

Course Design and Delivery Guidelines

Course Quality Goals and Sub-Goals

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Background

The **UNSW Medicine Course Design and Delivery Guidelines** are adapted from several documents that set out the minimum standards for designing and delivering blended and online courses at UNSW Sydney, namely:

- the Course Review Matrix and
- the [Guidelines for Design and Delivery of Blended Online Courses](#) (both developed by the UNSW Pro-Vice Chancellor Education Unit),
- the [UNSW Design and Delivery Policy and Procedures](#), and
- the [UNSW Beliefs about Learning](#).

The new element introduced in the Guidelines is the **Backward Design framework** (see figure next page). The framework is based on the concept of constructive alignment (Biggs & Tang, 2012) and curriculum design—that is, the desired learning outcomes are established, then the assessments are constructed to provide measurable evidence that the outcomes have been met (Wiggins & McTighe, 2005).

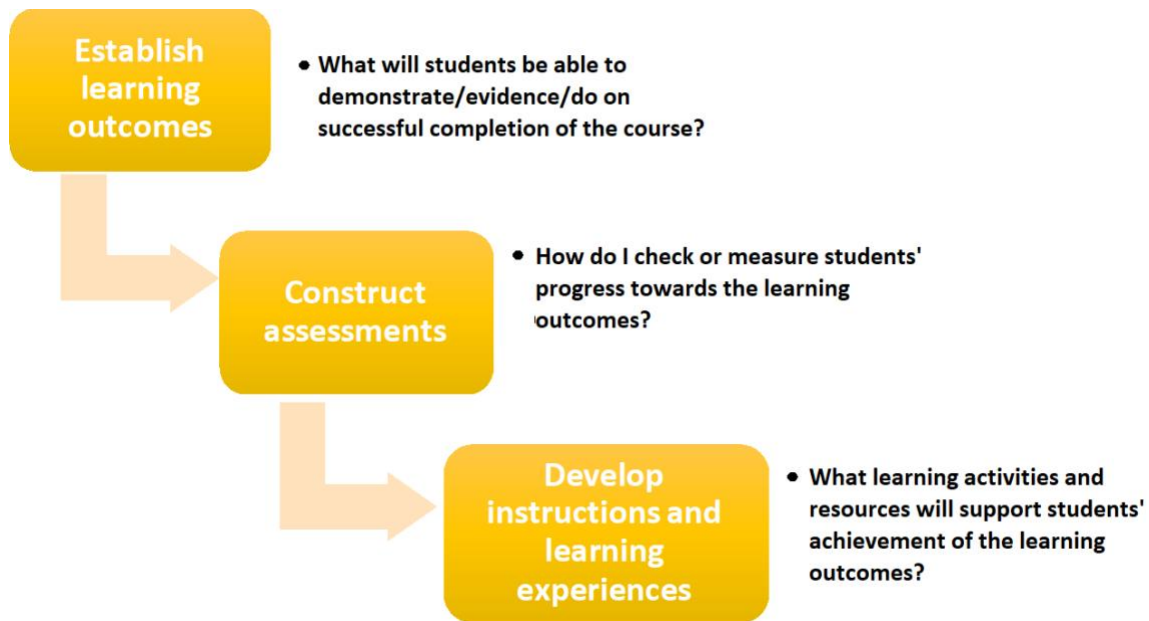


Figure 1. Backward Design principles.

With Backward Design, the designer works 'backward' from the outcomes, creating assessments and developing learning activities and resources to meet those outcomes. Figure adapted from Wiggins, G. & McTighe, J. (2005). *Understanding by design*. Expanded 2nd edition. Alexandria, VA. Association for Supervision and Curriculum Development.

Goal 1 – Course and Moodle site introduction

At the start, students are oriented to the design and structure of the course and Moodle site and informed as to what to expect.

Goal number	Goal description and examples
1a	<p>Students receive clear communication about where all relevant parts of the course are, and where to start.</p> <p>To help familiarise students with the course layout and Moodle site, a teacher might provide:</p> <ul style="list-style-type: none">• a welcome message or video on the homepage – include <i>'getting started'</i> instructions• an <i>'orientation'</i> or <i>'start here'</i> document giving an overview of the course layout and including all course components• a guided tour of the Moodle site in video or PDF form• frequently asked questions, <i>'how do I's?'</i> and rules of engagement• a discussion forum where students can post course-related questions• advice on how to be a successful online student. <p>For blended courses:</p> <ul style="list-style-type: none">• explain what <i>'blended'</i> means• clarify which activities and resources are provided face-to-face, and which online• indicate clearly where and when face-to-face meetings and activities take place.
1b	<p>Students receive clear communication about the aims of the course, and how it is structured.</p> <p>Students are provided with a Course Outline and other documents – for example, course schedule, course map – that tell them:</p> <ul style="list-style-type: none">• the aims of the course• how learning is structured (including a list of learning activity types) to contribute to achieving those aims• how the course is delivered (blended or fully online)• how the blended and online parts of the course are integrated to fulfil the course aims• all assessment activities, their purpose and their due dates• how students and teachers will communicate• academic integrity expectations and• other expectations of students. <p>The Course Outline adheres to school guidelines and uses the UNSW Course Outcome template developed by the PVCE. The teacher walks the students through this outline at the beginning of the course using, for example, an online discussion that is recorded. The Course Outline fully covers the face-to-face and online components, specifying dates, times</p>

