**Module Planning Tool**

This tool will guide you through planning module activities, required resources and assessment for building a blended learning module. We recommend you review the baseline principles outlined below and include these in your planning.

**Baseline Principles**

The following lists the minimum elements recommended for the design and delivery of your course.

**Fundamentals of course design**

* Articulate the scope and learning objectives (LOs) for your module. Review as required for adapting to blended delivery.
* Determine assessment mapped to LOs. Set expectations of what is required to succeed in the module early on, including formative and summative assessment.
* Select content and map it to LOs and assessment. Adapt as required, making sure that the essential learning elements are included in the content.
* Establish the learning activities (synchronous and asynchronous) and timetable them for each session and each week. Outline a feedback strategy, including a timeline for providing feedback.
* Consider accessibility and inclusion

**Elements required online** (also check the Blended course construction kit document)

*General*

* Active forum
* Active announcement channel

*First week*

* Introductory document or video with schedule for the semester, LOs, mode of delivery. Set expectations for student engagement, time spent in synchronous and asynchronous sessions as well as self-study time. Create an assessment table with breakdown of formative/summative and marks.
* Timetable of activities and definition of learning activities. What do you mean by a lecture? Seminar? Workshop? Group work? Remember that they may need clarification on how they will happen online.
* Links to external resources for the module. Literature and books accessible online, videos, webpages or other resources.

*Each week*

* Schedule for the week with sessions times and content to cover. State the LOs and how will the student achieve them.
* Schedule at least 2/3 of sessions or hours as synchronous active sessions. There is a list of active learning examples in page 2 of this document. Make sure sessions are recorded and uploaded.
* Create or source a minimum of 30min of AV content covering content material. This could be introductory video or supporting video covering the week’s topic.
* Clearly provide instructions to students on material or activities they need to complete ahead of the class and after class. Make students engage by using formative assessment, discussion forum or homework for discussing during next class
* Post lecture notes or content notes with references and links to reading material.

*Enabling student engagement through sessions and the module*

* Use poll/clicker questions during lectures. Take a pause and ask questions to be answered in the chat facility. Ask directed questions or task students to bring answers and show/discuss in class. Break into small groups and get students to discuss and report back to large group. A full list of activities and options available in QMplus can be found in page 2 of this document.
* Request feedback periodically. Use survey, activity completion or ‘help’ features in QMplus.

*Assessment and Feedback*

* Set assessment and feedback strategy clearly from Week 1.
* Set expectations for student engagement from the start of the course. Explain how engagement will be evaluated through formative and summative assessment.
* Use a variety of assessment options, consider amount of marking and feedback time required. Include some group assessment if relevant. Use as an opportunity to engage with peer assessment and feedback.
* Set a minimum of 50% of assessment marks devoted to ‘open-book – alternative assessment’ style. Remember that more likely end of Semester A assessment will also be ‘alternative assessment’ and not traditional face to face exams.
* Develop an assessment scheme with at least 3 pieces of assessment: if you decide to set 50% of your module as an end of semester ‘alternative assessment’, the rest of evaluation could be made of for example: 50% coursework (30% group + 20% individual contribution); 20% online test, 10% online worksheet, 20% video presentation. Use a combination that reflects the LOs. Remember to estimate the amount of time that will be spent on marking and providing feedback.
* Set a minimum of 2 pieces of formative assessment linked to asynchronous learning. You could even make this part of the summative assessment by rewarding students with a small percentage (5 – 10%) for engaging and demonstrating enough understanding for progressing in the module. Depending on the LOs, this could be for example: unlocking the next level of content by completing a task (reading or watching a video and answering questions; understanding an equation and performing a calculation) or professional skills related tasks (reading and classifying literature, use of software, developing a communication strategy).

**Active Learning Strategies**

This is a list of useful active learning strategies to include in the classroom. There are more ideas in the blended course construction kit document and in the ELU pages.

