# **University of Westminster** School of Electronics and Computer Science

### MAIN I - 2023/24

#### SUBJECT TO EXTERNAL EXAMINER APPROVAL

Module leader	Dr Philip Worrall
Units	Coursework 1 – Individual - CW1
Weighting:	50%
Qualifying mark	30%
Description	Digital marketing models and search engine optimisation
Covered Learning Outcomes	LO1 - Critically evaluate web marketing models and compare them with traditional models.
	LO2 - Demonstrate a good understanding of the use of SEO, email campaigns, and social media, as effective marketing tools.
	LO3 - Employ SEO techniques to maximise the effectiveness of marketing on the web, and design email marketing campaigns.
	LO5 - Critically interpret and discuss the results generated from SEO and analytics tools and provide recommendations for given scenarios.
Handed Out:	1pm Wednesday 31st January 2024
Due Dates	1pm Tuesday 5th March 2024
Expected deliverables	Single electronic file containing coursework answers (in either PDF of DOCX format)
Method of Submission:	Electronic submission on BB via a provided link in the assessment folder.
Type of Feedback and Due Date:	Written feedback on the submission will be provided within 3 weeks after the submission (the mark and comments via BB Rubric).  All marks remain provisional until formally agreed by an Assessment Board.
BCS Criteria meeting in this assignment	<ul> <li>2.1.1 Knowledge and understanding of facts, concepts, principles theories</li> <li>2.1.2 Use of such knowledge in modelling and design</li> <li>2.2.2 Evaluate systems in terms of quality and trade-offs</li> <li>2.2.4 Deploy tools effectively</li> <li>2.3.2 Development of general transferable skills</li> <li>3.1.1 Demonstrate a systematic understanding of the knowledge of the domain of their programme of study.</li> <li>3.2.2 Defining problems, managing design process, and evaluating outcomes</li> <li>4.1.1 Knowledge and understanding of scientific and engineering principles</li> </ul>

#### **Assessment regulations**

Refer to Part 3: Assessment regulations for taught courses of the guide for undergraduate students for a clarification of how you are assessed, penalties and late submissions, what constitutes plagiarism etc.

https://www.westminster.ac.uk/sites/default/public-files/general-documents/handbook-of-academic-regulations-2020.pdf

#### **Penalty for Late Submission**

If you submit your coursework late but within 24 hours or one working day of the specified deadline, 10 marks will be deducted from the final mark, as a penalty for late submission, except for work which obtains a mark in the range 40 - 49%, in which case the mark will be capped at the pass mark (40%). If you submit your coursework more than 24 hours or more than one working day after the specified deadline you will be given a mark of zero for the work in question unless a claim of Mitigating Circumstances has been submitted and accepted as valid.

It is recognised that on occasion, illness or a personal crisis can mean that you fail to submit a piece of work on time. In such cases you must inform the Campus Office in writing on a mitigating circumstances form, giving the reason for your late or non-submission. You must provide relevant documentary evidence with the form. This information will be reported to the relevant Assessment Board that will decide whether the mark of zero shall stand. For more detailed information regarding University Assessment Regulations, please refer to the following website: https://www.westminster.ac.uk/current-students/guides-and-policies/academic-matters/academic-regulations.

## Coursework 1 – Digital marketing models and search engine optimisation (SEO)

#### **OVERVIEW**

The coursework consists of a series of **3 questions**. You are required to provide answers to **ALL** questions and this coursework must be completed **INDIVIDUALLY**. The number of marks available for each question is provided in the right-hand margin. The total number of marks available is 100.

This assessment carries 50% of the total marks for this module.

#### **COURSEWORK SUBMISSION**

You are required to submit your answers to this coursework via Blackboard on or before 1pm Tuesday 5<sup>th</sup> March 2024. Your submission should be in either PDF of Microsoft Word (.doc/.docx) format. The suggested word count for this coursework is 2500 words (not including tables or figures). You should ensure that you label each of your answers with the question number that you are attempting to answer.

The first page of your submission should consist of a front cover, including: your name, student ID, the module code, title of this module and a word count. Otherwise, your name and student ID should not appear anywhere else on your submission.

#### **Digital Marketing Models**

#### **Question 1**

Using an online company of your choice as a case-study, discuss the application of digital marketing funnels to guide customers toward a desired outcome or action.

