

Self Assessment Report



Beaconhouse National University

**School of Visual Arts and Design
Bachelor of Design – Jewelry and Accessory**

***Prepared by: Program Team of SVAD
Presented by: Quality Assurance Department***

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Executive Summary

This report is prepared for the assessment of School of Visual Art and Design (SVAD) of Beaconhouse National University (BNU), as per requirement of Higher Education Commission (HEC). Quality Assurance Department (QA) of BNU was established in September 2005. Program Team Members worked with General Manager Quality Assurance to pursue the application of Self Assessment Manual in their respective department.

In School of Visual Art and Design (SVAD), Bachelor of Design – Jewelry & Accessory program was selected for the documentary evidence of self assessment, evaluation and improvements. The aim of this documentation is to be candid about the progress of the department and to improvise what is essential for further achievements. A commitment of respected Vice Chancellor to support Quality Assurance Department made the difference and resultantly, a cycle of assessment is about to complete.

Objectives

Following are the two main objectives of the self assessment report:

1. To be able to conceive, design and conduct small scale research project and analyze the information with the help of a parameter set by HEC
2. To identify the areas requiring improvements in order to achieve objectives through desired outcomes.

Execution

A soft and hard copy of self assessment manual was given to Dean and faculty. Quality Awareness presentation of Self Assessment Report (SAR) was arranged for the Dean and Program Team Members (PT) of the selected program. Hard copies of HEC issued 10 performas with manual with 8 criterion and 31 standards were provided to PT members to evaluate their program against defined standards. The PT members with an intimate support and follow up of QA, completed the SAR and forwarded to QA.

After reviewing SAR, QA arranged visit of Assessment Team to the selected program on June 3, 2014. GM (QA) accompanied the AT and participated in discussions with Dean and PT members and available faculty members. Date for exit meeting was fixed as June 13, 2014.

The implementation plan basing in the discussions in exit meeting have been made by In-charge Programs. They prepared it under following headings:

- a. Assessment Team finding
- b. Corrective Actions required
- c. Resources Needed

The implementation plan indicates the resources to improve the infrastructure, environment in the classes and Laboratory manuals. The recommended target dates to complete the tasks observed by Assessment Team, presented in exit meeting on June 13, 2014 and proved by Vice Chancellor have been indicated in the implementation plan.

At the completion of Self Assessment cycle, QA submitted the hard and soft copy of SAR to HEC on July 10, 2014.

General Manger (QA)

Introduction

The undergraduate degree program in Jewelry & Accessory design is a full time course, four-years in duration with a shared common first year, offered by the School of Visual Arts and Design at Beaconhouse National University. The course is based on integrating contemporary design thinking, materials and techniques with traditional sensibilities. The program also aims to develop and foster links with Pakistan's Gems and Jewelry industry and the international community at large. During the course, students develop a conceptual approach alongside a practical understanding of the materials and processes adopted by small and large jewelry artists and manufacturers. The course also develops independent and creative thinking through a series of increasingly complex design projects culminating in an exhibition of student work.

The main aim of the first year is to give the students a basic introduction to drawing, 2 dimensional and 3 dimensional designs along with knowledge of art history and is seen as a "foundation year". It is the prerequisite for advancement onto the specialized programs, of which Jewelry Design and Accessory is but one.

The design of the curriculum reflects the transition from a closely supervised skill based, taught first year, to an experimental, exploratory approach in the second year, and ultimately the final year, where the student is more self-led. The credit system and modular weightage also reflect this progression with the first year having short tightly controlled, specific modules and the final year having more complex and broader modules. The course culminates with a final major project where students demonstrate their accumulated knowledge, skills and expertise.

The second year not only provides students knowledge about basic jewelry drawing, making and material exploration, but also supplements this knowledge with courses in CAD and design theory.

The overall aim of the third year is to give students an opportunity to implement complex design skills, building upon the previous semesters, in particular working on a summer internship. Liaison with professionals in the industry is essential in developing this course.

The final year develops further integration between the taught courses. However, the emphasis is placed on the self directed project which leads them towards a graduate collection.

- Jewelry Designer
- Jewelry Artist/Studio Jeweler
- Silversmith / Goldsmith
- Accessory Designer (Fashion, Theatre, Film)
- Producer
- Retailer

- Sales/Marketing Consultants
- Gemologist
- Entrepreneur
- Design Education
- Design Consultant

Criterion 1: PROGRAM MISSION, OBJECTIVES AND OUTCOMES

INSTITUTION MISSION STATEMENT

“A truly national higher-education institution, emerging as a world-class Liberal Arts university with a merit-driven, need-based recruitment and admission policy at all levels; offering modern curricula in a range of conventional and new disciplines; while preserving the history and culture of Pakistani society; enriching the overall intellectual growth of a student through interaction and professional excellence”

Standard 1-1: The program must have documented measurable objectives that support Faculty / College and institution mission statements.

To become a leading International school of art and design studies inculcating creative ideas, professional practices and educational research current to the field.

SVAD MISSION STATEMENT

The mission of the School of visual arts and design is to build a successful career of its students. The school provides a prolific and dynamic program designed to meet individual needs of students with diverse aspirations, learning capacities, scopic regimes, artistic sensibilities and innovations.

Program Mission Statement (Jewelry & Accessory Design)

The Program aims to encourage, foster and expose the students to a more diverse art and design practice through new research and developments within academic and professional parameters. From multidisciplinary approaches to self-directed studies, students initiate and integrate assimilated knowledge from a diverse range of subjects to arrive at innovative and challenging solutions to previously explored and unexplored notions including new technologies and techniques. Students are introduced to different ways of approaching, perceiving and appreciating jewellery through studio and theory components within the course structure. Workshops, Seminars and Field visits help students to source historical and modern contexts through a critical eye. Fundamental knowledge of tools, materials and processes is complemented with development of ideas and concepts, leading to development of wearable and non-wearable portfolios, for the domestic and international market.

