

## V Arts & Social Sciences

### School of Education

# EDST5123: Educational Design for Learning in Higher Education

Term 1, 2019 (Online)

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#### **IMPORTANT:**

For student policies and procedures relating to assessment, attendance and student support, please see website, <a href="https://education.arts.unsw.edu.au/students/courses/course-outlines/">https://education.arts.unsw.edu.au/students/courses/course-outlines/</a>

The School of Education acknowledges the Bedegal people as the traditional custodians of the lands upon which we learn and teach

#### 1. LOCATION

Faculty of Arts and Social Sciences School of Education EDST5123 Educational Design for Learning in Higher Education (6 units of credit) Term 1, 2019

#### 2. STAFF CONTACT DETAILS

Course Coordinator: Professor Slava Kalyuga
Office Location: Goodsell Building 105
Email: s.kalyuga@unsw.edu.au

Phone: 9385 1985 Availability: By appointment

Admin Assistant

Office Location: School of Education, Goodsell Building

Email: education@unusw.edu.au

#### 3. COURSE DETAILS

| Course Name   | Educational Design for Learning in Higher  |  |
|---------------|--|--|
|               | Education  |  |
| Credit Points | 6 units of credit (uoc)  |  |
| Workload      | Includes 150 hours including equivalent of class contact hours, readings, discussions, assessments, and reflection |  |
| Schedule      | http://classutil.unsw.edu.au/EDST_T1.html  |  |

#### SUMMARY OF COURSE

In this course we explore approaches and principles underpinning educational design integrating instructional psychology and educational technology. To allow for breadth in educational design, the course is developed to enable participants to investigate the area by drawing from a range of options, which include teaching strategies, design of learning and assessment tasks, and educational technology. The course will introduce key concepts of human cognition and instructional psychology and discuss their applications to the design of learning tasks in online environments.

THE MAIN WAYS IN WHICH THE COURSE HAS CHANGED SINCE LAST TIME AS A RESULT OF STUDENT FEEDBACK:

The course has been completely restructured to be offered in fully online format, allowing for a greater flexibility whilst promoting student engagement.

#### COURSE LEARNING OUTCOMES (CLOs)

| Outcome |   | Assessment/s |
|---------|---|--------------|
| 1       | Analyse the importance and use of a range of fundamental characteristics of human cognition in learning, teaching, and instructional design in contemporary education from multiple perspective | 1            |
| 2       | Evaluate instructional designs involving digital technologies and online learning activities appropriate for a range of teaching contexts from multiple perspectives                            | 2            |
| 3       | Develop an evidence-supported argument and proposal for designing or redesigning components of a course for use in your own teaching practice   | 3            |

#### PROGRAM LEARNING OUTCOMES

| Standard |   | Assessment/s |
|----------|---|--------------|
| 1        | Disciplinary knowledge and practices Students should have acquired specialised disciplinary knowledge and capabilities related to the pedagogy in higher education, and be able to apply these to their teaching approach and practices across a range of higher education contexts.  | 1,2          |
| 2        | Enquiry-based learning Students should be able to use an analytical scholarly framework to examine their educational practice aimed at improving their effectiveness across these areas.  | 2,3          |
| 3        | Cognitive skills and critical thinking applicable to teaching in higher education Students should be able to:  identify, research and analyse complex issues and problems related to curriculum, assessment and pedagogy and propose appropriate and well justified solutions  draw from and analyse a range of evidence from different perspectives to enhance their practice. | 2            |
| 4        | Communication, adaptive and interactional skills Students should be able to communicate effectively with a range of audiences, and be capable of using independent and collaborative enquiry to work effectively across and within their disciplinary contexts.   | 1, 2,3       |
| 5        | Global outlook Students should be able to review and analyse the impact of international trends and perspectives in higher education as these may impact upon their local contexts and practices.   | 1,2          |

#### 4. RATIONALE FOR THE INCLUSION OF CONTENT AND TEACHING APPROACH

This course is intended to develop competence in evidence-based design of learner activities and learning tasks for academic staff with an emphasis on blended and online learning with the use of educational technology. It explores key principles underpinning instructional design. The course will demonstrate strategies and best practice to help students plan, develop and use instructional materials in online environments. Participants will learn how to manage learner mental load when teaching online. The course focuses on developing participants' understanding of effective, sustainable and transferable pedagogies. Students are introduced to contemporary scholarly literature on instructional psychology and technology-enabled design and asked to consider the appropriate place and use of this knowledge in their own teaching context. The assessments for this course are focused on evaluating students' own existing course and proposing changes in light of the concepts they explore in EDST 5123. The course encourages students to adopt a reflective, interactive and task-based approach to educational design that will provide a foundation in working online.