	and venues for the face-to-face classes. All expectations regarding student participation are laid out clearly.
1c	<p>Course teacher and student roles in the learning process are clearly explained.</p> <p>The teacher’s role in supporting students’ learning is clearly explained in the introductory section of the course. The expectation that students will actively participate in synchronous sessions is explicitly stated.</p> <p>Regarding the role of students:</p> <ul style="list-style-type: none"> • the level of independence required in online learning is clearly indicated, as is • the importance of maintaining online communication with the teacher and with student peers and • students' responsibility to catch up on any missed sessions. <p>If the course uses guest speakers to facilitate learning, guest speakers’ roles are clearly defined to students and rules of engagement with them are clearly set out.</p>
1d	<p>Students are informed how they can communicate with the teacher, other staff members and fellow students, and given guidance on communicating.</p> <p>Acceptable avenues of communication are listed – e.g. emails, forums, online chats, any assignment that includes interactive elements.</p> <p>Students receive clear communication about the preferred method of asking questions and the expected response time from the teacher.</p> <p>Students are informed how to communicate online (‘netiquette’) and expectations regarding online and classroom communication are clearly laid out. For example:</p> <ul style="list-style-type: none"> • students will proofread their communications for correct spelling and grammar • students will use a professional and respectful tone when communicating with the teacher and other students.
1e	<p>The teacher is introduced online.</p> <p>Using a synchronous or asynchronous (e.g. video) online welcome, the teacher’s presence is established so that students can put a face and a personality to the name. The welcome could include information about the teacher’s:</p> <ul style="list-style-type: none"> • field of expertise • teaching philosophy • experience with online and face-to-face teaching • role/s within the faculty/school • personal interests. <p>The welcome must</p> <ul style="list-style-type: none"> • be professional in content and tone and

	<ul style="list-style-type: none"> • include contact information – at a minimum: <ul style="list-style-type: none"> ○ email address ○ phone number ○ an indication of preferred contact method ○ office and/or virtual hours, preferred consultation hours ○ response time to email and/or phone. <p>The PVCE has created a Course Authority contact block on Moodle, where teachers are encouraged to display their contact details to students.</p>
<p>1f</p>	<p>Student introductions are requested.</p> <p>To help form a course-specific learning community, students are invited to introduce themselves to the teacher and class. Specific means of doing this are indicated (e.g. uploading a video, posting text on a ‘getting to know your classmates’ forum).</p> <p>Students are guided as to how they should introduce themselves. The teacher may provide students with specific questions to answer in their introduction, for example:</p> <ul style="list-style-type: none"> • Why are they taking the course? • What do they expect from the course? • What are their recreational interests?
<p>1g</p>	<p>Instructions on how to use all activities and resources are clear and complete.</p> <p>Instructions for all activities and resources (graded and non-graded) are easy to locate, and they make clear:</p> <ul style="list-style-type: none"> • what students must do • how it is to be done, and • how any required submissions are to be made <p>Each activity is given an appropriate descriptive title that encapsulates the activity, and a brief overview that outlines the main purpose of the activity, including its connection to any relevant learning outcomes.</p> <p>For invigilated exams (if applicable), instructions are provided on how to plan for these.</p>
<p>1h</p>	<p>Required technical and digital literacy skills are clearly stated.</p> <p>The technical and digital literacy skills students must possess to undertake the course are clearly indicated.</p> <p>‘Technical skills’ encompasses such skills as: using the Learning Management System (LMS), downloading and uploading files, installing and using software, sending and answering emails, using Microsoft applications (e.g. Word and Excel).</p>

'Digital information literacy' involves using technology effectively to locate, assess, synthesise and communicate knowledge or information. Examples of digital information literacy skills include:

- evaluating online resources for accuracy of information
- using computer networks to find, store and transmit data
- using online databases to find and compile information
- collaborating with peers to find relevant information, compile and present it for a team project.

Categories of digital literacy are set out in Churchill (2017, 2018)

1i Students are provided with access to technical, accessibility, academic and student support services available at UNSW to help them succeed.

Suggestions for information to include in the course:

Technical support services	Accessibility support services	Academic support services	Student support services
An email and/or phone number to the IT Service Centre and External/TELT Support .	UNSW's accessibility and accommodation information is provided for students with learning disabilities .	Academic support services and resources may include the Library , tutorials or other forms of guidance on citing sources, writing papers, conducting research, and self-assessing questionnaires.	Student support services and resources may include career services, financial aid, information on student or campus life, and counselling.
A link to a technical support website and links to tutorials or 'Getting Started' videos providing instructions on how to use the tools/features of Moodle and other technologies	A link, email address and/or phone number for the Equity, Diversity and Inclusion section of UNSW Human Resources.	A list of available academic support services with information about each service (e.g. phone numbers, website, email address, location) and links included for each.	A list of available student support services and resources with information about each service (e.g. phone numbers, website, email address, location) and links for each.
Where external or third-party tools and resources, such as publisher	A link to the UNSW Disability Inclusion Action Plan .	Links to tutorials or guides to academic writing and citation and	

	resources, are used in the course, and the resources are not supported by UNSW, directions for obtaining assistance are included.		online orientation.		
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Goal 2 – Learning Outcomes (the desired results)

The learning outcomes determine everything else in a course. They describe the knowledge and skills the students will have mastered when they have completed the course.

For assistance writing learning outcomes, see the [UNSW Learning Outcomes Guide](#).