Program Objectives:

1. To enable the students to work systematically through a design brief to impart skills in research, conceptual development, design and fabrication for creative outcomes.
2. To give students a contextual reference in terms of design and how technological, environmental, economic, social and political issues influence the industry and the art and design world.
3. To develop linkages between academia, industry and the indigenous craft sector.
4. To train students to contribute to the community through design interventions within socio-cultural limitations.
5. Introduce students to the design process and in particular to the role research has to play in encouraging original and innovative thinking.
6. To encourage independent thinking through professional practice students are guided in the process of self-evaluation and criticism, placing their work in the broader contexts of society and with knowledge of current practitioners.
7. To gain an understanding of the basic financial aspects of entrepreneurial ventures plus marketing and sales

Strategic Plan

The first of its kind in the country, the Department of Jewelry Design at BNU is a platform for integrating contemporary design sensibilities with traditional aesthetic values. We provide a space for highly skilled craftswomen/men, designers and new entrants who aspire to become professional jewelry makers and designers.

To this end, the department follows the systems and procedures prescribed by the HEC as well as international art and design education models. Further, the department has updated its curriculum in line with the recommendations of HEC.

Program Objective's Assessment

The following table illustrates how each of the above program objectives is measured and the actions taken as a result of these measurements.

The three tools for assessments of program objectives are:

1. Employer Survey
2. Alumni Survey
3. Graduating Students Survey

Objectives	How Measured	When Measured	Improvement Identified	Improvement Made
1	Graduating Students Survey	Conclusion of four year program	Better integration of skills required between different design areas	Development of projects and close monitoring of design objectives and outcomes
2	Alumni Survey Graduating Students Survey	Within one year of graduation	Diversity of exposure to various art and design outcomes	Close supervision of research oriented projects and following of design events, fairs and competitions
3	Employer Survey	Within one year of graduation After completion of community projects	Further development of Industry oriented assignments	More frequent interaction between academia and the industry through internships and visits
4	Graduating Students Survey	Conclusion of four year program	Identification of community related projects	Introduction of community based design modules as part of coursework
5	Alumni Survey Graduating Students Survey	Within one year of graduation	More emphasis on research and analytical skills	Emphasis on research skill development through theory Courses
6.	Alumni Survey Graduating Students Survey	Conclusion of four year program	Development of communication and presentation skills	Regular critiques and presentations to peers and professionals
7	Alumni Survey Employer Survey	Within one year of graduation	Need for Market surveys and comparative costing modules	Inclusion of pricing, costing and sales modules in Jewelry Major Studios and marketing course

Table 1.1: Program Objectives Assessment

Standard 1-2: The program must have documented outcomes for graduating students. It must be demonstrated that the outcomes support the program objectives and that graduating students are capable of performing these outcomes.

Program Outcomes

B. Des. in Jewelry & accessory has the following outcomes at the end of four years full time study program:

1. Students have adequate academic base from which they can pursue a professional career in art and design
2. Through practical and theoretical input students are capable of conceptually conceiving, designing and fabricating complex pieces.
3. Students have command on research methodology; reaching a final idea, concept or product through a logical path of research and discourse
4. Students have grasp on technical drawings (working drawings) and their conversion from computer aided designs (CAD) to computer aided manufacturing (CAM)
5. Students have essential set of skills to apply their knowledge in the industry and design firms for employability.
6. Students are able to integrate their acquired skills with the traditional local market through their knowledge of indigenous crafts and an understanding of the role of the craftsmen
7. Students are able to interact efficiently with the visiting foreign artists and local artisans through craft workshops and live projects
8. Provide adequate knowledge to empower and educate others in the same sector.
9. Students are provided with sufficient awareness about ethical values and professional practices.

Program Objectives	Program Outcomes								
	1	2	3	4	5	6	7	8	9
1	X	X	X	X	X	X	X	X	X
2	X	X	X		X	X	X	X	X
3				X	X	X	X	X	X
4				X	X	X	X	X	X
5	X	X	X	X	X	X	X	x	X
6		X			X	X			X
7					X			X	X

10. Table 1.2: Outcomes versus objectives

Standard 1-3: The results of the program’s assessment and the extent to which they are used to improve the program must be documented.

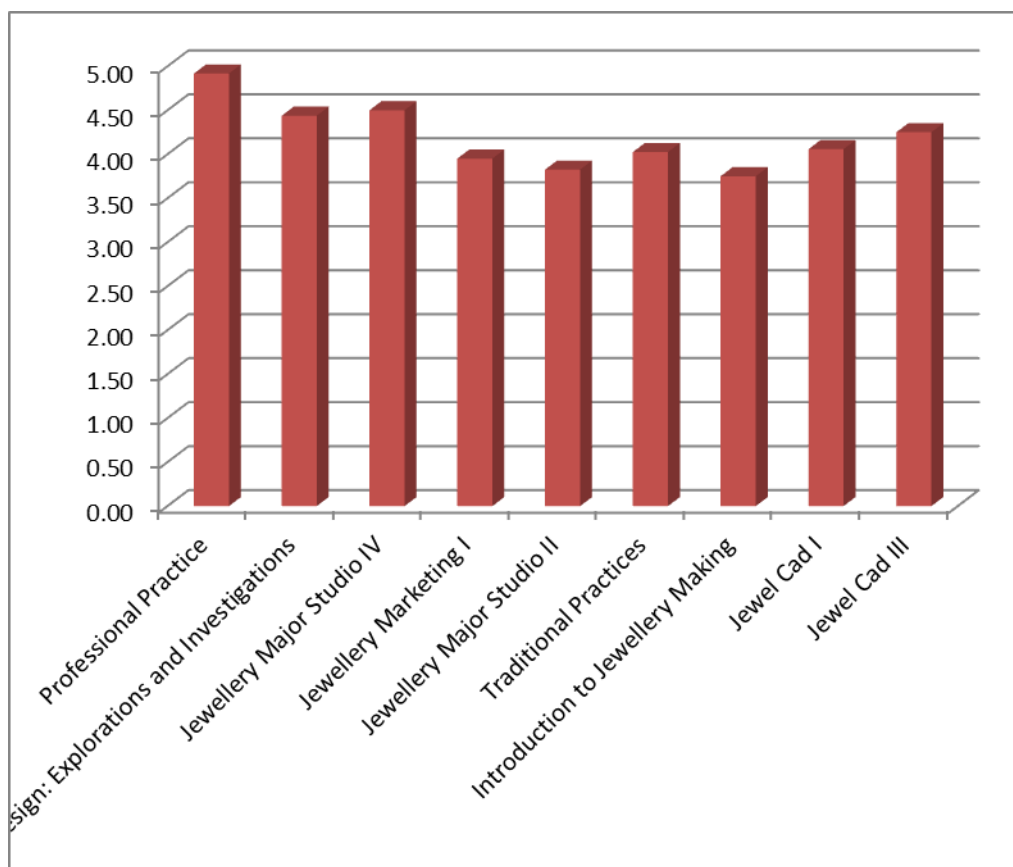
The program assessment has been done by launching HEC Performa number 1 and 10. The students of the program evaluated the courses offered in each semester.