In your answer you **MUST**:

- State the name of the online company you have selected for your case study.
- Define what is meant by a digital marketing funnel.
- Illustrate your answer with a correctly labelled diagram.
- Discuss the significance of each stage in the funnel.
- Evaluate the applicability of the funnel to your case-study.
- Define and explain any technical terms that you use.

[25 Marks]

#### **Search Engine Optimisation**

Imagine that you work for a Public Relations (PR) agency. Your manager has asked you to help promote a new client by setting up a small microsite about them.

For this activity you are free to choose the client you will use for your case study. The client could be an actor/actress, sports personality, influencer, celebrity or otherwise someone of general interest to the public.

#### Question 2

A) Using Google Sites, setup an initial 5-page microsite for your chosen client. Each page should document a distinct aspect of the client. Add some initial content (text and images) to your site and apply minimal styling.

Take a screenshot of each of the 5 individual pages as evidence that they have been created and **provide a URL** to your newly created microsite.

[6 Marks]

B) Using Google Forms, design a form to collect the email address of users of the microsite for email marketing purposes.

Place a link to the form at the top of one of the pages on your microsite and provide a screenshot of the form and the link to show that they have been implemented.

[4 Marks]

C) Carry out *keyword research* to identify potential sets of words and phrases that could be used to help optimise your microsite.

In your answer you MUST:

- Carry out a keyword density analysis (KDA) of your existing content.
- Identify sets of seed phrases related to your client.
- Demonstrate your understanding of keyword semantics, modifiers, and variations.
- Explain what is meant by search volume and keyword competitiveness.
- Document the process you followed to arrive at your chosen keywords.
- Summarise your findings using a keyword tree.

[9 Marks]

D) Optimise **TWO** pages of your website using a subset of the keywords identified in C) and provide detailed evidence of the process you have followed.

In your answer you MUST:

- Explain how you developed each page's content around your chosen keywords.
- Include screenshots of each page both before and after optimisation, highlighting the changes you have made.

[6 Marks]

- E) Backlinks and internal linking are two examples of alternative search engine optimisation (SEO) techniques.
  - I. For each technique, give a brief overview of how it works and explain the intuition behind why it may help to improve search engine ranking.

[6 Marks]

II. Apply these two techniques to your microsite and explain in detail how they have been implemented. Provide evidence that they have been applied in the form of screenshots.

[4 Marks]

F) Critically evaluate the extent to which the PageRank algorithm can contribute towards the overall relevance and quality of search engine results.

In your answer you **MUST**:

- Provide an annotated diagram that illustrates how the PageRank algorithm works. You should consider the case when there are just 5 web pages and not all webpages link to each other directly.
- Discuss the rationale and intuition behind the PageRank algorithm.
- Evaluate ways in which the PageRank algorithm might be open to manipulation and discuss potential countermeasures.

[15 Marks]

#### **Social Media and Traditional Marketing Methods**

#### **Question 3**

A) Discuss what is meant by the term "social signals" and critically evaluate their role in modern search engine algorithms.

#### In your answer you SHOULD

- Define the term "social signals" and illustrate your answer with relevant examples.
- Demonstrate a critical understanding of how social signals might be incorporated into search engine algorithms and their potential advantages and limitations.
- Reflect on recent trends in the search engine market and consumer search behaviour.

[15 Marks]

B) Critically discuss the role of social media marketing in managing the longer-term relationship between consumer and producer.

#### In your answer you SHOULD:

- Define the terms consumer and producer.
- Discuss what is meant by the long-term consumer-producer relationship.
- Highlight ways in which this relationship can be strengthened using social media marketing.
- Illustrate your answer with a real-world example.

