introduction to Course and Assessment Components

Unit 0

Contents

1. High level Introduction
 - What is this course?
2. The Learning Structure
 - How do I learn?
 - Where are the learning resources?
3. Assessment Components
 - How am I assessed?

1. High Level Introduction to this Course



Business Focus

See various business applications.

Work on exercises and cases with clear business needs.



Concepts Driven

Understand and able to explain the key Analytics* principles and concepts, and their relevance, to business decision makers.



Can Talk and Do

Effective communication.

Able to design and execute proof of concept, in order to show and convince.



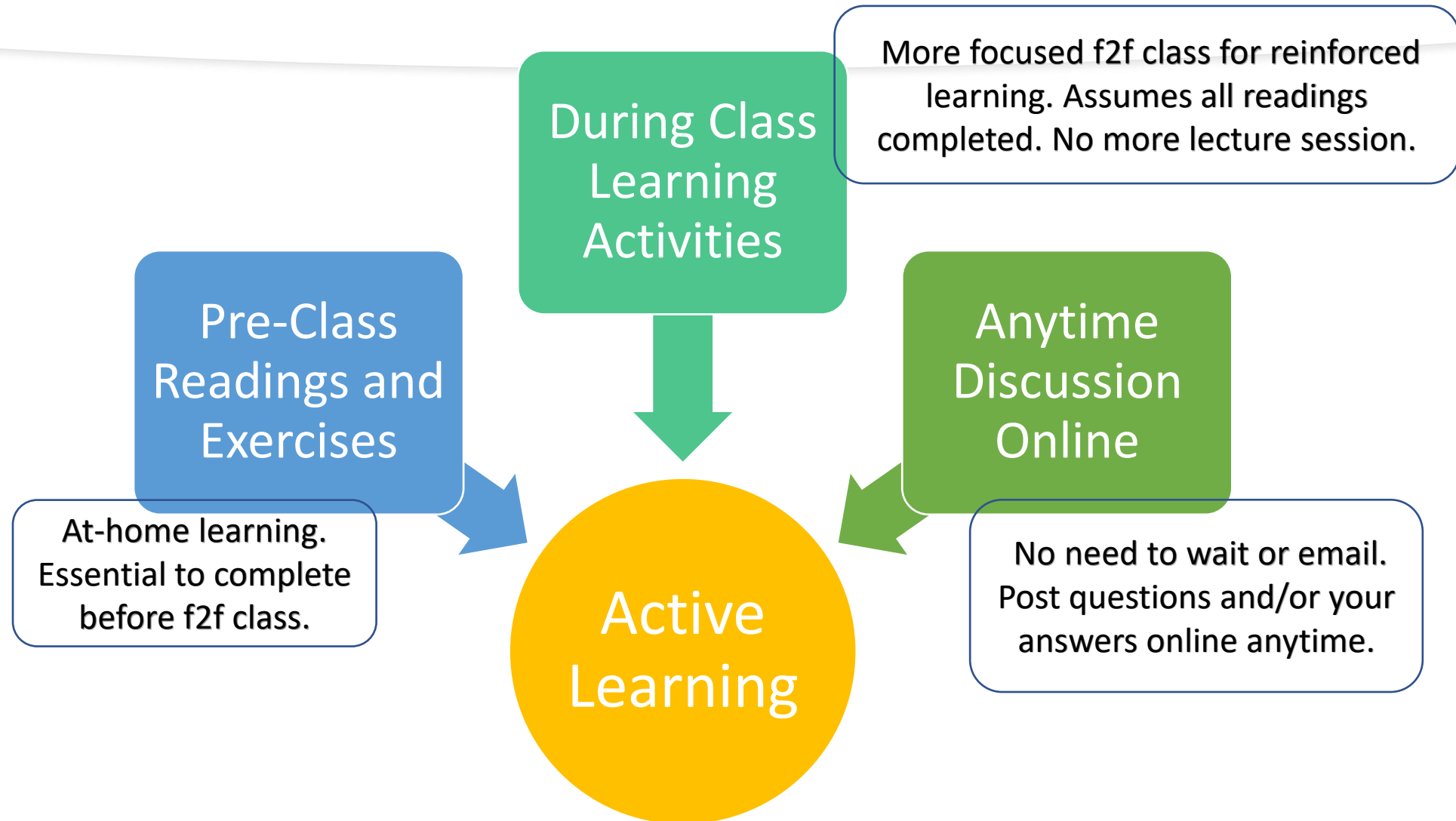
Math, Stats, Scripting

Algebra, Calculus, Probability, Statistics.