Standard 1-4: The department must assess its overall performance periodically using quantifiable measures.

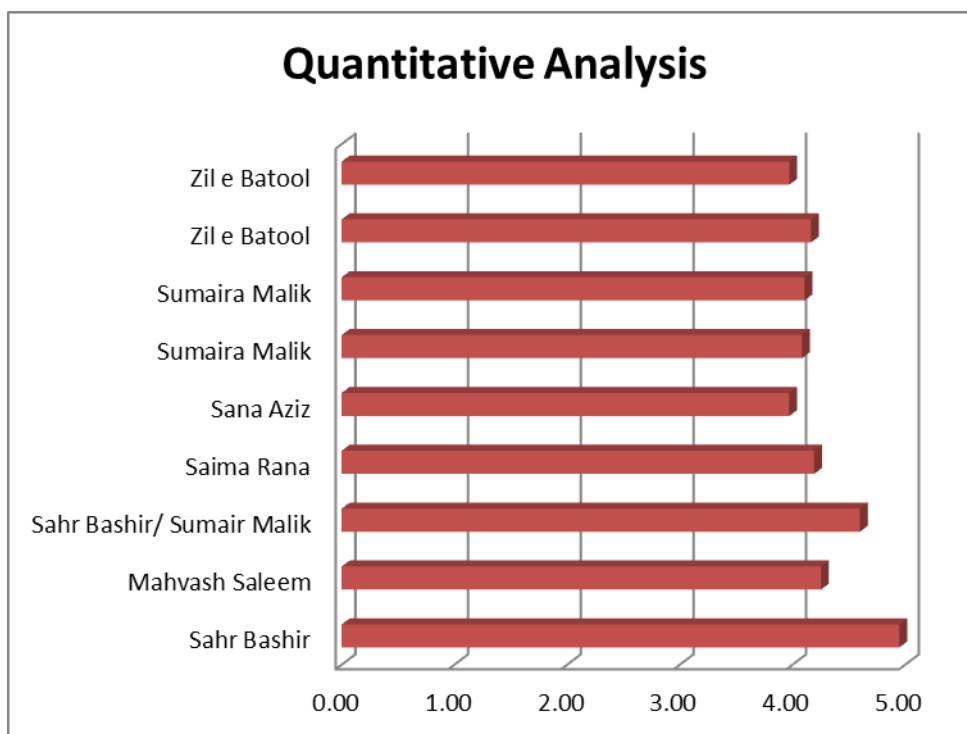
- Present students enrolment (undergraduate and graduate) during the last three years indicating percentages of honor students, student faculty ratio, average graduating grade point average per semester, average time for completing the undergraduate program and attrition rate.
- Indicate percentage of employers that are strongly satisfied with the performance of the department’s graduates. Use employer’s survey.

Session	Active	Graduated in 2008	Graduated in 2009	Graduated in 2010	Graduated in 2011	Graduated in 2012	Graduated in 2013	Expected Graduates	Left	Not Joined	Struck off	Grand Total
F2003		1										1
F2004		3	1						1			5
F2005			4						4		1	9
F2006				4		1			1			6
S2007										1		1
F2007					2							2
F2008	1						1	1	1		1	5
F2009	4				1	1	2				1	9
F2010	1											1
F2011	10											10
F2012	5											5
Grand Total	21	4	5	4	3	2	3	1	7	1	3	54

Sr.No.	Course Code	Course Title	Credit Hours	Course Evaluation
1	D-JW 484	Professional Practice	3	4.92
2	JW-2363	Design: Explorations and Investigations	3	4.44
3	D-JW 461	Jewellery Major Studio IV	9	4.50
4	D-HC 346	Jewellery Marketing I	3	3.95
5	D-JW 361	Jewellery Major Studio II	6	3.83
6	D-JW 482	Traditional Practices	3	4.03
7	D-JW 221	Introduction to Jewellery Making	3	3.75
8	D-JW 222	Jewel Cad I	2	4.06
9	D-JW 323	Jewel Cad III	2	4.25



Sr.No.	Name of Faculty	Quantitative Analysis	Max Marks
1	Sahr Bashir	4.95	5
2	Mahvash Saleem	4.25	5
3	Sahr Bashir/ Sumair Malik	4.60	5
4	Saima Rana	4.19	5
5	Sana Aziz	3.97	5
6	Sumaira Malik	4.09	5
7	Sumaira Malik	4.11	5
8	Zil e Batool	4.17	5
9	Zil e Batool	3.97	5



Criterion 2: CURRICULUM DESIGN AND ORGANIZATION

Standard 2-1: The curriculum must be consistent and supports the program's documented objectives.