#### 5. TEACHING STRATEGIES

As this course is conducted in an online format, it provides a flexible learning environment. The course will initially use explicit instruction designed to stimulate students' thinking and encourage participation in online whole group discussions, and also small group discussions to increase capacity for online course design in higher education. Students will engage with the course material through online lectures, activities, and discussion forums. Students will be asked to engage in self-directed reading to expand their knowledge regarding the course topic. Assessments are designed to support and extend course material.

The central focus is on providing a flexible, reflective and personal learning experience for students. The course intends to actively engage students by making their learning experience personally relevant by providing opportunities for them to review their own course design and develop a proposal for making changes that are meaningful and useful for their own teaching practice. Students will have the opportunity to draw upon and share their own relevant experiences and knowledge with peers from a range of disciplines. Students will be asked to relate what they learn to their own existing teaching practices by evaluating and redesigning components of their own course/s.

#### 6. COURSE CONTENT AND STRUCTURE

The course is structured to be completed online through Moodle and will be intensive for seven weeks (Weeks 1-7) from 18 February to 5 April. Each of these weeks will require approximately 3.5 hours per week for online activities (24 contact hours for the course). Time should be used each week to complete the learning activities. Learning activities will involve viewing lectures, videos, reading, writing, researching, posting, and responding to discussion forums. All learning activities and resources may be found in Moodle. The remaining term weeks are for working on the assessment.

| Module                 | Focus Topics   |
|------------------------|--|
| Week 1<br>18 Feb       | Introduction to the course. Main characteristics of human cognition. The importance of aligning online learning with how the human mind works. |
| Week 2<br>25 Feb       | Knowledge structures and the development of expertise. Instructional approaches to managing learner cognitive load.                            |
| Week 3<br>4 March      | Learning by problem solving and its instructional alternatives.  Assessment 1 due on Fri 8 March 2019, 5pm                                     |
| Week 4<br>11 March     | Evaluating cognitive factors in learner activities and online resources  |
| Week 5<br>18 March     | Managing cognitive aspects of multimedia learning  |
| Week 6<br>25 March     | Tailoring tasks to learner cognitive characteristics to engage and motivate students Cognitive aspects of designing assessments for learning.  |
| Week 7<br>1 April      | Instructional design for complex learning tasks. Integrated instructional design model.  Assessment 2 due on Fri 5 April, 5pm                  |
| Weeks 8 -10<br>8 April | Assessment 3 due on Fri 26 April, 5pm  |

#### 7. RESOURCES

#### **Textbook**

There is no set textbook for this course, although the following is most closely related to its content:

Clark, R. C. & Mayer, R. E. (2008). E-learning and the science of instruction. San Francisco, CA: Wiley (available in the book store).

Recommended books (copies of first four books are provided on Moodle):

How People Learn: Brain, Mind, Experience, and School (2000). Washington, DC: National Academy Press <a href="https://www.nap.edu/download/9853#">https://www.nap.edu/download/9853#</a>

Knowing what students know: The science and design of educational assessment. National Research Council's Committee on the Foundations of Assessment. Washington, DC: National Academy Press, 2001. https://www.nap.edu/download/10019#

Benassi, V.A., Overson, C.E. & Hakala, C.M. (Eds.). *Applying science of learning in education: Infusing psychological science into the curriculum*. Retrieved from the Society for the Teaching of Psychology web site: <a href="http://teachpsych.org/ebooks/asle2014/index.php">http://teachpsych.org/ebooks/asle2014/index.php</a>

Sweller, J., Ayres, P. & Kalyuga, S. (2011). Cognitive load theory. New York: Springer.

Clark, R. C., Nguyen, F. & Sweller, J. (2006). Efficiency in learning: Evidence-based guidelines to manage cognitive load. San Francisco, CA: Wiley.