Excel, R.

*: Includes Analytics, Data Science, Machine Learning, A.I.

2. The Learning Structure



Pre-Class Readings and Exercises

- Readings to be completed before class of the week.
- Complete the exercises as much as possible before class of the week.

Readings

- Slides PDF and/or Videos
- Textbook Chapter/Sections
- News Articles
- Research paper
- Specific Documents

Exercises

- Data Preparation and Analysis
- Concept Exercise
- Computing Exercise
- Simple R Scripting
- Microsoft Excel

Main Textbook

Chew C.H. (2020). Artificial Intelligence, Analytics and Data Science, Volume 1: Core Concepts and Models. Cengage, August 2020. [AAD1]

- Optional to buy the hardcopy book or softcopy eBook.
- Borrow book or read eBook online from NTU library.
- Covers all topics except eLearning topic.

During Class (online or physical) Learning Activities

- Not a lecture session.
 - Slides and readings can be done at home.
- Reinforce your learning from the Pre-class readings and exercises.
 - Clarifications in class.
 - Discuss your answers to exercises/case study analysis.
 - Extend to more advanced concepts.
 - Extend to more advanced exercises.

Refer to Course Outline PDF for overview, schedule and submission deadlines.

Refer to weekly Checklists for detailed list of weekly readings, exercises and other learning activities to complete.

Face to Face (f2f) class session, regardless of Physical or online, split into 2 smaller classes

- Instead of a 4 hours large group lecture/seminar, students will:
 - Do approx. 2.5 hours of readings and basic exercises **BEFORE** class session
 - Use online Discussion Forum to clarify doubts and ask questions at anytime.
 - You are encouraged to ask questions and answer questions on forum. **Will be graded.**
 - Answering questions will sharpen your thinking and communication.
 - Attend approx. **90 mins** of f2f class session with half the class size.
 - More effective use of class time for deeper learning with much smaller class size.
 - Note: each f2f class session split into two 90 mins sessions.
 - You will **only attend one** of the 90 mins session with your team mates.
 - **Odd numbered Teams attend first session** (1st 90 mins) in the scheduled class.
 - **Even numbered Teams attend second session** (2nd 90 mins) in the scheduled class.
 - Actual time start/end will be announced in NTULearn class site.
 - 30 mins buffer between each 90 mins session. Some student(s) may stay back to ask questions.