Title of Degree Program

B. Des Jewelry & Accessory

Definition of credit hour:

One credit hour is 1 hour of theory lecture or 3 hours of studio work in a week.

Degree plan

Following is the list of courses from B.Des Jewelry & Accessory

Foundation Year \ Semester I

Course Code		
V-FD 119	Histories of Art, Design and Architecture I	3
V-FD 121	Visual Communication Theory I	3
V-FD 123	Art and Society	3
V-FD 104	Foundation Drawing I	3
V-FD 105	Foundation 2D Studio I	3
V-FD 108	Foundation 3D Studio I	3
V-FD 106	Techniques and Techniques of Graphic Communication	3
Total Course Credit		21

Semester II

Course Code		
V-FD 120	Histories of Art and Design II	3
V-FD 122	Visual Communication Theory II	3
V-FD 114	Foundation Drawing II	3
V-FD 115	Foundation 2D Studio II	3
V-FD 118	Foundation 3D Studio II	3
V-FD 124	Techniques and Techniques of Graphic Communication	3
Total Course Credits		18

2nd Year \ Semester III

Course Code		
D-JW 221	Intro to Jewelry & accessory making	6
D-JW 222	CAD for jewelry & accessory I	2
D-JW 2363	Design: Exploration & Investigations I	3
D-JW	Jewelry Seminar I	3
SLA-102	Islamic Studies	3
Total Course Credits		17

Semester IV

Course Code		
D-JW 261	Jewelry & accessory design Studio I- fundamentals	6
D-JW 2463	Design: Exploration & Investigations II	3
D-JW	Jewelry Seminar II	3
D-JW 322	CAD for jewelry & accessory II	2
SLA 103	Pakistan Studies	3
Total Course Credits		17

3rd Year \ Semester V

Course Code		
D-JW 361	Jewelry & accessory design Studio II – intermediate	6
D-JW 323	CAD for jewelry & accessory III	2
D-JW 482	Traditional practices	3
D-JW 346	Marketing I	3
See list	Studio Theory elective	3
Total course credits		17

Semester VI

Course Code		
D-JW381	Jewelry & accessory design Studio III – advanced	9
D-JW 483	Contemporary materials and technologies	3
D-HC 347	Marketing II	3
Total Course Credits		15

4th Year \ Semester VII

Course Code		
D-JW 461	Jewelry & accessory design Studio IV – Independent study	9
D-JW 484	Professional practices	3
See list	studio elective\ Liberal arts elective	3
Total Course Credits		15

Semester VIII

Course Code		
D-JW 481	Jewelry & accessory design Studio V – Graduate collection	12
D-HC 448	Design Portfolio	3
Total Course Credits		15
Total Credit Amount		135

Course Outlines

School / Department:	SVAD
Session:	Fall
Course Title:	Introduction to Jewelry
Credit Hours:	6
Course Level:	Undergrad
Course Code:	D-JW 221
Course Instructor:	Sumaira Malik

Catalogue Description:

The emphasis of this course is on learning basic practical skills and developing ideas. Students will learn to translate concepts into creative solutions. Principles and elements of applied design along with jewellery forming techniques, materials and forms will be introduced.

This 6 credits course will carry equal weightage of both design and manufacturing components; students will be introduced to the conceptual and historical understanding of jewelry making, and thereby apply their own theoretical and creative understanding through theme based projects, as well as grasp the technical skills pertaining to basic jewelry manufacturing, as well as application of tools to particular techniques

Course Objectives:

- To acquire theoretical and historical knowledge about the adornment of body through discussions, presentations and fieldwork.
- To develop skills with processes, techniques & materials through demonstrations and progressive exercises.
- To generate ideas particular to individual fields of study.
- To learn through review, appreciation and presentation of individual work.
- To practice and be aware of health and safety in the workplace.

Design Components

- Object studies
- Composing/2D Designing and Rendering of basic jewelry forms
- Jewelry- categories, product types, and applied materials
- Understanding the jewelry design process- from researching to conceptualization to design development. Principles and elements of design
- Identifying and applying 'concepts' to jewelry; nature, tribal, ethnic, social etc.

Manufacturing components

- Drilling, Piercing/Sawing (a)Basic (b)Advance)
- Doming/ Swaging/Tube making
- Riveting
- Texturing on Metal sheet
- Annealing, Pickling, Soldering (Hollow, Investment)
- Fold forming, forging/ raising
- Bending & Box Making

School / Department:	SVAD
Session:	Fall
Course Title:	CAD for jewelry & accessory I
Cr. Hrs.:	6
Course Level:	Undergrad
Course Code:	D-JW 222
Course Instructor:	Zil e batool

Course Introduction:

CAD for Jewelry & Accessory I lead to the Introduction and practice of Basic techniques as well as elementary tools and functions of Matrix software. It includes on 3D Scale designing, export and import in different file formats, practice to make basic jewelry forms.

Power point presentations/handouts about deign development and basic terminologies use in CAD course will be presented as per required.

Overall Aims & Course Objectives:

- Students will learn the basics of Jewelry Design Software “Matrix”
- Each content will cover the meticulous research about the 3D design by using Matrix

- Students will learn the process of manufacturing through CAM by visiting PCSIR and PGJDC
- Investigating different perceptions about jewelry including traditional and contemporary.
- Learning how to develop 2D drawings in multiple 3D perspectives.
- Research and documentation of each project with the final 3D processing.
- Submissions: PowerPoint presentation with digital prints.

Pre-requisites of Course (If any):

Intended learning outcomes of the course:

End of the course students will be evaluated according to the learning skill of each project, students should have a full practical understanding of the new tools and terminologies taught throughout the semester. Students should have acquired the basic technical and 3D perspective skill learnt while visiting CAM processing units.

Contents:

1. **Research:**

- Research methodology relevant to each project and documenting in the form of digital prints.
- Online tutorials and primary research through library and developed Matrix manual.

