

## Year 3 / Semester 1 overview

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| Unit name | Psychology and Behaviour |
| Unit code | 1J5Z1009                 |

### Other connected units:

Psychological Research Methods (semester 2 unit that builds on this teaching.)

### Line manager synopsis:

#### Unit overview:

This unit introduces apprentices to the main approaches that psychologists draw on to study the mind, brain and behaviour. Taught sessions will cover the core areas of psychology as identified by the British Psychological Society. Apprentices will apply these key areas to help understand human behaviour in relation to technology and the digital user experience. Apprentices will explore psychological theories of selected topics within social psychology, cognitive psychology, Individual differences and personality, biological psychology, and developmental psychology.

#### What will apprentices do?

Through this unit, apprentices will develop the skills to bring both a holistic and critical evaluative approach to their work projects, interactions within teams, and with clients by considering psychological phenomena and theories to aid in project development, troubleshooting, and management.

These skills will be developed by enhancing their understanding of psychological design approaches to UX within a broad and evolving digital landscape encompassing online and offline behaviours. This will also allow apprentices to better identify user preferences, and motivations for more effective project formulation and output. The application of psychological theories and practices will encourage apprentices to consider the impact of technology in social, commercial, environmental and cultural contexts to allow for a critical understanding and meeting of the needs of digital users and stakeholders.

Through lecture content and classroom engagement, apprentices will further develop their critical evaluative skills to communicate complex information both verbally and written that is appropriate to the audience to which it is to be delivered.

Apprentices will engage with prerecorded lectures that are released in advance of classroom sessions. These recordings are broken up into mini lectures or 'short sprints' that normally range from 10 to 15 minutes in length. Selected readings/videos are also encouraged to be completed before face-to-face sessions.

Classroom sessions will involve:

- Recapping on what has been learnt in the short sprints
- Interactive opportunities to discuss and actively apply what is being learnt to real-world experiences within the workplace and to current societal contexts. This is done through both group activities, and classroom discussions.
- Building the scaffold of the unit assignment by actively beginning to critically consider the applicability of learnt psychological theories and practices to understand the specific digital user relevant to the apprentice's company.

An example submission might consist of...

A critical evaluation of a digital user's experience with a digital opportunity (e.g., website, app., digital product etc.) within their workplace by applying psychological theories and practices to better explain and develop interactions with this opportunity.

**Content covered:**

Sprint 1:

- A) *Applying the field of social psychology to better understand the digital user and online behaviour.*

Topics explored through a focus on the digital user include self and social identity, theories within social behaviour influence, self-presentation, and predicting behaviour. These areas begin to encourage apprentices to consider the effects of social influences, both online and offline, on digital user behaviours. They will gain an insight into online decision-making processes, and the power of alignment with groups (ingroup versus outgroup mentality) that encourage or discourage online activities, buying, and preferences.

- B) *Exploring the effect of personality and individual differences on technology usage.*

Topics explored include the benefits of studying personality, trait theory, the 'Big Five', the influence of personality on technology acceptance and usage in different context, and offline versus social media personality. Within this lecture, apprentices will look at behaviours from an individual perspective. This allows them to consider other factors at play (e.g., cultural, personality, demographics etc.) that also influence behaviours with interacting with digital technologies.

Sprint 2:

- A) *Applying biological psychology to gain an insight into technology and addiction.*

Topics explored within this lecture include gaining an evidence-based insight into what is addiction?, including what is technology/Internet addiction? Apprentices will also learn about and how to apply the biopsychosocial model which is a fundamental application within psychology designed to adopt a more holistic approach. This will encourage apprentices to think critically and adopt a 360-degree approach to their work. Biological mechanisms of the brain and (tech) addiction, psychological variables and Internet addiction, and (online) social mechanisms and Internet addiction will also be explored to develop an appreciation into these topics that may influence the consideration of approach to design.