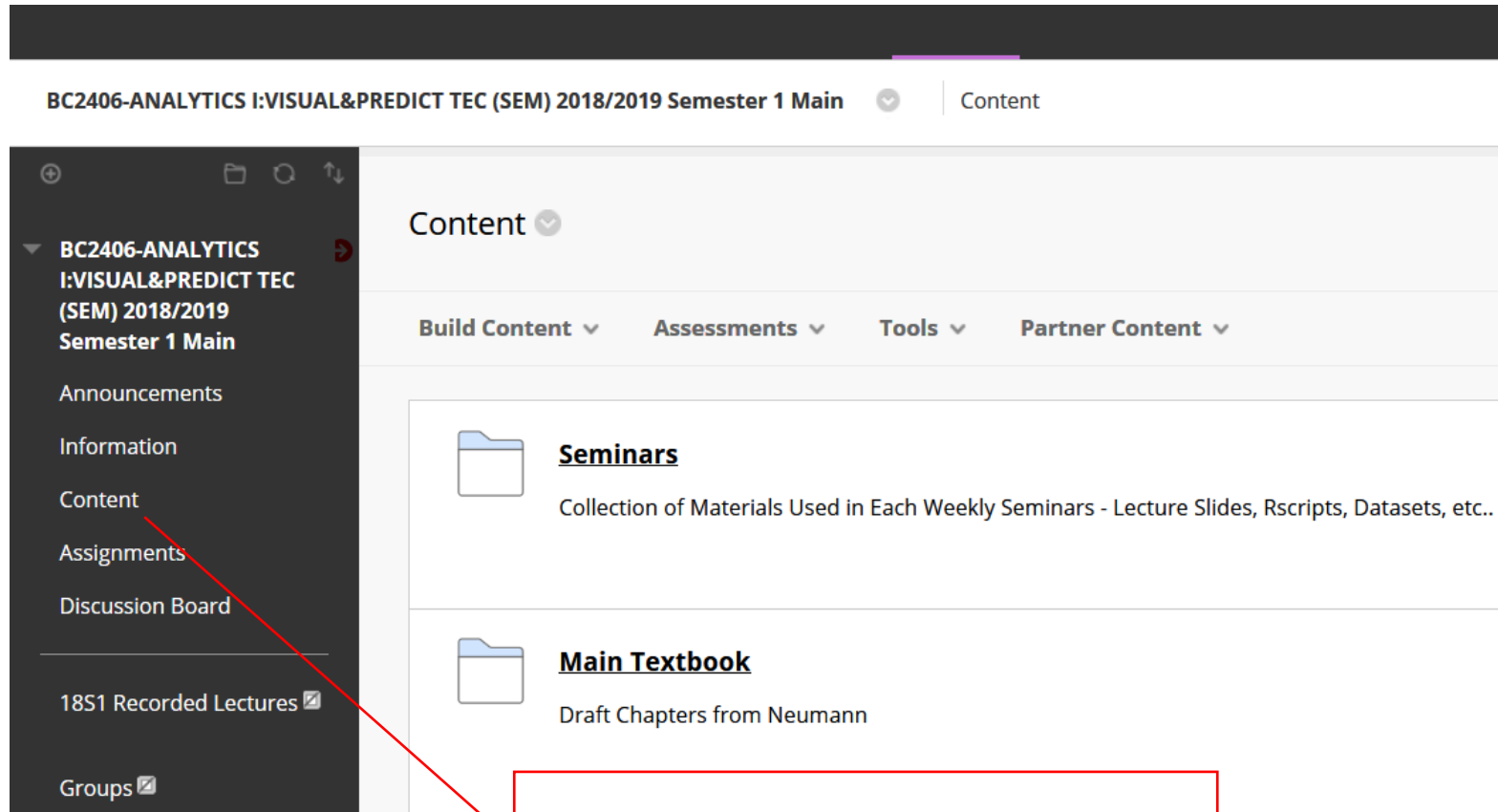
Anytime Discussion Online

- Important to support your learning and unblock learning difficulties as readings and exercises are to be completed at your own time before class session.
- “Test drive” a new online discussion platform as announced in NTULearn.
- Avail on website/android/iOS apps.
- Points awarded for quality of contributions. [See assessment rubrics.]
 - All contributions will be tracked by the platform.
- Points deducted for irrelevant or inappropriate content or comments.
 - Refer to the **Discussion Forum Rules and Code of Conduct** for details.
- Each student must contribute at least 10 times
 - Min requirement for 50% of participation marks.
 - Participation marks account for 15% of overall marks.

Learning Platforms

- NTULearn Main Site (for all enrolled students in all classes):
 - Standard course materials (readings, slides, videos, datasets, exercises, ...etc).
 - Announcements to all students in the same course.
- NTULearn Class Site:
 - Announcements to all students in the same class.
 - Team site for submission of graded team assignment/project.
 - Individual site for submission of graded individual assessment & peer evaluation form.
- f2f online class sessions conducted via Zoom.
 - Check NTULearn class site for zoom link and passcode.
- f2f physical class in NTU.
- Online Discussion Forum:
 - Sign up free from invite email.

NTULearn Main Site for Content and General Announcements



BC2406-ANALYTICS I:VISUAL&PREDICT TEC (SEM) 2018/2019 Semester 1 Main

Content

Content

Build Content Assessments Tools Partner Content

Seminars
Collection of Materials Used in Each Weekly Seminars - Lecture Slides, Rscripts, Datasets, etc..