2. **Design:**

- 2D drawing and final rendering of each project
- Technical drawing and raw images of the 3D perspectives.

3. **3D Design:**

- Multiple digital images of each project with step of constructions.
- Practice exercise of basic tools from Curves, Surface, Transform, and Scale Toolbars.
- Learning and developing each project with sufficient learning and criteria of developing 3D product

School / Department:	SVAD
Session:	Fall
Course Title:	Design: Exploration & Investigations I
Cr. Hrs.:	6
Course Level:	Undergrad
Course Code:	D-JW 2363
Course Instructor:	Mahvish Saleem

Course Introduction:

This course will be a core studio class which will define the essential parameters for students pursuing the professional fields of design practice. Its primary focus will be to research & analyze the core principles of Design to conceive and develop integrated design solutions. The Design process will be informed and investigated through each of the following: site and space observation; discovering, recording and representing on paper; translation from a 3D prototype to digital mediums; written and narrative expression- whereby an 'object' will transcend its immediate physical nature. The evolution of designed objects and notions of user centered design and ergonomics will underpin fundamental drawing exercises and material studies.

Overall Aims & Course Objectives:

- To look at designed objects, networks and environments more critically in our everyday life
- To develop observational skills through which to investigate and understand design
- To develop drawing as a means of expression and communication of the creative process
- To develop creative problem solving through a variety of skills,
- Techniques and processes
- To become familiar with researching, investigating and evaluating a wide range of materials and their properties.
- To have an informed opinion about Design and the design process and to be able to express those opinions.

Intended learning outcomes of the course:

At the end of this course our aim is to make students understand the language of design. The Different design processes will teach them how to express their opinions through design. They will explore different possibilities to make the required design, which will help them adopt the most contented way of expressing themselves.

School / Department:	SVAD
Session:	Fall
Course Title:	Jewelry & accessory design Studio I- fundamentals
Cr. Hrs.:	6
Course Level:	Undergrad
Course Code:	D-JW 261
Course Instructor:	Sumaira Malik

Course Introduction:

This studio based course forms a foundation for training students in design studies and technical skills. Simple creative exercises are conducted for producing initial design concepts to specific briefs. Studies in material, product, types, basic techniques, weights and measurements and workshop tools and equipment form major components of the course.

Course Objectives:

- The aim of this module is to develop drawing as a “thinking tool”, enabling students to articulate their ideas, resolve aesthetic issues and communicate designs through a variety of drawing media.
- Introduce students to the design process and in particular to the role research has to play in encouraging original and innovative thinking.
- To introduce students to research methodology; reaching a final idea, concept or product through a logical path of research.

Course Contents:

The Design Process

- Research and analysis
- Identifying and applying concepts
- Interpreting symbols and messages through jewellery
- Components of Design process - Research & Analysis, Conceptual Development, Design Development, Presentation
- Principles of jewelry design – Jewelry weight, bulk, balance, size, flexibility and rigidity, limitations & possibilities of material, purpose, characteristics of wearer
- Elements of jewelry design – Linear forms, geometric, textured, shape, mass, volume, closed and open forms, curves, direction, occupied space
- Translations of designs- Literal (replications of objects as is), Patterns, Stylized, Conceptual/Abstract, Thematic.

Manufacturing

- Introduction to precious metals
- Weight and Measurements
- Melting, alloying and ingot making
- Texturing on metal sheets
- Wire drawing and shaping(square and round)
- Piercing and sawing (advance)
- Soldering (hollow, investment)
- Bending and Box making

Format/Methodology:

Studio/Lecture/seminar/Field Trips-visits etc (according to project schedule)

A range of teaching methods will include critical discussions, demonstrations, group work, field visits to markets for relevant material/ tools purchasing, presentations and concentrated practice at the bench.

School / Department:	SVAD
Session:	Spring
Course Title:	Design: Exploration & Investigations II
Cr. Hrs.:	3
Course Level:	Undergrad
Course Code:	D-JW 2463
Course Instructor:	Mahvish Saleem

Course Introduction:

This course will be a *core* studio class which will define the essential parameters for students pursuing the professional fields of design practice. Its primary focus will be to research & analyze the core principles of Design to conceive and develop integrated design solutions. The Design process will be informed and investigated through each of the following: site and space observation; discovering, recording and representing on paper; translation from a 3D prototype to digital mediums; written and narrative expression- whereby an '*object*' will transcend its immediate physical nature. The evolution of designed objects and notions of user centered design and ergonomics will underpin fundamental drawing exercises and material studies.

Course Objectives:

- To look at designed objects, networks and environments more critically in our everyday life
- To develop observational skills through which to investigate and understand design

- To develop drawing as a means of expression and communication of the creative process
- To develop creative problem solving through a variety of skills, techniques and processes
- To become familiar with researching, investigating and evaluating a wide range of materials and their properties.
- To have an informed opinion about Design and the design process and to be able to express those opinions.

Course Contents: Research, Drawing, Observation, Recording & Documenting from human form to architectural space and environment

- Artifacts are the furniture of life
- Playing God?
- Identity' portrait

The body as landscape

- More than something to sit on.....
- The spaces we inhabit
- Made to measure
- The 'outside world

Format/Methodology:

Studio/Lecture/seminar/Field Trips-visits etc (according to project schedule)

School / Department:	SVAD
Session:	Spring
Course Title:	CAD for jewelry & accessory II
Cr. Hrs.:	2
Course Level:	Undergrad
Course Code:	D-JW 322
Course Instructor:	Zil e batool

Course Introduction:

CAD for Jewelry & Accessory II leads to the Intermediate level of practice tools and functions of Matrix software. It includes on scale 3D designing, export and import in different file formats, practice to different jewelry forms.

Power point presentations /handouts about deign development and basic terminologies use in CAD course will be presented as per required.

Overall Aims & Course Objectives:

Students will learn the Intermediate level of tools by learning Jewelry Design Software “Matrix”.