Goal number	Goal description and examples										
2a	<p>The course learning outcomes are measurable* using the chosen means of assessment, and they align with the program learning outcomes.</p> <p>Measurable learning outcomes describe clearly and specifically</p> <ul style="list-style-type: none"> • what students will learn, and be able to do, when they complete the course • how those abilities will be observable and measurable by the teacher, and • how they contribute to students' achieving the broader program learning outcomes. <table border="1" data-bbox="352 824 1377 1339"> <thead> <tr> <th data-bbox="352 824 839 904"><i>Examples of measurable outcomes</i></th> <th data-bbox="839 824 1377 904"><i>Examples of learning outcomes that are difficult or impossible to measure</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="352 904 839 1021">1. apply the principles of Natural Selection to explain human evolution</td> <td data-bbox="839 904 1377 1021">1. understand the theory of Natural Selection</td> </tr> <tr> <td data-bbox="352 1021 839 1102">2. describe the histological features of the stomach</td> <td data-bbox="839 1021 1377 1102">2. know the histological features of the stomach</td> </tr> <tr> <td data-bbox="352 1102 839 1218">3. discuss the roles of regulatory T cells in the control of intestinal inflammation</td> <td data-bbox="839 1102 1377 1218">3. appreciate the roles of regulatory T cells in the control of intestinal inflammation</td> </tr> <tr> <td data-bbox="352 1218 839 1339">4. demonstrate the correct operation of laboratory equipment</td> <td data-bbox="839 1218 1377 1339">4. be familiar with basic laboratory equipment</td> </tr> </tbody> </table> <p>Measurable outcomes describe precisely what students will be able to do and show evidence of, once they <i>understand, know, appreciate</i> and <i>are familiar with</i> a concept. For example, a learning outcome might not be measurable if it states that students will be able to 'understand the pathogenesis of inflammatory bowel diseases', but it can <i>become</i> measurable if the wording is changed to 'describe the pathogenesis of inflammatory bowel diseases'. Teachers can use the Bloom's Taxonomy action verbs to formulate effective and measurable learning outcomes.</p> <p>*Not all learning outcomes are measurable, but they should all be demonstrable or clearly able to be evidenced. Learning outcomes should be phrased so that students can understand exactly what competency they are expected to demonstrate, or what knowledge they must acquire and be able to apply.</p>	<i>Examples of measurable outcomes</i>	<i>Examples of learning outcomes that are difficult or impossible to measure</i>	1. apply the principles of Natural Selection to explain human evolution	1. understand the theory of Natural Selection	2. describe the histological features of the stomach	2. know the histological features of the stomach	3. discuss the roles of regulatory T cells in the control of intestinal inflammation	3. appreciate the roles of regulatory T cells in the control of intestinal inflammation	4. demonstrate the correct operation of laboratory equipment	4. be familiar with basic laboratory equipment
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2b	<p>Module or weekly learning outcomes are measurable and are clearly aligned with course outcomes.</p>										

	<p>State the learning outcomes for each module or week and align them with the course learning outcomes. Module learning outcomes describe the specific knowledge and skills students will gain and be able to apply at different stages of the course.</p> <p><i>An example of aligned course and module outcomes:</i></p> <p><i>Course outcome:</i> At the end of this course, students will be able to discuss the clinical consequences of bacterial infection in the female reproductive tract.</p> <p><i>Module outcome:</i> On completion of this module, students will be able to:</p> <ul style="list-style-type: none"> • list common signs and symptoms of bacterial infection in the ovaries, fallopian tubes, uterus and vaginal canal • summarise the underlying pathological processes that potentiated the development of the signs and symptoms and • describe the outcomes of bacterial infection in the female reproductive tract if left untreated.
2c	<p>All learning outcomes are appropriately located and clearly stated.</p> <p><i>The outcomes are:</i></p> <ul style="list-style-type: none"> • prominently located in the relevant part of the course; that is, course learning outcomes are typically stated in the Course Outline and module outcomes in the corresponding module • concise and written clearly, without jargon, unexplained terminology or ambiguous language • written so that students (including those with English as a second language) can readily understand the outcome and the tasks they must complete to realise it.
2d	<p>The learning outcomes are explicitly aligned to the learning and assessment activities throughout the course.</p> <p>Explicitly relate course activities (both graded and ungraded) to learning outcomes. That way, students can clearly see how completing these activities will help them achieve the learning outcomes. A teacher might show these linkages in a course map, in the Course Outline, and in individual activity/assessment instructions.</p>

Goal 3 – Assessment (measuring a student’s progress towards the learning outcomes)

Assessment is designed and implemented in such a way that teacher and students can monitor and evaluate students’ progress towards achieving the learning outcomes.

***NOTE: The design and implementation of assessment activities must comply with the UNSW [Assessment Design Procedure](#) and the [Assessment Implementation Procedure](#) respectively.**

Goal number	Goal description and examples
3a	<p>The chosen types of assessments align with and measure the learning outcomes.</p> <p>The assessment types* chosen will clearly generate evidence of whether students possess the desired knowledge or skills.</p> <p>For example:</p> <ul style="list-style-type: none">• A multiple-choice quiz will verify that a student can <i>recall, identify</i> or <i>select</i> facts or concepts covered in lectures.• An essay will demonstrate that a student can <i>discuss, evaluate</i> or <i>analyse</i> an argument.• An investigation plan shows how well a student can <i>design, recommend</i> and <i>develop strategies</i> to test and manage patients. <p>Look carefully at assessments to make sure they closely align with outcomes.</p> <ul style="list-style-type: none">• If the outcome is to ‘to evaluate the current treatment options for breast cancer patients’, an assessment that requires a literature review on the cause of breast cancer will not align.• If the outcome is to ‘explain the pathogenesis of Alzheimer’s disease’, an assessment requiring students to describe the histological features of a brain with Alzheimer’s disease will not contribute to the students achieving this outcome. <p>*Assessment types commonly set at UNSW include, but are not limited to, multiple-choice quiz (MCQ), essay, investigation, diagnostic assessment (pre-tests), self- and peer assessment, discussion board participation, interview. Generally formative assessments are conducted earlier in a course when feedback can be responded to by both students and teachers, and summative assessments determining the greatest part of the student’s final mark are scheduled towards the end of the course.</p>
3b	<p>Assessment information is presented at the beginning of the course.</p> <p>In the course introductory material, students are given clear, complete and specific written directions on how to complete each assessment activity (graded and non-graded).</p> <p>Suggestions for what to include:</p> <ul style="list-style-type: none">• due dates and time for each assessment, and information on how late submissions are managed• grades and weighting for each assessment

- aim/s of the assessment and its alignment to the relevant course and module learning outcomes
- structure of the assessment
- the required referencing or citation style
- word limits for written assessments (e.g. 1000 words, plus or minus 10%)
- suggestions as to where to find information to complete the activity
- if available, sample papers or exemplars

For any major assessment activities (those with a weighting of $\geq 30\%$), the teacher may consider holding synchronous Q&A sessions (recorded for those who cannot attend) to walk the students through the activities, clarify expectations and eliminate confusion, and provide further directions based on previous experience.

It is also good practice to embed an assessment-specific forum in the Moodle site so that students can contact the teacher if they have further questions.