1. “Think-Pair-Share.” activate students’ prior knowledge and share ideas about content with peers. Display Think-Pair-Share prompts about a concept or topic.
2. Facilitate a whole group discussion. Ask students to elaborate on their thinking by providing explanations, evidence, or clarifications.
3. Quick write
4. Turn and Talk online: students contact each other through private chat and discuss a topic.
5. Polling. Use approved QM clicker style software to ask questions during sessions.
6. Individual plus Group Quizzes. QMplus or in class.
7. Tests/Quizzes with common preconceptions as distractors.
8. Jigsaws as in class group work.
9. Partial Outlines/PPTs provided for lecture
10. Pausing in lecture and including polls, quiz, think-pair-share, wordcloud, fastest finger first.

This list was summarised from <https://teaching.berkeley.edu/active-learning-strategies>

**Module Planning Tool**

|  |  |
| --- | --- |
| Course Code |  |
| Teaching team |  |

|  |  |  |
| --- | --- | --- |
| **Course Learning Outcomes** |  | *Adjustments required* |
|  | **Current** | **Proposed** |
| **Assessment overview** |  |  |
| **Key learning activities** |  |  |
| **Additional information** |  | |

**Module Planning Tool**

Weekly planner. Please insert as many rows as necessary. Note synchronous (S) and asynchronous (A) activities.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week by week content** | **Current content** | **Activity/supporting material** | **Reviewed content** | **Activity/supporting material** |
| **Week 1** |  |  |  |  |
| **Week 2** |  |  |  |  |
| **Week 3** |  |  |  |  |
| **Week 4** |  |  |  |  |
| **Week 5** |  |  |  |  |
| **Week 6** |  |  |  |  |

**Module Planning Tool**

This is an abbreviated example of a reviewed module from semester A 19-20.

|  |  |
| --- | --- |
| Course Code | QXU4006 Materials Science 2 |
| Teaching team | Dr Maria Romero-González |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Course Learning Outcomes** | 1. Relate crystallographic structure to properties of materials 2. Explain processing and manufacturing of materials 3. Link physical processes to properties 4. Explain how by controlling the microstructure, materials can be optimised | | | *Adjustments required*  LOs were adjusted. LOs 1, 3 and 4 are essential for student progress.  LO 2 will be covered in L6 (Manufacturing module) and was adapted to: Outline the main processing techniques for materials. | | |
|  | **Current** | | | | **Proposed** | |
| **Assessment overview** | 20% Coursework – Group work on poster of Ceramics materials  80% Exam – cover all module content | | | | Online worksheet – 1, 2 & 3 10% each  Group coursework 30%  Online test 20%  Final Exam 20% | |
|  | **Current content** | **Activity/supporting material** | **Reviewed content** | | | **Activity/supporting material** |
| **Week by week content** | 1. Introduction to module. Review of knowledge. Microstructure and mechanical properties | Lecture (1h), notes | 1. Introduction to module. Review of knowledge. Introduction to online learning. | | | A. Pre-recorded lecture (20min).  S. Live stream (45min).  A. Quiz of previous knowledge (online).  S. Forum |
|  | 1. Characteristics and processing of metals and polymers | Lecture (2h x 2), notes  Practical (6h). Lab instructions.  *Practical not feasible, needs changing.* | 1. Characteristics of metals and polymers. Essential processing techniques | | | A. Intro video (10min)  S. Live stream (45min x 2)  S. Tutorial (calculations 45min)  A. Online quiz x 2  A. Extended group work (4 weeks, replacement for practical) |
|  | 1. Electrical & Thermal properties | Lecture (1h x 2), notes  Group tutorial (worksheet) 3h x 2 | 1. Electrical properties & Thermal properties | | | A. Youtube video (8min)  S. Live stream (3 x 45min)  S. Paired example work (2 x 45min)  S. Live Q&A session (1 x 45min) |

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