Each content will cover the meticulous research about the 3D design by using Matrix
Students will learn the process of manufacturing through CAM by visiting PCSIR and PGJDC

Investigating different perceptions about jewelry including traditional and contemporary
Learning how to develop 2D drawings in multiple 3D perspectives and execution of CAD

Research and documentation of each project with the final 3D processing

The Final outcome in result of CAM

Submissions: PowerPoint presentation with digital prints.

Pre-requisites of Course (If any):

Intended learning outcomes of the course:

End of the course students will be evaluated according to the learning skill of each project, students should have a full practical understanding of intermediate level of tools and terminologies taught throughout the semester. Students should have acquired the basic technical and 3D perspective skill learnt while visiting CAM processing units.

Contents:

1. Research:

Research methodology relevant to each project and documenting in the form of digital prints

Online tutorials and primary research through library and developed Matrix manual

2. Design:

2D drawing and final rendering of each project

Technical drawing and raw images of the 3D perspectives

Technical understanding of 3D prototype by assessing successful design execution

3. 3D Design:

Multiple digital images of each project with step of constructions

Practice exercise of Curves, Surface, Transform, Scale and 3D rendering by using basic and advance Toolbars

Learning and developing each project with sufficient learning and criteria of developing

3D product and its execution by CAM.

3D prototype by CAM processed final pieces

School / Department:	SVAD
Session:	Fall
Course Title:	Jewelry & accessory design Studio II- fundamentals
Cr. Hrs.:	6
Course Level:	Undergrad
Course Code:	D-JW 261
Course Instructor:	Sana Aziz

Course Introduction:

This module will cover advanced manufacturing techniques like Wax Carving, Casting, Chain Making and Stamping. By the end of the course, the students are expected to have acquired, a complete knowledge of practical skills like handling the materials, dealing with equipments and attaining creative solutions in fabricating designs.

Overall Aims & Course Objectives:

- Studying the form of the body, taking into account both wearable and non-wearable work.
- Investigating different perceptions about jewellery including traditional and current.
- Developing visual research skills through detailed study and forming a record of the information collected.
- Generating ideas and gaining experience in the design skill and process.
- Fabricating these design solutions into 3D forms by exploring a variety of materials and processes.
- Documentation of processes and the final outcome.
- Reviewing the final product

Intended learning outcomes of the course:

By the end of the course, the students should be able have a full understanding about the three new techniques that they learn throughout the semester. They should be able to express their ideas and thoughts creatively through these techniques.

Contents

- Rendering & Coloring stones
- Rendering of both simple and compound metal forms
- Practice drawing and rendering of colored and transparent stone, faceted, cabochons and pearls.
- Rendering these stones in different settings
- Technical drawing and rendering of a designed form/single piece

Manufacturing:

- Fabrication of rendered designs
- Fabricating rendered designs into a 3D form through the Wax Carving technique
- Experimenting with different types of casting techniques and making rubber moulds
- Learning 2 or 3 different types of Chain Making techniques and presenting the final pieces.
- Learning Stamping technique
- Using the techniques learned in the semester, in their final exam project

School / Department:	SVAD
Session:	Fall
Course Title:	CAD for jewelry & accessory III
Cr. Hrs.:	2
Course Level:	Undergrad
Course Code:	D-JW 323
Course Instructor:	Zil e Batool

Course Introduction:

Jewel CAD module III leads to the practice of advance tools and terminologies of Matrix software. It includes processing of the design for the wax modeling, export and import in different file formats, estimation of the design, product making and cost reduction. Learning of how to advertise the product through catalogues and branding.

Power point presentations /handouts about deign development and basic terminologies use in CAD/CAM course will be presented as per required

Overall Aims & Course Objectives:

- Students will learn the advance level of tools by learning Jewelry Design Software “Matrix”

- Each content will cover the meticulous research about the 3D design by using Matrix
- Students will learn the process of manufacturing through CAM by visiting PCSIR and PGJDC
- Investigating different perceptions about jewellery including traditional and contemporary
- Learning how to develop 2D drawings in multiple 3D perspectives and execution of CAD
- Research and documentation of each project with the final 3D processing
- The Final outcome in result of CAM
- Submissions: PowerPoint presentation with digital prints and CAM processed prototypes to make mass production out of one piece.

Pre-requisites of Course (If any):

Intended learning outcomes of the course:

End of the course students will be evaluated according to the learning skill of each project, students should have a full practical understanding of advance tools and terminologies taught throughout the semester. Students should have acquired the maximum technical and 3D perspective skill learnt while processing and visiting CAM processing units.

Contents:

1. **Research:**

- Research methodology relevant to each project and documenting in the form of digital prints
- Online tutorials and primary research through library and developed Matrix manual

2. **Design:**

- 2D drawing and final rendering of each project
- Technical drawing and raw images of the 3D perspectives
- Technical understanding of 3D prototype by assessing successful design execution

3. **3D Design:**

- Multiple digital images of each project with step of constructions
- Practice exercise of Curves, Surface, Transform, Scale and 3D rendering by using advance Toolbars
- Learning and developing each project with sufficient learning and criteria of developing 3D product and its execution by CAM.
- 3D prototype by CAM processed final pieces

School / Department: SVAD
Session: Fall
Course Title: Traditional Practices
Cr. Hrs.: 3
Course Level: Undergrad
Course Code: D-JW 482
Course Instructor: Sumaira Malik

Course Outline

The translations of traditional styles and impeccable skills in the techniques of granulation and filigree, chasing, repousse and stamping dates back to decades from its earliest conception as a distinguished and prestigious craft in goldsmithing. From Etruscans to Greek, to Medieval Europe to India, these techniques have absorbed, integrated and retained it continuum to present day cultures in a 'revitalized and contemporary' jewellery form.

Students undertaking this course will be introduced to traditional tools to acquire skills pertaining to these ancient techniques. Concentrated bench practice will be supplemented through visual demonstrations and lectures, theme-based projects and visits to historical sites whereby students will experiment on their individual approach to this respectable craft to suit their mode of expression and develop a portfolio of market quality pieces.