3c

Students receive clear communication at the beginning of the course how their grades will be calculated.

In the Course Outline, points, percentages and weights for each part of the grade are clearly stated and their relationships are explained. The policy on late submission is stated, and if grades will be reduced the amount of the reduction is specified. This information (or directions to it in the Course Outline) is also placed in the appropriate section of the Moodle course site.

Grade information might include:

- a list of all activities that contribute to the student's final grade, along with their weightings
- an explanation of how the student's accumulated marks generate the final course letter grade
- details on how late submissions will be graded and how many points will be deducted

The information can be presented in a table – for example:

Assessment items	Points	Contribution to final grade (%)
Literature review	20	20
Research seminar	50	20
Final manuscript	100	40
Reflective piece	20	10
		Total: 100

<p>3d</p>	<p>For each assessment activity, marking criteria are provided at the beginning of the course.</p> <p>In the Course Outline, students are given clear, specific and descriptive marking criteria to evaluate their learning progress. The criteria:</p> <ul style="list-style-type: none"> • clearly indicate the teacher’s expectations and • clarify how a grade for an activity or part of an activity is calculated. <p>The same information is also placed in relevant section/s of the Moodle course site.</p> <p>Marking criteria information might include:</p> <ul style="list-style-type: none"> • marking criteria for all graded work – for example, detailed rubrics or checklists for all major assessments • details of how students will be graded on their participation in discussions, including: <ul style="list-style-type: none"> ○ how many posts are required per week ○ how often students must respond to other students’ posts and comments ○ criteria for evaluating the quality of their posts and comments • point values for each question in tests • for group work: <ul style="list-style-type: none"> ○ the criteria used to evaluate individual and group performance ○ whether a team mark or an individual mark will be awarded.
<p>3e</p>	<p>Assessments are appropriately located and paced, varied and sequenced.</p> <p>Assessments are placed at appropriate intervals throughout the course, and each assignment allows students adequate time to process information and complete the work in a thoughtful manner.</p> <p>The course uses a sufficient variety of assessment types to allow students to fully demonstrate how they can apply their knowledge and analysis skills. The assessments build on previous knowledge and skills gained in the current and prerequisite courses.</p>
<p>3f</p>	<p>Students receive regular feedback throughout the course.</p> <p>The teacher, together with the Learning Management System and student peers, provides ongoing, detailed and prompt feedback on students’ work and general progress. Students receive clear communication about exactly how and when the teacher will provide feedback on all activities. Feedback is not restricted to assessment feedback.</p> <p>Examples of good feedback practice:</p> <ul style="list-style-type: none"> • Early in the course, self-assessment opportunities for students are built in – for example, practice quizzes with automated feedback. • Before they submit an assignment, students are given an opportunity to compare their work to exemplars or sample answers, to encourage them to think about how they might improve their performance. • Students submit a plan or draft of a written assessment for teacher/peer feedback before final submission.

- Teachers use Biggs’s [SOLO taxonomy](#) when setting and assessing formative, qualitative weekly assessments.

Examples of poor feedback practice:

- Students receive points for submitting a draft of an assessment but receive no feedback.
- Students are automatically graded on a quiz, but not told which questions they got wrong or what is the correct answer.
- Feedback tells students what is wrong with their work, but not what they could do to improve it.

Goal 4 – Learning Activities

The learning activities promote students' active engagement with course material, teachers and their peers, and help them achieve the learning outcomes.

Goal number	Goal description and examples									
4a	<p>The learning activities encourage assessment completion and contribute to students achieving the desired learning outcomes.</p> <p>The learning activities incorporate strategies that actively engage the students with the course content, promoting the achievement of the stated learning outcomes.</p> <p>The learning activities are varied to provide students with multiple ways to master the content and develop the required skills. Activities may include simulation exercises, student presentations, virtual laboratories, practice quizzes, case studies, class discussion, written reflections, and role-playing.</p> <p>Examples of alignment and misalignment between activities and outcomes:</p> <table border="1"> <thead> <tr> <th>Learning outcome</th> <th>Aligned activities</th> <th>Misaligned activities</th> </tr> </thead> <tbody> <tr> <td>Students to prepare a literature review on the clinical outcomes of inflammatory bowel diseases</td> <td>Performing a literature search for relevant and current journal articles on the pathogenesis of inflammatory bowel diseases and preparing a draft literature review.</td> <td>Identifying histological features of the large intestine and reading journal articles on irritable bowel syndrome.</td> </tr> <tr> <td>Students to design and implement an exercise and diet regime for diabetes patients</td> <td>Interviewing patients about their exercise and diet needs and reading journal articles on how a low-fat diet may help diabetic patients maintain a healthy weight.</td> <td>Practice writing medication recommendations for diabetic patients and watching virtual laboratory demonstrations on how to diagnose diabetes.</td> </tr> </tbody> </table>	Learning outcome	Aligned activities	Misaligned activities	Students to prepare a literature review on the clinical outcomes of inflammatory bowel diseases	Performing a literature search for relevant and current journal articles on the pathogenesis of inflammatory bowel diseases and preparing a draft literature review.	Identifying histological features of the large intestine and reading journal articles on irritable bowel syndrome.	Students to design and implement an exercise and diet regime for diabetes patients	Interviewing patients about their exercise and diet needs and reading journal articles on how a low-fat diet may help diabetic patients maintain a healthy weight.	Practice writing medication recommendations for diabetic patients and watching virtual laboratory demonstrations on how to diagnose diabetes.
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4b	<p>The learning activities provide opportunities for interaction that support active learning and engagement.</p> <p>The learning activities are designed to promote three types of interactions: student–content, student–student and student–teacher. Opportunities for student–teacher and student–student interactions are particularly crucial for wholly online courses as they help students feel part of a learning community, rather than learning in isolation.</p>									

