

T6. Course Specification (CS)

Institution: Najran university	Date 15/5/1438 H.
College/Department : College of applied medical science / Department of Medical Rehabilitation Sciences.	

A. Course Identification and General Information

1. Course title and code: Prosthetics and Orthotics (308 PHTH) الأطراف الصناعية والأجهزة المساعدة 308 عطب	
2. Credit hours: 2 (1+1)	
3. Program(s) in which the course is offered : Physiotherapy Program (If general elective available in many programs indicate this rather than list programs)	
4. Name of faculty member responsible for the course: DR\ Alaa Abosrie Amin	
5. Level/year at which this course is offered: 6 th level/3 rd year	
6. Pre-requisites for this course (if any) : PHTH 304	
7. Co-requisites for this course (if any):	
8. Location if not on main campus : main campus	
9. Mode of Instruction (mark all that apply)	
a. Traditional classroom الفصل الدراسي التقليدي	<input checked="" type="checkbox"/> Yes What percentage النسبة المئوية ? 100%
b. Blended (traditional and online) التعليم المدمج (التقليدي + عبر الانترنت)	<input type="checkbox"/> What percentage النسبة المئوية ?
c. e-learning التعليم الإلكتروني	<input type="checkbox"/> What percentage النسبة المئوية ?
d. Correspondence التعليم بالمراسلة (عن بعد)	<input type="checkbox"/> What percentage النسبة المئوية ?
f. Other طرق أخرى	<input type="checkbox"/> What percentage النسبة المئوية ?
Comments التعليق:	

B. Objectives

<p>1. What is the main purpose for this course ?</p> <p>To provide students of applied medical science college with knowledge about the different type of Prosthetics and Orthotics and when to use and how to apply it. The course discusses the complication and the side effect of the Prosthetics and Orthotics. The student will know in this course about the amputee patient in term of psychological side and the disability side and how to help him to cope with his new statues.</p>
<p>2. Briefly describe any plans for developing and improving the course that are being implemented. (e.g. increased use of IT or web based reference material, changes in content as a result of new research in the field)</p> <ul style="list-style-type: none"> Continuous updating of the information, knowledge and skills included in the course through continuous search for the new knowledge and skills available in recent publications (books, researches, internet and others). Verifying the information resources. Continuous improvements in teaching methods as well as encouraging the students to participate effectively in the lectures. Continuous evaluation of the course content, student level and establish plans accordingly.

C. Course Description (Note: General description in the form used in the Bulletin or handbook should be attached)

<p>Course Description :</p> <p>This course demonstrates and practice of the evaluative and effective use of different type of Prosthetics and Orthotics in physical therapy management procedures used in orthopedic and neurological conditions. And teach the students how to evaluate, plan and implement the appropriate use them and how to apply them to individuals with orthopedic and neurological problems treated by medical or surgical procedures.</p>
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1. Topics to be Covered :		
List of Topics	No. of Weeks	Contact Hours
Introduction to orthotics	1	3 (1+2)
Upper limb orthotics 1.	1	3 (1+2)

Upper limb orthotics 2.	1	3 (1+2)
Lower limb orthotics1.	1	3 (1+2)
Lower limb orthotics2.	1	3 (1+2)
Spinal orthotics part 1.	1	3 (1+2)
Spinal orthotics part 2.	1	3 (1+2)
midterm exam theory and practical	1	3 (1+2)
Introduction to prosthetics.	1	3 (1+2)
Balance and gait training with prostheses part 1	1	3 (1+2)
Balance and gait training with prostheses part 2	1	3 (1+2)
Lower extremity amputation part 1	1	3 (1+2)
Lower extremity amputation part 2	1	3 (1+2)
Mobility Aids	1	3 (1+2)
Geriatric rehabilitation part 1	1	3 (1+2)
Geriatric rehabilitation part 2	1	3 (1+2)

1.Course components (total contact hours and credits per semester):						
	Lecture	Tutorial	Laboratory or studio	Practical	Other:	Total
Contact Hours	16	0	0	32	0	48
Credit	1	0	0	1	0	2

3-Additional private study/learning hours expected for students per week	4 hours
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4. Course Learning Outcomes in NQF Domains of Learning and Alignment with Assessment Methods and Teaching Strategy.

On the table below are the five NQF Learning Domains, numbered in the left column.

First, insert the suitable and measurable course learning outcomes required in the appropriate learning domains (see suggestions below the table)

Second, insert supporting teaching strategies that fit and align with the assessment methods and intended learning outcomes.

Third, insert appropriate assessment methods that accurately measure and evaluate the learning outcome. Each course learning outcomes, assessment method, and teaching strategy ought to reasonably fit and flow together as an integrated learning and teaching process. (Courses are not required to include learning outcomes from each domain).