- B) *Exploring the field of cognitive psychology to focus our understanding on the memory and attention of the digital user.*

Within this penultimate lecture of the unit, apprentices will gain a brief insight into the functions of attention, how memory is measured and classified, and some models of memory. From these apprentices will then critically examine from the evidence within the literature whether digital technology is becoming our new attention and memory? They will critically analyse the potential benefits and negative impacts of technology on these components. Finally, the effect of learning on the digital user will be briefly explored.

Sprint 3:

- A) *An insight into the effect of technology on development through the application of development psychology.*

Within this final lecture within Psychology and Behaviour, apprentices will explore psychological literature, theories, and practices that are pertinent to the field of developmental psychology. While a broad area of research, a focus will be placed on theories that apprentices may find beneficial to their own experiences and to the application of design considerations when applied to young children and adolescents. Those discussed will include Bronfenbrenner's ecological model of human development, Piaget's cognitive developmental theory, and Erikson's psychological theory of development. Apprentices will consider the evidence supplied about the effect of screen time across developmental stages in childhood (from birth to adolescence).

- B) *Dedicated support session for assignment.*

This session will provide a recap on expected learning outcomes to be met within the assignment, formatting, what it means to adopt a critical evaluative stance, and a discussion on the essay framework.

**Learning outcomes:**

LO1: Use psychological literature to support and refute psychological theories and practices (K2, K4, K6, S5, S7, S14, S15, S17, S19).

LO2: Identify and describe key psychological theories and practices that are applicable to the digital user (K2, K4, K6, S5, S7, S14, S15, S17, S19).

LO3: Recognise the breadth of approaches adopted within psychology (K2, K4, K6, S5, S7, S14, S15, S17, S19).

**KSBs:**

- K2 Key schools of thought and specialist areas of practice, including Human Computer Interaction (HCI) and sociological, psychological and design approaches to UX, including User Centred Design (UCD), data-led design and experimental testing.
- K4 The broad and evolving digital landscape, including the interaction between online and offline, and the various channels that direct users to products and services (search engines, direct traffic, referrals etc.), including how to critically analyse and interpret analytics data.
- K6 The changing role of digital in human experiences and the impact of technology in social, commercial, environmental and cultural contexts and how to operate within ambiguous and uncertain situations.
- S4 Compose, construct and use multiple user research approaches to form an understanding of user populations, including surveys, field based research, contextual inquiry, user interviews, focus groups, stakeholder interviews/workshops, formative lab-based and direct user testing sessions (e.g. acceptance and usability testing).
- S5 Critically analyse and evaluate assumptions and findings to understand user and stakeholder needs (including behaviours, emotions, beliefs and preferences), and define the solutions' functional, non-functional, structural and content requirements.
- S7 Analyse, interpret, synthesise and apply insights, to inform the development of personas, user journeys and system workflows, to ensure user and organisational needs are met.
- S14 Articulate and communicate complex information, concepts and ideas effectively and concisely, through written, visual and verbal means.
- S15 Communicate concepts in a manner appropriate to the audience, adapting communication techniques accordingly between user research participants, stakeholders or varying degrees of seniority and team members from a broad spectrum of specialist fields.
- S17 Use advanced cognitive skills to deal with competing interests within and outside the organisation, through well-reasoned arguments and excellent negotiation skills.
- S19 Identify the preferences, motivations, strengths and limitations of other people and apply these insights in order to work more effectively with and to motivate others.
- S20 Demonstrate competence in customer service, in active listening and in leading, influencing and persuading others.
- B8 Is comfortable and confident interacting with people from different backgrounds and demographics and in delivering excellent customer service.

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| Unit name | Conversion and UX |
| Unit code | 1J5Z1007          |

Other connected units:

UX Toolkit (Some shared related concepts in Sprint 2 although CUX will be more data driven and practical).