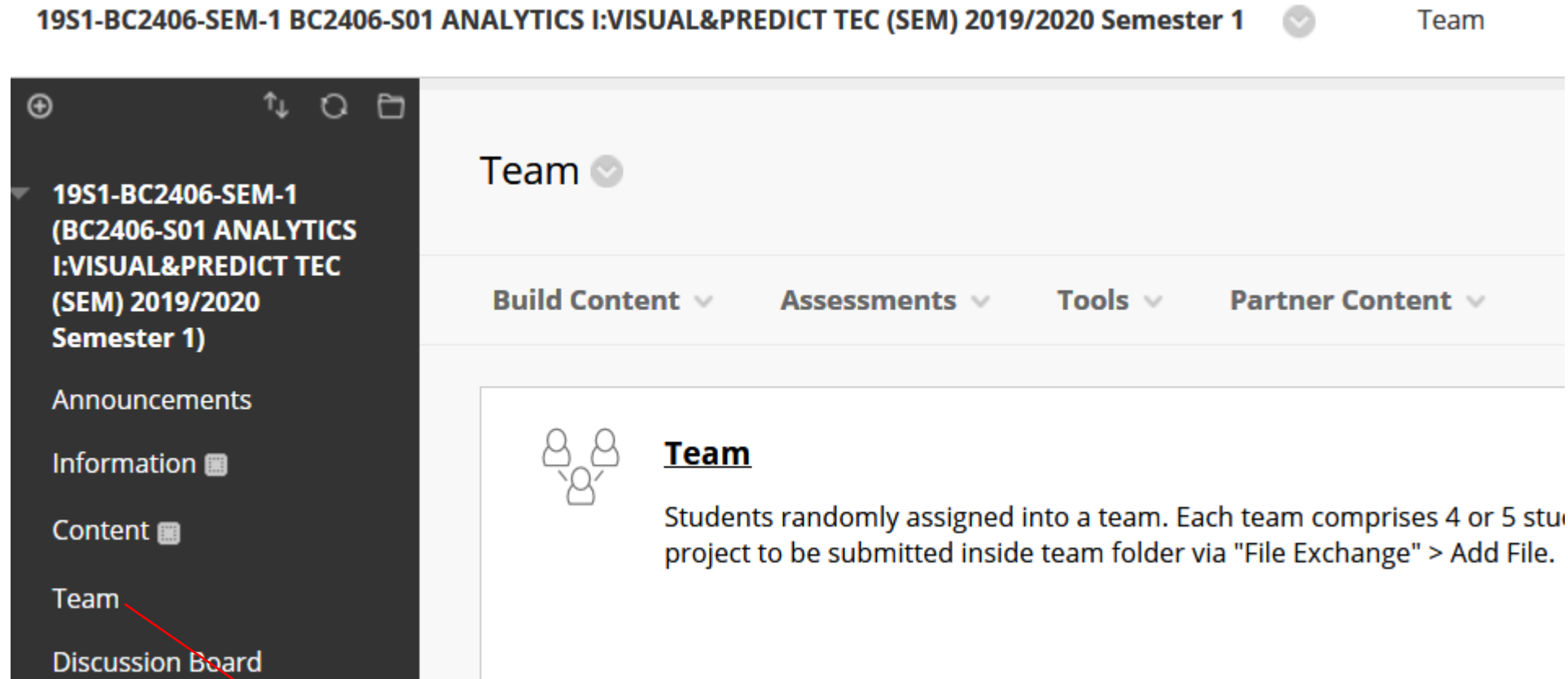
Main Textbook
Draft Chapters from Neumann

Content:

Contains all learning materials for all BC2406 Students.

NTULearn Class Site for Team Submissions and Class Specific Announcements

19S1-BC2406-SEM-1 BC2406-S01 ANALYTICS I:VISUAL&PREDICT TEC (SEM) 2019/2020 Semester 1 Team



Team

Build Content Assessments Tools Partner Content

Team

Students randomly assigned into a team. Each team comprises 4 or 5 stu
project to be submitted inside team folder via "File Exchange" > Add File.

Team:

Contains your team members and team submission. e.g. team activities, team assignment submission, team project submission.

Piazza Online Discussion Forum

The screenshot shows the Piazza web interface. At the top is a blue navigation bar with the 'piazza' logo, a dropdown menu for 'BC 2406', and links for 'Resources', 'Statistics', and 'Manage Class'. On the right of the bar is a user profile for 'Neumann Chew C.H.'. Below the navigation bar is a breadcrumb trail: 'LIVE Q&A' > 'Drafts' > 'Reading list' > 'admin_matters' > 'unit_1_intro' > 'unit_2_fundamental' > 'unit_3_data_explore' > 'unit_4_data_structure' > 'unit_5_data_cleaning' > 'unit_6_linear_reg' > 'unit_7_logistic_reg' > 'unit_8_cart' > 'unit_9'. A left sidebar contains filters for 'Unread', 'Updated', 'Unresolved', and 'Following', along with a 'New Post' button and a search bar. Below these are sections for 'PINNED' and 'TODAY' posts, including 'Skill for Analytics Professional', 'Welcome to Piazza!', and several private messages. The main content area features a blue banner with the text 'To return to your home screen, click 'Q&A' in the top bar.' Below this is a yellow box titled 'New to Piazza with the transition to online classes?' which provides links to get started videos and a schedule for live sessions every Monday-Friday. At the bottom, a 'Class at a Glance' section shows a summary of forum activity: 0 unread posts, 0 unanswered questions, 0 unresolved followups, 8 total posts, 22 total contributions, 0 instructor responses, 0 student responses, and n/a average response time.