Course Contents

Filigree & Granulation
Chasing & Repousse
Stamping
Etching

Course Outcomes

- Students are able to learn traditional practices in depth
 - Learn advance level of soldering and intricate fabrication of pieces
 - The course encourage students to use traditional techniques in their own mode of expression
-

School / Department: SVAD
Session: Fall
Course Title: Marketing I
Cr. Hrs.: 3
Course Level: Undergrad
Course Code: D-HC 346
Course Instructor: Saima Rana

Course Introduction:

To develop an understanding of marketing as a major tool in today's highly competitive apparel and home furnishing industry.

Course Objectives:

Upon successful completion of this course, the students will be able to:

- Learn the fundamentals of marketing theory and consumer demands, with emphasis on how these apply to the merchandising and retailing of apparel and home furnishing.
- The course will explore how local and international apparel producers, retailers and home furnishing companies merchandise and market their products.
- Students will engage in analyzing merchandising plans, store images, promotions and retail management approaches.
- This course will also help students identify career plans and more significantly entrepreneurship.

Course contents

1. What is marketing?

- Definition
- Importance of marketing
- Product vs. Market orientation
- Types of marketing

2. Customer Value and Satisfaction

- Defining customer value and satisfaction
- The need for customer retention and the cost of lost customer
- Customer relationship marketing

3. Marketing Research

- Definition
- Process of marketing research
- Uses of marketing research

- Methods and sources of marketing research
- Sampling methods
- Benefits and limitations

4. Strategic Market planning

- Factors influencing marketing strategy
- Competitive analysis and competitive marketing strategies
- Market strategies for growth

5. Marketing Segmentation

- Market segments
- Types of segmentation
- Uses of segmentation

6. Marketing Objectives

- Types of objectives

7. Marketing Mix (4 P's)

- Introduction to 4 P's
- Elements of marketing mix
- Choice of marketing mix

Product

- Stages of a Product Life Cycle
- Extension strategies
- Use of product life cycle
- New Product Development
- Product Launch and withdrawal
- Product Range
- Branding

Managing Service businesses and ancillary services

- Types of service industries
- Definition of service
- Categories of offers
- Characteristics of services and their marketing implications
- Managing product support services

Price

- Pricing objectives
- Price sensitivity
- Pricing strategies
- Factors effecting pricing decisions

Promotion

- Above the line and below the line promotion
- Objectives of promotion
- Types of advertising
- Choice of advertising media
- Advertising and society
- Corporate advertising
- Types of BTL promotion

Place

- Channels of distribution
- Intermediaries
- The choice of distribution channel
- Types of retailing
- Direct marketing

8. International marketing

- Importance of international marketing
- Why go international?
- Why overseas market if different
- Methods of entering overseas markets

9. Entrepreneurship

Analyzing the marketing environment

- The strategic planning process
- External environment analysis
- Internal environment analysis

These 9 modules will be taught over a 16 weeks programme

Format/Methodology: Lecture, case studies, guest speakers and field trips

School / Department: SVAD
Session: Spring
Course Title: Jewelry & accessory design Studio III- fundamentals
Cr. Hrs.: 9
Course Level: Undergrad
Course Code: D-JW 381
Course Instructor: Sana Aziz

Catalogue Description:

The formulation of a personal vision and self directed work pattern will be emphasized at this stage. Intensive training in creating pieces for specific markets, themes, materials and price ranges with advanced clients presentations and product samplings will form the major component. Students will be given exercise to develop collections for identified segments, workshop organization and management, productivity, efficiency and quality control for international markets.

Course Objectives:

- Evaluate the body as a format for wearable and non-wearable work.
- Investigate traditional and current perceptions of jewellery and body adornment.
- Gain experience and skill in the design process through application on jewellery form.
- Develop visual research skills through detailed studies and recordings of various solutions to projects.
- Generate ideas and realize as finished product.
- Translate investigations into 3D forms by exploring a variety of materials and processes.
- Document processes, ideas and material knowledge.
- Reflect, analyze, discuss and review process and finished piece.

Course Contents:

Design

Rendering & Coloring stones

- Drawing faceted stones (colorless, colored), cabochons (transparent & opaque), pearls (round, symmetrical and baroque), phenomenal stones
- Rendering Stones in different settings- pave, bezel and prongs + as single product and suite.
- Renderings of all above types in 3 stages: graphite pencil, colored pencils & watercolors
- Designing for single pieces, theme collections (creative designing) and suites.

Manufacturing

Fabrication for single pieces, collections and suites in a) metal b) studded

- Fabricating basic bezels, fancy bezels, pave & prong setting, stone setting in mix media (alternative)
- Findings (Conventional and unconventional)

Format/Methodology:

Studio/Lecture/seminar/Field Trips-visits etc (according to project schedule)

A range of teaching methods will include critical discussions, demonstrations, group work, field visits to markets for stones/ tools purchasing, presentations and concentrated practice at the bench.

School / Department:	SVAD
Session:	Spring
Course Title:	Contemporary Materials & Technology
Cr. Hrs.:	3
Course Level:	Undergrad
Course Code:	D-JW 483
Course Instructor:	Sahr Bashir

Catalogue Description:

This course focuses on exploring the unconventional and the alternative through the integration of contemporary mediums, technologies and theories. References to other art forms & disciplines provide a departure point for exploration within the realms of scale, color, light, sound, form and alternative materials.

Aims & Objectives

This course is based on four cross-disciplinary modules through which students will be stepping across the boundaries of jewelry to integrate shared ideas, mediums and methodologies which lie within the disciplines of fiber, visual arts & new media, visual communication design and architecture & environment studies.

Each module is designed to interlink two disciplines through a shared outcome in the form of new thoughts, alternative processes or the use of new materials.