Line manager synopsis:

**Unit overview:**

This unit will explore the customer journey to the point of conversion and the various techniques in digital marketing which assist this process. To do this you will develop understanding of what conversion is; examine campaign planning for conversion; identify the connection between customer acquisition and conversion; consider conversion rate optimisation; undertake Customer Journey Analysis and explore ROI and measures for success in conversion optimisation.

**What will apprentices do?**

Fundamentally, students will be exposed to different concepts and practices that are aligned to their learning outcomes. In a natural setting student will adopt aspects of critical thinking where they would review case studies related to the industry and how it aligns with understanding the user experience of the user and achieving high conversion rates. The case studies are not just meant to be read but are supposed to stimulate dialogue among students where different theories, practices and ideas are shared and explored.

Formatively, students will also undertake some practical tasks during seminar sessions. Tasks such as setting up events and conversions, building and analysing conversion funnels in GA4 and analysing on page speeds will give students the ability to put theory into practice. They would also have an overview of applicable tools such as Microsoft Clarity (session recordings and heatmaps) and Google Optimize (undertaking A/B testing) and how its related to web analytics data such as performance.

An example submission might consist of creating a conversion ecomap, in addition to identifying and critically evaluating a user's abandonment rate within their organisation. In simple terms the student will evaluate how specific leads (B2B) or sales (B2C) among users can be improved from available data.

**Content covered:**

Sprint 1: The first sprint will discuss concepts related to what conversions are and the types of conversions. Additionally, it will explore market and device segmentation, understanding touchpoints (Channels), Buyer personas, customer Journey mapping and best practices and building a conversion ecomap.

Sprint 2: The second sprint will set the premise for the students to explore customer behaviour in the digital sphere. Subsequently, students will be introduced to tools and technologies for appraising performance and conversions. This would be augmented by giving students an understanding of processes and methods that are required pre and post appraisal.

Sprint 3: The third sprint will primarily focus on understanding conversions as related to more nascent technologies. Concepts related to video UX will be explored, in addition to evaluating performance with live shopping, augmented reality, virtual reality or Metaverse settings.

**Learning outcomes:**

LO1: Identify new practice in campaign design to maximise conversion and ROI (K2, K4).  
 LO2: Demonstrate a critical appreciation of conversion through digital communications techniques (K4, K7, S1).

LO3: Demonstrate a structured and integrated approach to campaign planning for conversion (K12, S14, S15, S17, S18, S21).

**KSBs:**

- K2 Key schools of thought and specialist areas of practice, including Human Computer Interaction (HCI) and sociological, psychological and design approaches to UX, including User Centred Design (UCD), data-led design and experimental testing.
- K4 The broad and evolving digital landscape, including the interaction between online and offline, and the various channels that direct users to products and services (search engines, direct traffic, referrals etc.), including how to critically analyse and interpret analytics data.
- K7 How to achieve an ethical balance when applying psychological and persuasive techniques (e.g., scarcity, reciprocity and social proofing) to encourage users to carry out desired actions.
- K12 How to interpret organisational policies, standards and guidelines in relation to their impact on UX and anticipate any potential conflicts between organisational and user needs.
- S1 Apply creative, analytical and critical thinking skills to the design, development and improvement of UX solutions and systematically analyse and apply structured problem-solving techniques to complex UX challenges.
- S14 Articulate and communicate complex information, concepts and ideas effectively and concisely, through written, visual and verbal means.
- S15 Communicate concepts in a manner appropriate to the audience, adapting communication techniques accordingly between user research participants, stakeholders or varying degrees of seniority and team members from a broad spectrum of specialist fields.
- S17 Use advanced cognitive skills to deal with competing interests within and outside the organisation, through well-reasoned arguments and excellent negotiation skills.
- S18 Work autonomously and interact effectively within wide, multidisciplinary teams, including designers, developers, engineers, analysts, project managers etc.
- S21 Balance and trade-off competing quality, time and budget criteria, demonstrating understanding of business need, managing time effectively and being able to plan and complete UX activities to schedule.

