Subject Description Form

Subject Code	**SFT316KD**
Subject Title	**Knitted Structure Design**
Credit Value	**3**
Level	**3**
Pre-requisite/ Co-requisite/ Exclusion	Pre-requisite: SFT202FY Introduction to Fashion Materials Co-requisite: SFT315KD Knitwear Design Exclusion: ITC3222K Knitted Structure Design
Objectives	The subject provides the foundation knowledge on knitting techniques and fabrics through hands-on exercises on V-bed hand knitting machine, basic Circular and Warp knitting. It covers the essential elements of the formation, properties and end-uses of knitted fabrics for the production of knitwear.
Intended Learning Outcomes	Upon completion of the subject, students will be able to: (a) describe and elaborate the basic principles of knitted fabric formation; (b) define and explain the essential terms in weft/warp knitting fabrics/panels manufacture; (c) identify and compare the different knitted fabric structures and properties; (d) communicate effectively with industrial practitioners; (e) develop a foundation for further study and engage in life-long learning; and (f) identify and apply the safety and ethical practices in the industry.
Subject Synopsis/ Indicative Syllabus	**(I) Basic V-bed Hand Knitting Machine and Suitable Yarn for Knitwear** Specification, configuration and operation of V-bed hand knitting machines. Overview of the yarn types suitable for the non-jacquard fabrics and the relationship between yarn type, fabric property and fabric application. Basic and complicated flat knitting fabric structures, including ribs, plain double jersey and single jersey, lace, cable, racking, terry; fringe.

	(II) Basic Electronic Flat Knitting Machine and Suitable Yarn for Knitwear Basic specification, configuration and operation of electronic flat knitting machine Overview of the drawing tools and colour-code for elementary knitting structures. Option lines for knitting process control, including yarn carrier, stitch length and fabric take-down tension. **(III) Developing Skills for Knitted Structure** Mix and combination of yarn, fabric structure and knitting technique. Creative fabric structure design project. **(IV) Safety and Ethical Practices in the Industry** General safety and general ethical practices when operating the machines in knitwear industry.
Teaching/Learning Methodology	Laboratory work will be carried out in the knitting workshop with demonstration and guidance from lecturer/technician. Students will work on a project base and will need to submit their designed fabrics at the end for the final assessment.

Assessment Methods in Alignment with Intended Learning Outcomes

Specific assessment methods/tasks	% weighting	Intended subject learning outcomes to be assessed (Please tick as appropriate)					
		a	b	c	d	e	f
Continuous Assessment	**100%**	✓	✓	✓	✓	✓	✓
Coursework	50%	✓	✓	✓	✓	✓	✓
Individual Project	50%	✓	✓	✓	✓	✓	
Examination	**0%**						
Total	100%						

Explanation of the appropriateness of the assessment methods in assessing the intended learning outcomes:

Assignments will assess students' understanding of knitting principles and fabric structures.
Projects will assess students' manipulative skills and creativity more comprehensively.

Student Study Effort Expected

Class contact:	
▪ Laboratory	39 Hrs.
Other student study effort:	
▪ Assignments and Projects	66 Hrs.
Total student study effort	105 Hrs.

Books

Brackenbury, T. (1992), *Knitted Clothing Technology*. Clackwell Scientific Publications, Oxford.

Lee, R. (2003), *Creative machine knitting*. Guild of Master Craftsman, Lewes England.

Raz, S. (1993), *Flat knitting technology*. Universal Maschienfabrik, Westhausen.

	Spencer, D. J. (2001), *Knitting technology a comprehensive handbook and practical guide*. 3rd Edition, Woodhead publishing Ltd. Yue, K. H. (1995), *Knitting Handbooks No.7, No. 9 & 10*. The Hong Kong Polytechnic University.