Class at a Glance Updated 7 seconds ago. [Reload](#)

✓ no unread posts	8 total posts
✓ no unanswered questions	22 total contributions
✓ no unresolved followups	0 instructors' responses
	0 students' responses
	n/a avg. response time

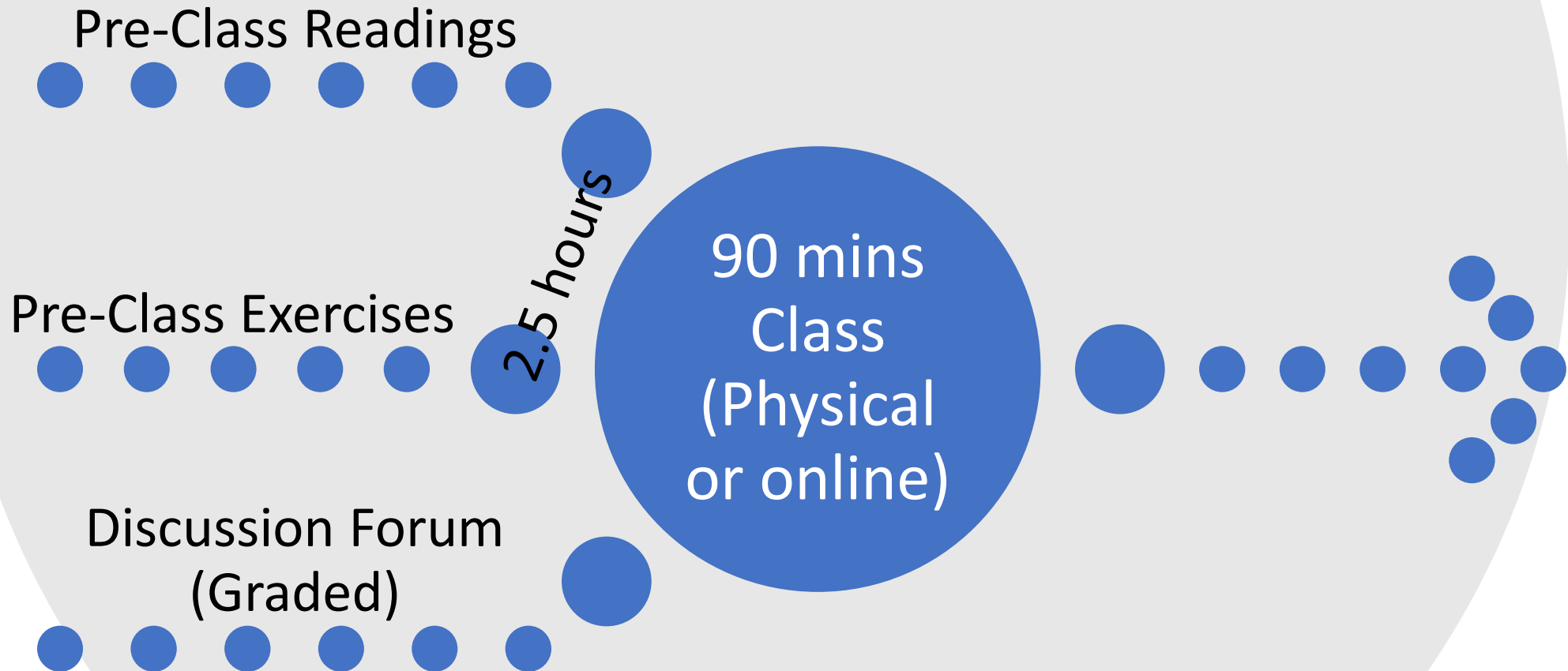
- Sign up free from invite email to your NTU email acct.
 - Inform Course Coordinator if you did not receive invite email.
- Student Questions and Answers will be graded.
- Refer to Discussion Forum Rules and Code of Conduct PDF for details.