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| Unit name | UX Toolkit |
| Unit code | 1J6Z1000   |

**Other connected units:**

Conversion and UX (Some shared related concepts in Sprint 2 although CUX will be more data driven and practical).  
UX Toolkit: Iteration (Semester 2 unit that builds on some of this teaching.)

**Line manager synopsis:**

**Unit overview:**

In this unit, apprentices will explore the links between user experience, metrics, and business objectives.

**What will apprentices do?**

Apprentices will select a product from their workplace and identify a pain point or unmet user need. They will conduct secondary and/or primary research to investigate the impact this has on both the user and the organisation. Based on the research, apprentices will propose a redesign in the form of a clickable prototype, aiming to solve the pain point or unmet user need.

Apprentices will identify the product KPIs and UX metrics, considering what success looks like for the redesign. The most appropriate quantitative methods to measure success must be considered and justified.

A professional, shareable slide deck with accompanying artefacts (e.g., user flow, annotated stills of the prototype) will explain the process, research, and thinking behind the redesign, as well as discuss next steps. This allows apprentices to work towards presenting and selling the benefits of their solutions to others in their organisation.

An example submission might focus on a pain point that has been identified on an e-commerce checkout page. Perhaps the user is unclear on the pricing for home delivery or click and collect, and abandons their purchase. The apprentice will look to UX theory, existing research, and may also conduct primary research, to find out more about the impact from a user perspective and a business perspective. The apprentice will explore a new solution and redesign, but needs to consider what success looks like in terms of KPIs and metrics, such as a reduction in bounce rate. The apprentice will produce a well-designed slide deck that effectively communicates (via written and visual means) their process and solutions to stakeholders.

### **Content covered:**

#### Sprint 1:

- Identifying unmet user needs (Barsoux et al's Four Ways of Looking framework, Appreciative Inquiry 4D Cycle).
- Impact of unmet user needs (Maslow's Hierarchy of Needs, Bradley's Design Hierarchy of Needs).

#### Sprint 2:

- UX metrics and how to choose them (behavioural - time on task, average session length, abandonment rate, error rate; attitudinal - daily/monthly active users, Net Promotor Score, Customer Satisfaction Score, user retention rate, System Usability Score).
- Mapping UX metrics to business KPIs.
- UX benchmarking (Google HEART framework).
- How to measure success and linking it to UX metrics and KPIs (usability testing, analytics, A/B testing, surveys, eyetracking).
- Ethics of UX metrics.

#### Sprint 3:

- Getting stakeholder buy-in.
- Collaborative design critiques with peers to get feedback on prototypes.

### **Learning outcomes:**

1. Select and implement user interface elements to create user journeys and task flows that meet business and user goals (*K1, K3, K8, K10, K11, K14, K15, S1, S2, S3, S4, S5, S6, S7, S8, S10, S11, S12, S13, S14, S16, S18, B1, B2, B3, B4, B5, B6, B7*)
2. Decide on quantitative methods to assist in evaluating the formulated measures of success for the user experience (*K1, K3, K8, K10, K11, K14, K15, S1, S2, S3, S4, S5, S6, S7, S8, S10, S11, S12, S13, S14, S16, S18, B1, B2, B3, B4, B5, B6, B7*)

### **KSBs:**

- K1 The full scope of the discipline of UX, including definitions, principles and ontologies, as well as the different perspectives, approaches or schools of thought and the theories that underpin them. Advanced methods and techniques to review, consolidate, extend and synthesise their knowledge and understanding, and to initiate and carry out projects.
- K3 The essential concepts of digital product design, service design and User Interface (UI) design, and how these fundamental concepts can be applied to new and emerging forms of user interaction.
- K8 How UX principles adapt to accommodate different forms of interaction across multiple touchpoints (physical and/or digital), and to formulate and apply these principles in complex contexts.