	<p>The purpose of the interactions is to encourage active learning and engagement. Active learning is when students are engaged by <i>doing</i> something, testing new information and putting it to use in completing a task.</p> <p>Examples of activities for student–teacher interaction: submit a paper for teacher feedback; discuss concepts in a synchronous session using Collaborate Ultra webinar tool or on an asynchronous discussion board</p> <p>Examples of activities for student–content interaction: watch lecture videos and respond to questions embedded in videos; interact with a simulation; maintain a reflective journal using the blog tool</p> <p>Examples of activities for student–student interaction: provide peer support and contribute to the learning community by sharing questions and answers in discussion sessions using a wiki; work on a group presentation in breakout rooms; peer-assess using the Moodle Workshop tool</p>
4c	<p>The teacher makes it clear how and when they will interact and provide feedback to students.</p> <p>Substantive interaction between teacher and students is encouraged during the course. This frequent feedback and interaction help students engage with the course and be part of a learning community. Also, students can better manage their learning activities, as they know when to expect feedback from the teacher.</p> <p>In the introductory course material, students receive clear communication about when they can expect the teacher’s responses to emails and discussion posts, and feedback on their work. For example, teachers might state that they will reply to emails in 24–48 hours, and feedback for assignments and grades will be posted within a week after the due date. If it is necessary to change the interaction plan during the course, the change is clearly communicated to students.</p>
4d	<p>Students are informed of the level of interaction and engagement required in the course.</p> <p>In the Course Outline and in the relevant sections of the Moodle course site, the teacher clearly articulates the requirements for student interaction and engagement. This helps students plan how they will participate in course activities and actively engage with teachers, other students and the course overall.</p> <p>It is also clearly stated what is expected of students when they are responding to teacher- and/or peer-initiated interactions. For example, for students to earn a certain grade for class participation, the student must initiate a discussion thread presenting their original analysis and evaluation in at least 300 words, and reply to at least two of their peers’ posts in responses at least 100 words in length. (See also the UNSW Assessment Policy and the Assessment Toolkit.)</p>

Goal 5 – Learning Resources

The learning resources (includes both instructional materials and course tools/software) facilitate the learning process and support students to achieve the stated learning outcomes.

Goal number	Goal description and examples
5a	<p>The instructional materials encourage assessment completion and contribute to the achievement of the desired learning outcomes.</p> <p>Instructional materials demonstrably provide the information that students need to complete the assessments and achieve the stated course and module learning outcomes. Learning resources may include but are not limited to:</p> <ul style="list-style-type: none">• textbooks• videos• images• diagrams• interactive content (e.g. simulations)• publisher- or teacher-created materials• PowerPoint slides• expert lectures.
5b	<p>The course tools are linked with the learning outcomes.</p> <p>The course tools are the software and applications that facilitate student interaction and engagement. They may be used to deliver content, provide feedback and grade assignments; they may be internal or external to Moodle.</p> <p>Examples of tools include: quiz and assignment tools, plagiarism detection tools (e.g. Turnitin), announcements, social media (e.g. Facebook, Instagram, Twitter), blogs, discussion boards, self- and peer assessment tools (e.g. the Moodle Workshop tool) and video repositories.</p> <p>Students are given clear information and instructions about how the tools support the achievement of the stated learning outcomes. For example:</p> <ul style="list-style-type: none">• The Moodle OU blog tool or an external website or blog tool (e.g. WordPress) can clearly be seen to support a course learning outcome requiring students to compose weekly reflections on their experiences developing teamwork skills.• If a module learning outcome is that students demonstrate performing venipuncture, students using a simulation to demonstrate the steps on a virtual patient will clearly support the achievement of that outcome.
5c	<p>The course tools promote student engagement and active learning.</p> <p>The selected tools help students actively engage in their learning process, facilitating ongoing interactions with the teacher, course content and other students, rather than requiring students to passively absorb information.</p>

	<p><i>Some tool types that promote engagement and active learning:</i></p> <ul style="list-style-type: none"> • tools that facilitate <i>asynchronous</i> interaction with other students, such as Google Docs or wikis • tools that facilitate <i>synchronous</i> interaction with the teacher and other students, such as webinars or Collaborate Ultra. • automated self-assessment exercises, such as practice quizzes • games, simulations and animations that require student input and allow for feedback
5d	<p>The relationship between using learning resources and completing learning activities is clearly explained.</p> <p>Students receive clear communication about how the learning resources provided, and the course’s learning activities, will help them achieve the learning outcomes. A list of essential and supplementary and/or optional resources is provided, appropriately labelled, and each resource’s relevance to learning activities is explained. For the supplementary/optional resources, students are encouraged to use them as their time and interest permits.</p> <p><i>Example explanations:</i></p> <ul style="list-style-type: none"> • information on how the virtual laboratory sessions will be used in collaborative discussion via wiki • a description of some linked YouTube videos, and an explanation of how they are to be used in the learning activities • a course map that directly shows the link between the learning outcomes, activities and resources <p>If students are expected add to the course learning resources through their own research, guidelines are provided for this collaborative building of content. Information on how to identify relevant materials, how to distinguish between essential and supplementary materials and between credible, authoritative and scholarly sources and those that are not is also provided.</p>
5e	<p>References are provided, and permissions for use obtained, for all learning resources.</p> <p>The course models academic integrity by ensuring that sources for all learning resources and quotations are clearly and appropriately identified with references, in a consistent style. This requirement applies to publisher- and teacher-created materials, textbooks, published articles and quotations from those articles, images, videos, audio recordings, websites, tables, graphic materials and other forms of multimedia.</p> <p>Most resources used in the course are open-access or provided under a Creative Commons licence and are appropriated attributed.</p> <p>Licensed electronic journal articles and e-books are linked to the course via the Library's proxy services, not provided as PDFs in the course, and are accessible by all students regardless of their study mode.</p>