Mayer, R. E. (2008). Learning and Instruction, 2<sup>nd</sup> edition. New Jersey: Pearson Ed. (Chapter 1)

#### Suggested readings for each week are provided on Moodle

The following are some examples of journals focusing on higher education, instructional psychology and/or educational technology:

- Australasian Journal of Educational Technology;
- British Journal of Educational Technology;
- Computers and Education;
- Educational Psychology Review
- Educational Technology Research and Development;
- · Educational Technology and Society;
- Instructional Science
- Review of Educational Research;
- International Journal of Technology Enhanced Learning.

#### 8. ASSESSMENT

| Assessment Task  | Length                 | Weight | Course<br>Learning<br>Outcomes<br>Assessed | Program Learning Outcomes Assessed | Due Date        |
|--|------------------------|--------|--|------------------------------------|-----------------|
| Task 1 Minor Essay: Human cognition and its educational implications | 750-<br>1000<br>words  | 15%    | 1  | 1,4,5                              | March 8 (5 pm)  |
| Task 2 Report (essay): Review and evaluation of instructional design | 1750-<br>2000<br>words | 35%    | 2  | 1,2,3, 4, 5                        | April 5 (5 pm)  |
| Task 3 Report (major essay): Application of design review            | 2500-<br>3000<br>words | 50%    | 3  | 2,4                                | April 26 (5 pm) |

#### **Assessment Details**

#### Assessment Task 1: Minor Essay

(750-1000 words). Human cognition and its educational implications.

Based on the suggested readings in this course, and sources you have found yourself, write your brief reflection on the importance of knowledge of human cognition for teaching and learning. Illustrate your points with specific short example(s) from the area of your teaching interest.

Reference appropriate scholarly literature and frameworks which have either been referred to in the course or which you have found yourself. All references must follow APA 6<sup>th</sup> Edition guidelines.

#### Assessment Task 2: Report (essay):

Review and evaluation of instructional design (1750-2000 words)

Evaluate the design of component of your course involving digital technologies and online learning activities appropriate for a range of teaching contexts.

Based on the principles and guidelines discussed in the course, analyse, review and critique existing instructional design in the area of your teaching interests. Drawing upon your analysis, review and critique as well as concepts explored in this course, and relevant research literature, identify components which may benefit from a redesigned online activity and/or resource.

Reference appropriate scholarly literature and frameworks which have either been referred to in the course or which you have found yourself. All references must follow APA 6<sup>th</sup> Edition guidelines.

#### Assessment Task 3: Report (major essay)

Application of design review (2500-3000 words)

Develop an evidence-supported argument and proposal for designing or redesigning component(s) of a course for use in your own teaching practice

In relation to the components which might benefit from a redesigned online activity and/or resource (identified in Assessment Task 2), propose how you might go about redesigning these components and provide evidence-based arguments for the proposed changes.

Considering the proposed changes, redesign some components of your course that you have identified as needing redesign to enhance students' learning experience. You may choose to redesign any number of activities, assessments, and/or resources that would be beneficial for your particular teaching context. However, a minimum of one resource, activity, or assessment should be included.

Drawing upon concepts explored in the course, scholarly literature, and your own reflections, provide a description of, and an accompanying evidence-based argument, for your revised course components (resources, activities, or assessments) including how they have changed from the original components. Include your justification (based on support from the literature) for selecting the particular techniques or an evidence-based argument for technology not being appropriate for the particular components of your course.

Reference appropriate scholarly literature and frameworks which have either been referred to in the course or which you have found yourself. All references must follow APA 6<sup>th</sup> Edition guidelines.

#### **Submission of Assessment Tasks**

Students are required to follow their lecturer's instructions when submitting their work for assessment. All assessments will be submitted online via Moodle by 5pm. Students are also required to keep all drafts, original data and other evidence of the authenticity of their work for at least one year after examination. If an assessment is mislaid the student is responsible for providing a further copy. Please see the Student Policies and Procedures for information regarding submission, extensions, special consideration, late penalties and hurdle requirements etc.

https://education.arts.unsw.edu.au/students/courses/course-outlines/

#### **Feedback**

| Assessment Task          | Feedback Mechanism     | Feedback Date          |
|--------------------------|------------------------|------------------------|
| 1: Minor Essay           |                        |                        |
| 2: Project (Essay)       | via Turnitin on Moodle | Within 10 Working Days |
| 3: Project (Major Essay) |                        |                        |

## UNSW SCHOOL OF EDUCATION FEEDBACK SHEET EDST5123 EDUCATIONAL DESIGN FOR LEARNING IN HIGHER EDUCATION

Student Name: Student No.:

Assessment Task: Assessment Task 1 (minor essay)

| SPECIFIC CRITERIA   | (-) | <b>—≻</b> (+) |
|---|-----|---------------|
| Understanding of the question or issue and the key concepts involved  |     |               |
| Critical analysis of the concepts explored in the relevant sections of the  |     |               |
| course and their implications to your own teaching practice.  |     |               |
| Depth of analysis and/or critique in response to the task   |     |               |
| Depth of reflective enquiry and analysis  |     |               |
| Familiarity with and relevance of professional and/or research literature used  |     |               |
| to support response   |     |               |
| Appropriate and effective use of relevant literature  |     |               |
| Structure and organisation of response  |     |               |
| <ul> <li>Appropriateness of overall structure of the response to the task.</li> </ul>   |     |               |
| Clarity and coherence of response to the task.  |     |               |
| Presentation of response according to appropriate academic and linguistic   |     |               |
| conventions   |     |               |
| <ul> <li>Clarity, consistency and appropriateness of quoting, citing, paraphrasing,<br/>attributing sources of information</li> </ul> |     |               |
| <ul> <li>Clarity and appropriateness of sentence structure, vocabulary use, spelling,<br/>punctuation and word length</li> </ul>      |     |               |
| GENERAL COMMENTS/RECOMMENDATIONS FOR NEXT TIME  |     |               |
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Lecturer Date
Recommended: /20 (FL PS CR DN HD) Weighting: 15%

NB: The ticks in the various boxes are designed to provide feedback to students; they are not given equal weight in determining the recommended grade. Depending on the nature of the assessment task, lecturers may also contextualize and/or amend these specific criteria. The recommended grade is tentative only, subject to standardisation processes and approval by the School of Education Learning and Teaching Committee.

## FEEDBACK SHEET EDST5123 EDUCATIONAL DESIGN FOR LEARNING IN HIGHER EDUCATION

Student Name: Student No.:

Assessment Task: Assessment Task 2 (essay)

| Understanding of the question or issue and the key concepts involved  • Analysis of a current design of selected instructional materials • Identification of components that require redesign • Explanation of an evaluation strategy.  Depth of analysis and/or critique in response to the tasks • Depth of reflective enquiry and critical analysis from multiple perspectives including your own, those of your colleagues through class discussions, and the literature.  Familiarity with and relevance of professional and/or research literature used to support response • Appropriate and effective use of relevant international scholarly literature and how it relates to your local context.  Structure and organisation of response • Appropriateness of overall structure of the response to the task. • Clarity and coherence of response to the task.  Presentation of response according to appropriate academic and linguistic conventions • Clarity, consistency and appropriateness of conventions for quoting, citing, |  |
|---|--|
| Identification of components that require redesign     Explanation of an evaluation strategy.  Depth of analysis and/or critique in response to the tasks     Depth of reflective enquiry and critical analysis from multiple perspectives including your own, those of your colleagues through class discussions, and the literature.  Familiarity with and relevance of professional and/or research literature used to support response     Appropriate and effective use of relevant international scholarly literature and how it relates to your local context.  Structure and organisation of response     Appropriateness of overall structure of the response to the task.     Clarity and coherence of response to the task.  Presentation of response according to appropriate academic and linguistic conventions   |  |
| Explanation of an evaluation strategy.  Depth of analysis and/or critique in response to the tasks     Depth of reflective enquiry and critical analysis from multiple perspectives including your own, those of your colleagues through class discussions, and the literature.  Familiarity with and relevance of professional and/or research literature used to support response     Appropriate and effective use of relevant international scholarly literature and how it relates to your local context.  Structure and organisation of response     Appropriateness of overall structure of the response to the task.     Clarity and coherence of response to the task.  Presentation of response according to appropriate academic and linguistic conventions  |  |
| Depth of analysis and/or critique in response to the tasks  • Depth of reflective enquiry and critical analysis from multiple perspectives including your own, those of your colleagues through class discussions, and the literature.  Familiarity with and relevance of professional and/or research literature used to support response  • Appropriate and effective use of relevant international scholarly literature and how it relates to your local context.  Structure and organisation of response  • Appropriateness of overall structure of the response to the task.  • Clarity and coherence of response to the task.  Presentation of response according to appropriate academic and linguistic conventions  |  |
| Depth of reflective enquiry and critical analysis from multiple perspectives including your own, those of your colleagues through class discussions, and the literature.  Familiarity with and relevance of professional and/or research literature used to support response     Appropriate and effective use of relevant international scholarly literature and how it relates to your local context.  Structure and organisation of response     Appropriateness of overall structure of the response to the task.     Clarity and coherence of response to the task.  Presentation of response according to appropriate academic and linguistic conventions   |  |
| to support response   |  |
| Appropriate and effective use of relevant international scholarly literature and how it relates to your local context.  Structure and organisation of response     Appropriateness of overall structure of the response to the task.     Clarity and coherence of response to the task.  Presentation of response according to appropriate academic and linguistic conventions  |  |
| and how it relates to your local context.  Structure and organisation of response  Appropriateness of overall structure of the response to the task.  Clarity and coherence of response to the task.  Presentation of response according to appropriate academic and linguistic conventions   |  |
| Structure and organisation of response  |  |
| <ul> <li>Appropriateness of overall structure of the response to the task.</li> <li>Clarity and coherence of response to the task.</li> </ul> Presentation of response according to appropriate academic and linguistic conventions   |  |
| Clarity and coherence of response to the task.  Presentation of response according to appropriate academic and linguistic conventions   |  |
| conventions   |  |
| Clarity, consistency and appropriateness of conventions for quoting, citing.  |  |
| paraphrasing, attributing sources of information, and listing references (APA style).  • Clarity and appropriateness of sentence structure, vocabulary use, spelling,   |  |
| punctuation and word length.  GENERAL COMMENTS/RECOMMENDATIONS FOR NEXT TIME  |  |