BC2406 Instructors

Class	Instructor	Office	Email
1, 4, 6.	Neumann Chew C.H. (Course Coordinator)	S3 B2C 104	neumann.chew@ntu.edu.sg
2, 3, 5.	Hyeokkoo Eric Kwon	S3 B2B 71	eric.kwon@ntu.edu.sg
7	Pinar Darendeli	TBC	sp.darendeli@ntu.edu.sg

For consultation with your instructor, please email to arrange. Due to Covid-19, this might be online.

Learning Journey Per Typical Week





3. Assessment Components

How students are assessed.

Assessment Components

1. Participation and Individual Presentation (30%) [Individual]
2. Assignment (10%) [Team]
3. Project (30%) [Team]
4. Computer Based Assessment (30%) [Individual]

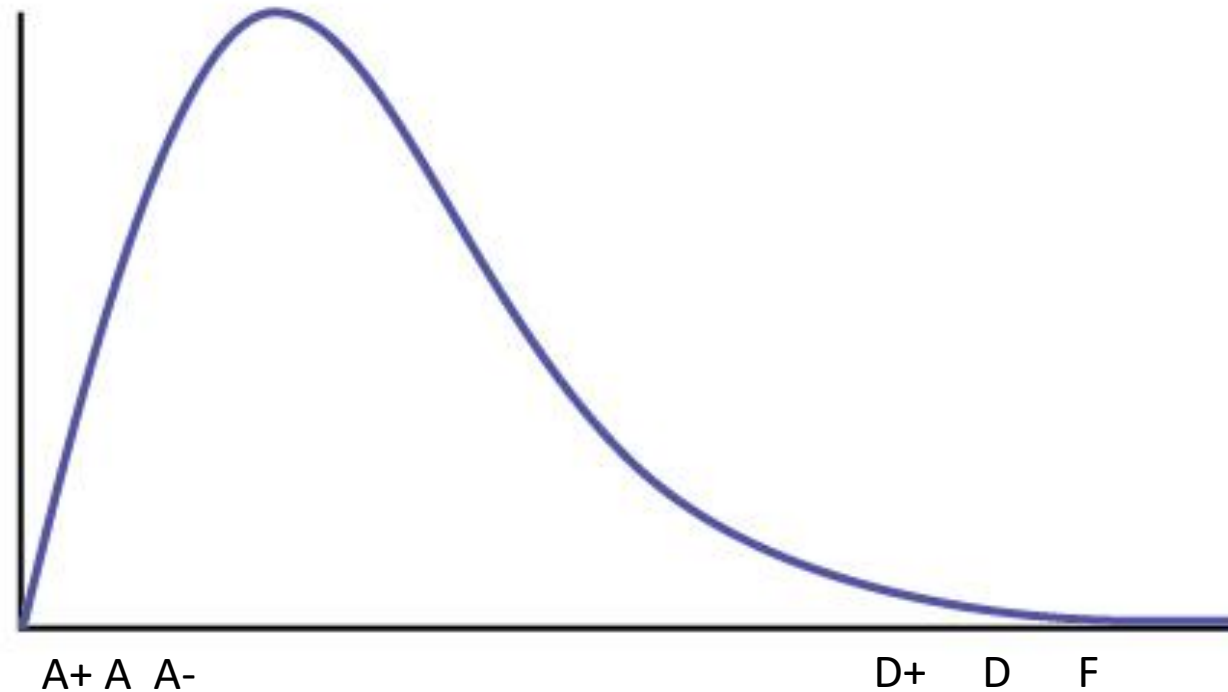
Refer to Assessment Components and Rubrics.pdf for details.

Note: Assignment, Project and CBA are to be submitted into NTULearn > Class site [not main site].

Peer Evaluation for Team Based Work

- Refer to sample Peer Evaluation Form and Rubrics.pdf for details.
- You will rate your team mates on their contribution.
- Their marks may be increased or decreased, depending on the details and evidence.

The Grading Curve



- Hard and Competitive to get A or A+.
- The majority will be B or B+

Note: Above image not drawn to scale. Exact distribution is confidential.

Summary

- What is this course?
 - Business Focus + Analytics* Concepts + Scripting.
 - Front and lead the business on Analytics*.
 - Able to do/lead a successful demo/POC.
- How do I learn?
 - Pre-class readings and exercises.
 - f2f class discussions and exercises.
 - Online discussion forum anytime. [new platform]
 - Refer to Weekly Checklists for what to do before class session each week.
- How am I assessed?
 - 4 assessment components.
 - Refer to assessment components and rubrics.pdf.