	<p>The format of references follows the prescribed style for the course, e.g. Chicago and APA. At a minimum, a reference includes:</p> <ul style="list-style-type: none"> • the author/owner name, • date of publication, • resource title, and • if supplied, the URL or source. <p>Teachers are encouraged to use the course material system Leganto (which is supported by the University) to manage the provision of materials to students. For more information go to the UNSW Library’s Leganto page and contact your Outreach Librarian for training sessions.</p> <p>Teachers must comply with UNSW’s educational statutory licence for the use of copyright materials. For more information go to the UNSW Library’s Copyright page.</p>
5f	<p>The learning resources are current and relevant.</p> <p>The learning resources are current for the discipline they relate to. If older resources are used because they are foundational or for other purposes, the rationale for their use is clearly stated. The learning resources are accessible using current technologies (e.g. they work on mobile phones/tablet devices). Links to the resources are current and have been tested to make sure they work.</p>
5g	<p>It is clear that learning resources are authoritative.</p> <p>The learning resources come from credible, authoritative and scholarly sources – for example, recognised experts and practitioners in the discipline/field, respected organisations or institutions, peer-reviewed journals. They accurately deliver the necessary information. When non-authoritative sources are used (for example, Wikipedia) the less credible nature of these sources is indicated to the students.</p>
5h	<p>An appropriately wide array of learning resources is used to provide students with an engaging and rich learning experience.</p> <p>Students are provided with a range of relevant learning resources. They are also informed as to how to use them effectively to achieve the learning outcomes. These resources may include textbooks and peer-reviewed papers, publisher- and teacher-created resources, websites, audio and video resources. A course using only PDF readings, or one single-author textbook, or only weekly audio lectures, would generally not be considered to present sufficient variety of resources.</p> <p>The following combinations would be more engaging:</p> <ul style="list-style-type: none"> • a series of audio podcasts, a textbook <i>and</i> teacher-created lecture videos • a selection of websites, a series of animations to break down the explanation of a complex concept, and a textbook

- several scholarly papers as readings, a wiki used for group work, and lecture materials

Tools such as social media, videos, discussion forums, blogs, games, animations, simulations and collaboration tools (e.g. Collaborate Ultra, available in Moodle) have been considered and included where they are appropriate to the course material and the learning outcomes.

Goal 6 – Course Evaluation

Several different methods are used to evaluate the course.

According to the [UNSW Integrated Curriculum Framework](#), evaluation should review ‘the effectiveness of courses/programs in developing the graduate capabilities and PLOs; the level of coherence between the courses/program’s educational design and the principles inherent in the outcomes-based Integrated Curriculum Framework; the quality of teaching in the courses/program; and students’ learning outcomes and experiences’.

Goal number	Goal description and examples
6a	<p>Throughout the course, students are given opportunities to provide formal and informal feedback on course delivery.</p> <p>Formal feedback from the myExperience survey is used to revise course delivery in later iterations of the course, and to communicate to the next cohort how the course has been improved, ‘closing the feedback loop’.</p> <p>The teacher may also consider soliciting mid-term student feedback, in order to address any students’ concerns by adjusting teaching strategies before the end of the current term. Another strategy is to embed pre- and post-course reflection questions into the curriculum to capture students’ thoughts on, for example, their expectations of the course and the teacher’s teaching practices.</p> <p>The teacher could also use the following evaluation instruments to capture feedback of the use of technologies, learning activities and teaching:</p> <ol style="list-style-type: none">1. PULTS (<i>Perceived Utility of Learning Technologies Scale</i>) was developed in a collaboration between Medicine and PVCE to gather student feedback on the use of tools/software in undergraduate Medicine teaching.2. PULAS (<i>Perceived Utility of Learning Activities Scale</i>) enables student feedback on one-off learning activities (e.g. a lecture, tutorial or practical class). This is a modified version of the PULTS.3. PETS (<i>Perceived Effectiveness of Teaching Scale</i>) enables student feedback on a teacher’s effectiveness in one or more learning activities.
6b	<p>Throughout the course, data analytics are used to identify successful and problematic learning and teaching practices. Practices are adjusted promptly.</p> <p>Moodle provides a rich source of information about students’ engagement and interaction with the Learning Management System, the course content, teachers and other students. The following reports can be generated:</p> <ul style="list-style-type: none">• a log of activity in a Moodle course, for various periods• a course activity report, showing the number of views for each activity and resource (and any related blog entries)• a participation report for a particular activity• graphs and tables of user activity

	<p>With knowledge of how students have been interacting with a course, the course can be adjusted to suit their viewing habits. Or students can be alerted (or navigation made clearer) to course material they are neglecting, to make sure that they take full advantage of all the online resources provided.</p> <p>Instructions on how to generate these reports are available on the Generate reports in Moodle page.</p>
6c	<p>Students have been engaged as partners in the course review process.</p> <p>When reviewing the course, the teacher has discussed it with course students to gather first-hand and more in-depth feedback regarding which course features and teaching strategies are worth retaining and where adjustment is required. The teacher has asked specific questions about the effectiveness of the course design, the usefulness of the learning activities and the appropriateness of the assessments.</p>

Goal 7 – Navigation and Provision for Student Diversity

The course utilises Universal Design for Learning concepts to facilitate accessibility* and usability*.

**accessibility – all students can access all course content and activities*

**usability – all students can easily navigate the course and interact with course elements*

Goal number	Goal description and examples
7a	<p>The course employs a navigation scheme that is consistent, predictable and efficient throughout the course to facilitate ease of use.</p> <p>Movement through the course is intuitive and logical. Consistent page structure and design orient students throughout the course. Resources and activities are presented in coherent learning segments (e.g. modules, lessons, tutorials). They are logically ordered, and appropriately sequenced (e.g. by time or topic, from simple to complex). All naming conventions are appropriate, logical and consistently applied throughout the course.</p> <p>It is easy for students to move from the course to external links and back again. All links are functional, and minimal scrolling is required on any given page. Navigation options such as links to guide students from one area of the course to another are available on all pages.</p>
7b	<p>The course design minimises distractions to maximise usability.</p> <p>The course resources are clearly organised and presented so that students can easily read and interpret the information.</p> <p>Strategies to minimise distractions include the following:</p> <ul style="list-style-type: none">• Similar content is grouped together, and headings are used to indicate change of topic.• Font, colour coding, graphics and icons are used to serve specific instructional purposes and are consistent throughout the course.• There are minimal editing and proofreading errors in course materials.• Naming conventions are appropriate, logical and consistently applied.• Unnecessary visual elements that dominate the screen space are avoided, e.g. large banners and images that students must always scroll past to reach the learning resources. <p>The course home or landing page contains minimal text, with content and course information organised into resource containers to reduce clutter.</p>
7c	<p>The course provides accessible text and images to meet the needs of diverse students.</p> <p>Course material text and images are accessible to all students. For example:</p> <ul style="list-style-type: none">• All text elements and images are large or enlargeable.• All information conveyed by colour is also available without colour.• A text equivalent is provided for all non-text information to meet the needs of diverse students.

