

DEREE COLLEGE SYLLABUS FOR: BIO 4080 INTERNSHIP IN BIOINFORMATICS**3/0/3****UK LEVEL: 6**
UK CREDITS: 15

(Updated: Fall 2024)

PREREQUISITES:

The student must have completed a minimum of 40 credits from the core courses of the Bioinformatics program before being able to take this course. All work placements are subject to formal approval by the Department Head /Program Coordinator /Internship Administrator (as appropriate).

**CATALOG
DESCRIPTION:**

Work-based learning in the field of Biomedical and Health Sciences, such as in a pharmaceutical industry or a clinical setting. Students gain hands-on experience and receive training as they learn to apply knowledge and skills gained in the program in a real-life work environment.

RATIONALE:

Work-based learning offers exposure to different work environments and professional practices. It aims to develop students' practical and professional competencies as well as transferable skills (e.g. communication and teamwork skills). Additionally, this work experience aims to encourage students to reflect on the knowledge and skills they gained throughout their studies and integrate them with current practices in a real work environment. It offers an opportunity for self-evaluation of students, as they are asked to reflect on their performance in the particular work setting.

LEARNING OUTCOMES:

As a result of taking this course, the student should be able to:

1. Integrate key theory and concepts in the field of Bioinformatics with professional practice, through a work-based learning internship experience.
2. Apply skills on scientific writing and professional communication in a real-life, workplace setting.
3. Apply practical skills and professional behavior in a workplace environment.
4. Critically evaluate the interrelationships of functions and operations connected with the work placement.
5. Demonstrate understanding of ethical and managerial challenges.
6. Develop and formulate a personal development plan based on a critical self-assessment of personal and professional skills and competencies.

METHOD OF TEACHING AND LEARNING:	In congruence with the teaching and learning strategy of the college, the following tools are used: ➤ Office hours: Students are encouraged to make full use of the office hours of their instructor, where they can ask questions and discuss work-based learning issues. ➤ Use of a Blackboard site, where instructors can post course material and resources such as notes, readings, assignment								
	instructions, timely announcements and useful web links; also interact with the instructor via online Blackboard tools such as journals. ➤ Use of library facilities: Students are encouraged to make use of the library facilities for their papers. ➤ Professional seminars and workshops: Seminars organized and delivered by the Department of Science and Mathematics faculty on professional conduct and workshops on interviewing skills, drafting of CV, presentation skills delivered in cooperation with the Office of Careers Services. ➤ The Internship in Biomedical and Health Sciences is consistent with the work-based learning (internship) policies and procedures, as they have been described in the Deree Work-Based Learning (Internship) Policies and Procedures; ➤ Work-based learning internship: Minimum 180 working hours within 3-4 months.								
ASSESSMENT:	Summative: <table border="1" data-bbox="643 1274 1449 1610"> <tr> <td data-bbox="643 1274 1257 1442"> First assessment Reflective Paper (written report): A reflection on the internship experience including time management. </td><td data-bbox="1257 1274 1449 1442"> 60% </td></tr> <tr> <td data-bbox="643 1442 1257 1610"> Second assessment 30% oral presentation, 10% Personal Development Plan (PDP): written assignment </td><td data-bbox="1257 1442 1449 1610"> 40% </td></tr> </table> Formative: <table border="1" data-bbox="643 1682 1441 1830"> <tr> <td data-bbox="643 1682 1251 1756"> Activities Report – Individual (includes daily journal and brief weekly report) </td><td data-bbox="1251 1682 1441 1756"> 0% </td></tr> <tr> <td data-bbox="643 1756 1251 1830"> Presentation of Internship experience and Reflective Paper (individual) </td><td data-bbox="1251 1756 1441 1830"> 0% </td></tr> </table> The formative assessments aim to prepare students for the summative assessments. The first summative assessment tests Learning Outcomes 1, 2, 3 and 4. The second summative assessment tests Learning Outcomes 1, 4 and 5.	First assessment Reflective Paper (written report): A reflection on the internship experience including time management.	60%	Second assessment 30% oral presentation, 10% Personal Development Plan (PDP): written assignment	40%	Activities Report – Individual (includes daily journal and brief weekly report)	0%	Presentation of Internship experience and Reflective Paper (individual)	0%
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Activities Report – Individual (includes daily journal and brief weekly report)	0%								
Presentation of Internship experience and Reflective Paper (individual)	0%								

INDICATIVE READING:	REQUIRED READING: N/A RECOMMENDED READING: • Gotlieb, A. (2014) <i>Planning a Career in Biomedical and Life Sciences: Making Informed Choices</i>; eBook ISBN: 9780128025703; Paperback ISBN: 9780128022429. Elsevier. • Neugebauer, J. & Evans-Brain, J. (2009). <i>Making the most of your placement</i>. Los Angeles: Sage. • Sweitzer, H. & King, M. (2008). <i>The Successful Internship: Transformation and Empowerment in Experiential Learning</i>.
	Cengage. • Cottrell, S. (2015). <i>Skills for success: Personal Development and Employability</i>, UK, Palgrave-McMillan. Articles as recommended by the corresponding supervisor.
INDICATIVE MATERIAL: <i>(e.g. audiovisual, digital material, etc.)</i>	REQUIRED MATERIAL: N/A RECOMMENDED MATERIAL: N/A
COMMUNICATION REQUIREMENTS:	Verbal and written skills using academic / professional English
SOFTWARE REQUIREMENTS:	MS Office and Blackboard CMS Search engines
WWW RESOURCES:	The instructor will recommend sources that are appropriate to the program.
INDICATIVE CONTENT:	Work based learning according to the assigned tasks and responsibilities in the context of a work placement in an area related to the program (e.g. pharmaceutical company or clinical setting).