[10 Marks]

#### 6MARK017W - COURSEWORK1 - MAIN MARKING SCHEME

**NOTE:** Marks will be allocated in relation to the correctness, completeness, and the quality of the answer provided.

Criteria	Mark Per Component	Mark Provided	Comments
Question 1 Digital Marketing Models	25 marks		
Using an online company of your choice as a case-study, discuss the application of digital marketing funnels to guide customers toward a desired outcome or action.			
<ul> <li>State the name of the online company you have selected for your case study (1 mark).</li> <li>Define what is meant by a digital marketing funnel (2 marks).</li> <li>Illustrate your answer with a correctly labelled diagram (4 marks).</li> <li>Discuss the significance of each stage in the funnel (8 marks).</li> <li>Evaluate the applicability of the funnel to your case-study (8 marks).</li> <li>Define and explain any technical terms that you use (2 marks).</li> </ul>	25		
Question 2 Search Engine Optimisation	50 marks		
<ul> <li>A) Using Google Sites, setup an initial 5-page microsite for your chosen client. Each page should document a distinct aspect of the client. Add some initial content (text and images) to your site and apply minimal styling.</li> <li>Take a screenshot of each of the 5 individual pages as evidence that they have been created and provide a URL to your newly created microsite.</li> </ul>	6		

Take a screenshot of each of the 5 individual pages as evidence that they have been created (5 marks) and <b>provide a URL</b> to your newly created microsite (1 mark).		
B) Using Google Forms, design a form to collect the email address of users of the microsite for email marketing purposes.		
Place a link to the form at the top of one of the pages on your microsite (2 marks) and provide a screenshot of the form and the link to show that they have been implemented (2 marks).	4	
C) Carry out <i>keyword research</i> to identify potential sets of words and phrases that could be used to help optimise your microsite.		
In your answer you MUST:		
<ul> <li>Carry out a keyword density analysis (KDA) of your existing content (1 marks).</li> <li>Identify sets of seed phrases related to your client (1 mark).</li> </ul>		
<ul> <li>Demonstrate your understanding of keyword semantics, modifiers, and variations (2 marks).</li> </ul>	9	
<ul> <li>Explain what is meant by search volume and keyword competitiveness (2 marks).</li> </ul>		
<ul> <li>Document the process you followed to arrive at your chosen keywords (1 marks).</li> </ul>		
Summarise your findings using a keyword tree (2 marks).		

<ul> <li>D) Optimise TWO pages of your website using a subset of the keywords identified in C) and provide detailed evidence of the process you have followed.</li> <li>In your answer you MUST: <ul> <li>Explain how you developed each page's content around your chosen keywords (3 marks).</li> <li>Include screenshots of each page both before and after optimisation, highlighting the changes you have made (3 marks).</li> </ul> </li> </ul>	6	
<ul> <li>E) Backlinks and internal linking are two examples of alternative search engine optimisation (SEO) techniques.</li> <li>i) For each technique, give a brief overview of how it works (3 marks) and explain the intuition behind why it may help to improve search engine ranking (3 marks).</li> <li>ii) Apply these two techniques to your microsite and explain in detail how they have been implemented (2 marks). Provide evidence that they have been applied in the form of screenshots (2 marks).</li> </ul>	10	
<ul> <li>F) Critically evaluate the extent to which the PageRank algorithm can contribute towards the overall relevance and quality of search engine results.</li> <li>In your answer you MUST:</li> <li>Provide an annotated diagram that illustrates how the PageRank algorithm works. You should consider the case when there are just 5 web pages and not all webpages link to each other directly (5 marks).</li> </ul>	15	

<ul> <li>Discuss the rationale and intuition behind the PageRank algorithm (5 marks).</li> <li>Evaluate ways in which the PageRank algorithm might be open to manipulation and potential countermeasures (5 marks)</li> </ul>		
Question 3 Social Media and Traditional Marketing Methods	25 marks	
A) Discuss what is meant by the term "social signals" and critically evaluate their role in modern search engine algorithms.		
<ul> <li>In your answer you SHOULD</li> <li>Define the term "social signals" and illustrate your answer with relevant examples (6 marks).</li> <li>Demonstrate a critical understanding of how social signals might be incorporated into search engine algorithms and their potential advantages and limitations (5 marks).</li> <li>Reflect on recent trends in the search engine market and consumer search behaviour (4 marks).</li> </ul>	15	
B) Critically discuss the role of social media marketing in managing the longer-term relationship between consumer and producer.		
<ul> <li>In your answer you SHOULD</li> <li>Define the terms consumer and producer (2 marks).</li> <li>Discuss what is meant by the long-term consumer-producer relationship (3 marks).</li> </ul>	10	

END				
	•	Illustrate your answer with a real-world example (1 marks).		
		media marketing (4 marks).		
	•	Highlight ways in which this relationship can be strengthened using social		

#### **END**