	<ul style="list-style-type: none"> • Where alternative formats are provided, the accuracy of the alternative content is verified.
7d	<p>Multimedia content is available in alternative formats.</p> <p>Multimedia content (video and audio) is accessible to all students. Equivalent textual representation of, for example, lectures is provided. Any video and animations are captioned, or text transcripts are available. Where alternative formats are provided, the accuracy of the alternative content is verified. A student with, for example, hearing or visual impairment should have access to all materials and should be able to complete all the course activities.</p>

References and further reading

General

- This page, 'UNSW Educational Design', contains most documents referenced in these Guidelines: <https://teaching.unsw.edu.au/educational-design>
- UNSW's Guidelines on Learning can be found at: <https://teaching.unsw.edu.au/guidelines>
- UNSW's Beliefs About Learning can be found at: <https://teaching.unsw.edu.au/beliefs>
- This UNSW Learning Outcomes Guide will help you clarify your thinking around creating learning outcomes: <https://teaching.unsw.edu.au/sites/default/files/upload-files/UNSW%20Learning%20Outcomes%20Guide.pdf>
- UNSW Assessment Policy: <https://www.gs.unsw.edu.au/policy/assessmentpolicy.html>

Goal 1 – Course and Moodle site introduction

1. Collins, K., Groff, S., Kupczynski, L., & Mathena, C. (2019). Asynchronous video and the development of instructor social presence and student engagement. *Turkish Online Journal of Distance Education (TOJDE)*, 20(1), 53–70.
2. Shin, S. & Cheon, J. (2019). Assuring Student Satisfaction of Online Education: A Search for Core Course Design Elements. *International Journal on E-Learning*, 18(2), 147–164. Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE).
3. Ahmad, A., & Jeffery, M. (2018). A conceptual framework for efficient design of an online operations management course. *Journal of Educators Online*, 15(3), 112–125.
4. Churchill, D. (2018). Educational access and excellence, in Dash, T. R. & Behera, M. *Educational Access and Excellence: 2015 Association of Southeast Asian Institutions of Higher Learning (ASAIHL) Conference*. Allied Publishers Pvt. Ltd., New Delhi.
5. Geringer, S. K. (2018). Impact of an online orientation course on academic success of online students. (78), ProQuest Information & Learning, US.
6. Koivula, M. (2018). The Impacts of Asynchronous Video Reflection on Social Presence: A Case Study. *In Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education*, 1119–1128.
7. Churchill, D. (2017). *Digital resources for learning*. Springer, Singapore.
8. Lee, J. & Martin, L. (2017). Investigating students' perception of motivating factors of online class discussions. *International Review in Open and Distributed Learning*, 18(5), 149–172.
9. Jankowski, N. A. (2016). *Unpacking relationships: Instruction and student outcomes*. American Council on Education.
10. Huss, J. A., Sela, O., & Eastep, S. (2015). A Case Study of Online Instructors and Their Quest for Greater Interactivity in Their Courses: Overcoming the Distance in Distance Education. *Australian Journal of Teacher Education*, 40(4), 72–86.
11. Taylor, J. M., Dunn, M., & Winn, S. K. (2015). Innovative orientation leads to improved success in online courses. *Online Learning*, 19(4), 112–120.

12. Hendricks, S., & Bailey, S. (2014). What really matters? Technological proficiency in an online course. *Online Journal of Distance Learning Administration*, 17(2).

Goal 2 – Learning Outcomes (the desired results)

1. Biggs J., Tang C. (2012) Aligning the Curriculum to Promote Learning. In: Seel N.M. (eds) *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA
2. Napper V.S. (2012) Alignment of Learning, Teaching, and Assessment. In: Seel N.M. (eds) *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA
3. DiPietro, M. (n.d.). How learning works: 7 research-based principles for smart teaching. Retrieved from https://www.missouristate.edu/assets/fctl/MSU_HLW_Keynote.pdf
4. Shin, S. & Cheon, J. (2019). Assuring Student Satisfaction of Online Education: A Search for Core Course Design Elements. *International Journal on E-Learning*, 18(2), 147–164. Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE).
5. Revised Bloom’s Taxonomy, Iowa State University: <http://www.celt.iastate.edu/teaching/effective-teaching-practices/revised-blooms-taxonomy/>
6. Biggs’ structure of the observed learning outcome (SOLO) taxonomy, University of Queensland: <http://www.uq.edu.au/teach/assessment/docs/biggs-SOLO.pdf>
7. Ahmad, A., & Jeffery, M. (2018). A conceptual framework for efficient design of an online operations management course. *Journal of Educators Online*, 15(3), 112–125.
8. Jankowski, N. A. (2016). Unpacking relationships: Instruction and student outcomes. American Council on Education.
9. Millet, & Weinstein, S. (2015). Grading by objectives: A matrix method for course assessment. *Quality Approaches in Higher Education*, 6(2).
10. Learning Outcomes: <https://teaching.unsw.edu.au/learning-outcomes>
11. UNSW Integrated Curriculum Framework: <https://teaching.unsw.edu.au/integrated-curriculum-framework>

Goal 3 – Assessments (the acceptable evidence that measures the learning outcomes)

1. Shin, S. & Cheon, J. (2019). Assuring Student Satisfaction of Online Education: A Search for Core Course Design Elements. *International Journal on E-Learning*, 18(2), 147–164.
2. Ahmad, A., & Jeffery, M. (2018). A conceptual framework for efficient design of an online operations management course. *Journal of Educators Online*, 15(3), 112–125.
3. McCarthy, J. (2017). Enhancing feedback in higher education: Students’ attitudes towards online and in-class formative assessment feedback model. *Active Learning in Higher Education*, 18(2), 127–141.
4. Jankowski, N. A. (2016). Unpacking relationships: Instruction and student outcomes. American Council on Education.