- K10 How UX practices and design recommendations can be effectively applied throughout development, improvement and continuous delivery life cycles using a range of methodologies, including iterative, agile and lean approaches.
- K11 How to solve problems through testing and evaluating solutions via analysis of test data and results from feasibility, acceptance and usability testing.
- K14 The benefits and constraints of creating inclusive user experiences, including how to critically analyse and evaluate designs against accessibility guidelines, policies and regulatory requirements.
- K15 Awareness and understanding of the core tools and technologies involved in digital product and service design and development, including a basic level of knowledge of the advantages of certain tools and technologies for specific applications and purposes.
- S1 Apply creative, analytical and critical thinking skills to the design, development and improvement of UX solutions and systematically analyse and apply structured problem-solving techniques to complex UX challenges.
- S2 Use design thinking and/or service design methods to determine the design and implementation of new value propositions, products and services, and improve existing ones.
- S3 Select, formulate and apply from a range of user research methods including those from the fields of Human Computer Interaction (HCI), sociology, psychology and ethnography, including qualitative and quantitative approaches.
- S4 Compose, construct and use multiple user research approaches to form an understanding of user populations, including surveys, field based research, contextual inquiry, user interviews, focus groups, stakeholder interviews/workshops, formative lab-based and direct user testing sessions (e.g. acceptance and usability testing).
- S5 Critically analyse and evaluate assumptions and findings to understand user and stakeholder needs (including behaviours, emotions, beliefs and preferences), and define the solutions' functional, non-functional, structural and content requirements.
- S6 Critically evaluate arguments, assumptions, abstract concepts and data (that may be incomplete), to make judgements, and to frame appropriate questions to achieve a solution - or identify a range of solutions - to a problem.
- S7 Analyse, interpret, synthesise and apply insights, to inform the development of personas, user journeys and system workflows, to ensure user and organisational needs are met.
- S8 Design, facilitate and evaluate experimental tests using tools such as A/B and multivariate testing to enable a data-led approach to the development and continual improvement of UX solutions.
- S9 Design, facilitate and evaluate requirements gathering, ideation and co-design activities, involving stakeholders and/or users.
- S10 Creatively explore and devise a range of design solutions, including the production of system and user flows, static wireframes and prototypes of varying degree of fidelity, from paper prototypes to interactive prototypes.
- S11 Adapt and evaluate design solutions according to the context of intended use, including responsive, mobile, online, offline, personal, public and enterprise, working with multidisciplinary product teams to assess the impact of implementing specific design recommendations.
- S12 Design and refine clear, logical information architectures for content and data.
- S13 Independently analyse test data, interpret results and evaluate the suitability of proposed solutions, considering current and future contexts of use, including in consultation with team members from other disciplines to ascertain a holistic view on the applicability of design recommendations.
- S14 Articulate and communicate complex information, concepts and ideas effectively and concisely, through written, visual and verbal means.
- S16 Manage expectations and present user research insight, proposed solutions and/or test findings to clients and stakeholders.
- S18 Work autonomously and interact effectively within wide, multidisciplinary teams, including designers, developers, engineers, analysts, project managers etc.
- B1 Is passionate about creating effective, efficient, delightful and innovative solutions that enhance user experience through the appropriate balance of form and function.
- B2 Has a strong work ethic and commitment in order to meet the standards required.

- B3 Is reliable, objective and capable of independent and team working, and acts with integrity with respect to confidentiality, the protection of personal data and online safety.
- B4 Champions accessibility and diversity in order to create inclusive solutions.
- B5 Is driven to keep up to date with the latest UX trends, tools, techniques and practices to support the ongoing development of their own skills and knowledge and the sharing of that knowledge to develop the skills of others.
- B6 Exercises initiative and personal responsibility and has the ability to continuously develop professionally.
- B7 Undertakes independent decision-making in complex, unpredictable and changing circumstances.