Code #	NQF Learning Domains And Course Learning Outcomes	Course Teaching Strategies	Course Assessment Methods
1.0	Knowledge		
1.1	Define and recognize the biomechanical principles and components involved in the development, fabrication, fit, modification, and function of prosthetic and orthotic devices.	Lectures. Practical classes. Audiovisual learning.	Quizzes Written Exam Practical Exam
1.2	Label the appropriate recommendations and complication for selection, design and use of prosthesis and orthosis.	Brainstorming sessions	
1.3	Recognize the history, etiology, pathology, functional and psychological implications of amputations, both congenital and acquired		
2.0	Cognitive Skills		
2.1	Justify suitable orthosis and prosthesis for specific conditions.	Lectures. Practical classes.	Written Exam
2.2	Analyze the pathomechanics of the extremities and trunk to appraise, modify fabricate and fit the functions of prosthetic and orthotic devices.	Problem solving questions Audiovisual learning.	Practical Exam
3.0	Interpersonal Skills & Responsibility		
3.1	Show Collaborate with colleagues as a team work. use self-directed learning.	Problem solving	Practical Exam
4.0	Communication, Information Technology, Numerical		
4.1	Operate efficiently the different knowledge resources including the library resources and websites.	Assignments and Student presentation	Assignment
5.0	Psychomotor		
5.1	Illustrate, design and use of prosthetic and orthotic devices with various conditions .	▪ Practical classes.	Practical exam.

5. Schedule of Assessment Tasks for Students During the Semester

	Assessment task (e.g. essay, test, Quizzes, group project, examination, speech, oral presentation, etc.)	Week Due	Proportion of Total Assessment
1	Final written exam	16	40 %
2	Midterm written exam	8	20%
3	Midterm practical and oral exams	8	10%
4	Final practical and oral exams	15	20%
	Quiz	12	5%
5	Assignment	8	5%

D. Student Academic Counseling and Support

1. Arrangements for availability of faculty and teaching staff for individual student consultations and academic advice. (include amount of time teaching staff are expected to be available each week)

- office hours will be every Monday from 1 PM to 3 PM
- Academic advisory for the students is Dr\ Mohamed Jarrar
- Academic advisory for the program is Dr\ Mohamed Samy
- Facilitate the communication between the student and the instructor through E-mail.

E. Learning Resources

1. List Required Textbooks :

Michelle M. Lusardi , Millee Jorge , Caroline C. Nielsen : Orthotics and Prosthetics in Rehabilitation, 3rd Edition, 2013.

Bella J. May , Margery A. Lockard Prosthetics & Orthotics in Clinical Practice: A Case Study Approach 1st Edition, Mar 8, 2011.

2. List Essential References Materials (Journals, Reports, etc.)

- **Prosthetics and Orthotics International journal**
- **journal of Prosthetics and Orthotics(American academy of orthotists and prosthetists).**
- **Anatomical landmarks of prosthesis**
- **PROSTHETIC AND ORTHOTIC DEVICES Provider Guide January 1, 2015 (Washington State Health Care Authority).**

3. List Electronic Materials Web Sites, Facebook, Twitter, etc.

- Power point lectures will be prepared regularly and will be available on Najran university web site.
- Video lectures to demonstrate the uses of different orthosis and prosthesis
- WWW.WHO.org
- WWW.physiotherapy.org
- WWW.pubmed.gov
- <https://login.nu.edu.sa/cas/login?service=http%3A%2F%2Flib.nu.edu.sa%2FDigitalLibrary.aspx>

4. Other learning material such as computer-based programs/CD, professional standards or regulations and software.
NA.

F. Facilities Required

Indicate requirements for the course including size of classrooms and laboratories (i.e. number of seats in classrooms and laboratories, extent of computer access etc.)

1. Accommodation (Classrooms, laboratories, demonstration rooms/labs, etc.)

- Lecture rooms and laboratories are already available.
- **Lecture rooms (size 70M) (30 students)**
- **Laboratories (size 50M) (30 students)**

2. Computing resources (AV, data show, Smart Board, software, etc.)

- Computers and datashow are already available.
- Data show.
- Audio visual facilities

3. Other resources (specify, e.g. if specific laboratory equipment is required, list requirements or attach list)

- Library supplied with reference text books, electronic resources.
- prosthetic and orthotic Lab, equipped with many equipments.

G. Course Evaluation and Improvement Processes :

1. Strategies for Obtaining Student Feedback on Effectiveness of Teaching

- Midterm evaluation feedback.
- Completion of course evaluation questionnaire by each student.
- End of term discussion between the teacher and the students regarding what went well and what could have gone better.

2. Other Strategies for Evaluation of Teaching by the Instructor or by the department.

- Course coordinator report.
- Observations from colleagues.
- Class observation by supervisors.

<ul style="list-style-type: none"> Independent assessment of standards achieved by the students.
<p>3. Processes for Improvement of Teaching : عمليات تحسين التدريس :</p> <ul style="list-style-type: none"> Continuous updating of course contents according to the previous course report. Regular meetings where problems are discussed and solutions given. Workshops on teaching methods. Review of recommended teaching strategies.
<p>4. Processes for Verifying Standards of Student Achievement (e.g. check marking by an independent member teaching staff of a sample of student work, periodic exchange and remarking of tests or a sample of assignments with staff at another institution)</p> <ul style="list-style-type: none"> Check marking of a sample of student work by an independent faculty member. Periodic exchange and remarking of a sample of assignments with a faculty member in another institution. Students who believe they are under graded could have their papers checked by another reader.
<p>5. Describe the planning arrangements for periodically reviewing course effectiveness and planning for improvement:</p> <p>Action plan for course improvement will be done according to the feedback about the course from students, other colleagues and the dean.</p>

Name of instructor Dr. Alaa Abosrie _____

Signature التوقيع: *AlaaAbosrie* Date Report Completed : 15/5/1438 H.

Name of field experience teaching staff: _____

Program coordinator : Dr. Mohammed Eid

Signature: *Μοηαμμεδ Ειδ*

Date received: 29 / 8 / 1438