Lecturer Date

Recommended: /20 (FL PS CR DN HD) Weighting: 35%

NB: The ticks in the various boxes are designed to provide feedback to students; they are not given equal weight in determining the recommended grade. Depending on the nature of the assessment task, lecturers may also contextualize and/or amend these specific criteria. The recommended grade is tentative only, subject to standardisation processes and approval by the School of Education Learning and Teaching Committee.

## FEEDBACK SHEET EDST5123 EDUCATIONAL DESIGN FOR LEARNING IN HIGHER EDUCATION

Student Name: Student No.:

Assessment Task: Assessment Task 3 (Major essay)

| SPECIFIC CRITERIA  | (-) | <br>—≻ (+) |
|--|-----|------------|
| Understanding of the question or issue and the key concepts involved   |     |            |
| <ul> <li>Identification of components that require redesign with evidence-based<br/>recommendations.</li> </ul>  |     |            |
| <ul> <li>Description of redesigned components of your course (activities,<br/>assessments, or resources).</li> </ul>   |     |            |
| <ul> <li>Explanation of practical considerations.</li> </ul>   |     |            |
| Depth of analysis and/or critique in response to the tasks   |     |            |
| <ul> <li>Depth of reflective enquiry and critical analysis from multiple perspectives</li> </ul>   |     |            |
| including your own, those of your colleagues through class discussions, and the literature.  |     |            |
| Familiarity with and relevance of professional and/or research literature used   |     |            |
| to support response  |     |            |
| <ul> <li>Appropriate and effective use of relevant international scholarly literature<br/>and how it relates to your local context.</li> </ul>   |     |            |
| Structure and organisation of response   |     |            |
| <ul> <li>Appropriateness of overall structure of the response to the task.</li> <li>Clarity and coherence of response to the task.</li> </ul>  |     |            |
| Presentation of response according to appropriate academic and linguistic  |     |            |
| conventions  |     |            |
| <ul> <li>Clarity, consistency and appropriateness of conventions for quoting, citing,<br/>paraphrasing, attributing sources of information, and listing references (APA<br/>style).</li> </ul> |     |            |
| <ul> <li>Clarity and appropriateness of sentence structure, vocabulary use, spelling, punctuation and word length.</li> </ul>  |     |            |
| GENERAL COMMENTS/RECOMMENDATIONS FOR NEXT TIME   |     | <br>· ·    |
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**Lecturer** Date

Recommended: /20 (FL PS CR DN HD) Weighting: 50%

NB: The ticks in the various boxes are designed to provide feedback to students; they are not given equal weight in determining the recommended grade. Depending on the nature of the assessment task, lecturers may also contextualize and/or amend these specific criteria. The recommended grade is tentative only, subject to standardisation processes and approval by the School of Education Learning and Teaching Committee.