5. McCarthy, J. (2015). Evaluating written, audio and video feedback in higher education summative assessment tasks. *Issues in Educational Research*, 25(2),153–169.
6. Millet, & Weinstein, S. (2015). Grading by objectives: A matrix method for course assessment. *Quality Approaches in Higher Education*, 6(2).
7. Biggs J., Tang C. (2012) *Aligning the Curriculum to Promote Learning*. In: Seel N.M. (eds) *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA
8. Napper V.S. (2012) *Alignment of Learning, Teaching, and Assessment*. In: Seel N.M. (eds) *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA
9. DiPietro, M. (n.d.). How learning works: 7 research-based principles for smart teaching. Retrieved from https://www.missouristate.edu/assets/fctl/MSU_HLW_Keynote.pdf
10. Solo-Taxonomy YouTube video by Professor Bob Fox, UNSW Sydney: <https://www.youtube.com/watch?v=-Pjk2DP6MHE>
11. Biggs' structure of the observed learning outcome (SOLO) taxonomy, University of Queensland: <http://www.uq.edu.au/teach/assessment/docs/biggs-SOLO.pdf>
12. UNSW Integrated Curriculum Framework: <https://teaching.unsw.edu.au/integrated-curriculum-framework>

Goal 4 – Learning Activities

1. Collins, K., Groff, S., Kupczynski, L., & Mathena, C. (2019). Asynchronous video and the development of instructor social presence and student engagement. *Turkish Online Journal of Distance Education (TOJDE)*, 20(1), 53–70.
2. Napper V.S. (2012) *Alignment of Learning, Teaching, and Assessment*. In: Seel N.M. (eds) *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA
3. DiPietro, M. (n.d.). How learning works: 7 research-based principles for smart teaching. Retrieved from https://www.missouristate.edu/assets/fctl/MSU_HLW_Keynote.pdf
4. Shin, S. & Cheon, J. (2019). Assuring Student Satisfaction of Online Education: A Search for Core Course Design Elements. *International Journal on E-Learning*, 18(2), 147-164. Waynesville, NC USA: Association for the Advancement of Computing in Education (AACE).
5. Ahmad, A., & Jeffery, M. (2018). A conceptual framework for efficient design of an online operations management course. *Journal of Educators Online*, 15(3), 112–125.
6. Koivula, M. (2018). The Impacts of Asynchronous Video Reflection on Social Presence: A Case Study. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1119–1128).
7. Lee, J. & Martin, L. (2017). Investigating students' perception of motivating factors of online class discussions. *International Review in Open and Distributed Learning*, 18(5), 149–172.
8. Jankowski, N. A. (2016). *Unpacking relationships: Instruction and student outcomes*. American Council on Education.
9. Huss, J. A., Sela, O., & Eastep, S. (2015). A Case Study of Online Instructors and Their Quest for Greater Interactivity in Their Courses: Overcoming the Distance in Distance Education. *Australian Journal of Teacher Education*, 40(4), 72–86.

10. Course Design Model – RASE: <https://teaching.unsw.edu.au/course-design-model-rase>

Goal 5 – Learning Resources

1. Collins, K., Groff, S., Kupczynski, L., & Mathena, C. (2019). Asynchronous video and the development of instructor social presence and student engagement. *Turkish Online Journal of Distance Education (TOJDE)*, 20(1), 53–70.
2. Napper V.S. (2012) Alignment of Learning, Teaching, and Assessment. In: Seel N.M. (eds) *Encyclopedia of the Sciences of Learning*. Springer, Boston, MA
3. DiPietro, M. (n.d.). How learning works: 7 research-based principles for smart teaching. Retrieved from https://www.missouristate.edu/assets/fctl/MSU_HLW_Keynote.pdf
4. Course Design Model – RASE: <https://teaching.unsw.edu.au/course-design-model-rase>
5. Ahmad, A., & Jeffery, M. (2018). A conceptual framework for efficient design of an online operations management course. *Journal of Educators Online*, 15(3), 112–125.
6. Koivula, M. (2018). The Impacts of Asynchronous Video Reflection on Social Presence: A Case Study. In *Proceedings of E-Learn: World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 1119–1128).
7. Hendricks, S., & Bailey, S. (2014). What really matters? Technological proficiency in an online course. *Online Journal of Distance Learning Administration*, 17(2).

Standard 6 – Course Evaluation

1. Ahmad, A., & Jeffery, M. (2018). A conceptual framework for efficient design of an online operations management course. *Journal of Educators Online*, 15(3), 112–125.
2. Dinu, L., Auter, P. J., & Arceneaux, P. (2015). Gathering, analyzing, and implementing student feedback to online courses: Is the quality matters rubric the answer? *International Journal of Organisational Design and Engineering*, 1(1), 15–28.
3. Bendus, O. (2005). Evaluation of Online Courses: Integrating Principles of Effective Online Teaching into Practice of Evaluation. In G. Richards (Ed.), *Proceedings of E-Learn 2005--World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education* (pp. 231–233).
4. Course Design Model – RASE: <https://teaching.unsw.edu.au/course-design-model-rase>
5. UNSW Integrated Curriculum Framework: <https://teaching.unsw.edu.au/integrated-curriculum-framework>

Goal 7 – Navigation and Provision of Student Diversity

1. Rice, M.F. (2018). Supporting literacy with accessibility: Virtual school course designers' planning for students with disabilities. *Online Learning*, 22(4), 161–179.

2. Hendricks, S., & Bailey, S. (2014). What really matters? Technological proficiency in an online course. *Online Journal of Distance Learning Administration*, 17(2).