Although primarily a studio based course, seminars and lectures by professionals from diverse backgrounds who are exploring alternative paths and practices will be arranged alongside to clarify emerging concepts

The course

Intended Outcomes:

- To encourage collaborative study between different departments
- To enable students to view their ongoing studies bearing in mind a new set of criteria.
- To explore new materials and technologies and adopt them appropriately to outcomes
- To approach jewelry design with a set of fresh approach
- To be equipped with an insight into design that is thoughtful and critical through experimentation and reiteration.
- To enable students to answer questions of production and construction with new media in the study and construction of jewelry.

Format/Methodology:

Studio/Lecture/seminar/Field Trips-visits etc (according to project schedule)

School / Department:	SVAD
Session:	Fall
Course Title:	Jewelry & accessory design Studio IV- Independent Study
Cr. Hrs.:	9
Course Level:	Undergrad
Course Code:	D-JW 461
Course Instructor:	Sahr Bashir

Course Introduction:

Students are given the freedom to express their individual identity and creative potential through self-directed research leading to customized design outcomes. Students may focus on previously explored areas specific to their interest and explore them through a multidisciplinary approach to create a body of work under a selected topic.

Overall Aims & Course Objectives:

- To show an individual approach towards completion of a self directed study according to professional guidelines
- To develop appropriate and essential skills in all areas of the design process: research, concept, design development, sampling, fabrication, presentation

Pre-requisites of Course (If any):

Jewelry & Accessory Design Studio III; Advanced

Intended learning outcomes of the course:

- A minimum of four fully resolved pieces developed under the above mode of study with close supervision of the tutor and advisors.
- Documentation of the design development accompanied by complete technical sketches, sketch books and process journals.
- At least two designs need to be presented in complete rendered form digitally through CAD/Matrix
- A comprehensive written report demonstrating evidence of an understanding of Levels 1- 7 with a complete bibliography and acknowledgement of visual/other sources of reference.
- Appropriate display and presentation of all of the above in the designated space.
- A verbal presentation to the selected panel of jurors

Contents:

- Topic Selection & Brief
- Research & Analysis
- Conceptual Development
- Design Development
- Sampling & Model Making
- Fabrication
- Representation: Report, Display, Critique

School / Department:	SVAD
Session:	Fall
Course Title:	Professional Practice
Cr. Hrs.:	3
Course Level:	Undergrad
Course Code:	D-JW 484
Course Instructor:	Sahr Bashir

Course Introduction

Students work with an organization or industry in order to work alongside professionals in the field of Jewelry & Accessory Design. They will be supervised by professionals from within the organization as well as members of faculty. Relevant topics concerning the jewelry design profession such as copyright, design ethics, exhibiting & photographing work, public and private commissions will be explored.

It is expected that students will complete their internship over the summer term in an intensive block of 6 weeks by working with a professional/industry with reference to their area of interest. This will be supervised by close collaboration between the professional colleague in the organization and related university faculty.

Overall Aims & Course Objectives:

Pre-requisites of Course (If any): A six weeks internship in a supervised capacity. . All expectations of this subject are to be complete before the fall session 2012.

Intended learning outcomes of the course:

This course will forge students report writing capability/data organizing before the final report

Contents:

Weekly Teaching Plan:

Week 1-2	How to assess your internship
Week 3	writing an introduction
Week 4	doing your research
Week 5-6	locating the required area of research and analyzing it
Week 7-8	writing down about the context of your report
Week 9	linking the research to the context of your report
Week 10	writing up the conclusion of the report and editing it
Week 11	making a short, 'to the point' presentation
Week 12-14	working on the presentation

Teaching & Learning Methods:

Assessment and Evaluation:

A Proposal

A Paper (minimum 2000 words)

- Reason for particular Placement.
- Brief description of the context.
- Description of your duties.
- Findings.
- Diary of activities.
- Professional's report

A Presentation (approx. 30 minutes)

- Over view of your paper.
- Visual support materials.

Recommended Readings:

According to Individual Placements and Research Topics

School / Department: SVAD
Session: Spring
Course Title: Jewelry & accessory design
Studio V- Graduate Collection
Cr. Hrs.: 12
Course Level: Undergrad
Course Code: D-JW 481
Course Instructor: Sahr Bashir

Catalogue Description:

An individual portfolio will be developed under close supervision of tutors and a panel of advisors for the graduate exhibition. Students will undertake writing a proposal focusing on a specific area of interest and develop a body of work on a professional level.

Course Contents:

Level 1 | Topic Selection & Brief

A Design Brief is a statement of Intent containing basic structured information essential to defining the expectations of the project. The brief should be an outline of the design process and cover aspects like the concept, context, cost, materials, scale, production process, scale, end user, function, display and timeline.

Level 2 | Research & Analysis

Research is the process through which a thorough and detailed investigative study into all aspects of the chosen area of interest is conducted. This may be presented through visual as well as written documentation. Analysis will include retaining the relevant aspects after filtering through all the information gathered to ensure a focused approach.

Level 3 | Conceptual Development

The concept clearly defines the inspiration and theme behind the collection. These may range from the organic to the abstract, sculptural, narrative, geometric, symbolic, cultural, humorous, social, or thought provoking. Exploration of new ideas and directions leading to creative but practical design solutions is encouraged.

Level 4 | Design Development

Design Development is the process through which identifying the questions and finding solutions leads to a crystallization of the concepts explored. Appropriate decisions are taken regarding all aspects of the piece/s like shape, form, colours, texture, function, materials, processes, cost etc.

Level 5 | Sampling & Model Making

This stage is directed at seeking clarification to aesthetic and technical questions encountered during the design development process. Test pieces and construction of a three dimensional model will attempt to further resolve any unidentified problems, especially technical issues, regarding the final piece/s.

Level 6 | Fabrication

Fabrication involves the physical realization of a design/s through learned skills. A systematic step-by-step approach will help eliminate mistakes which may be costly in terms of time and resources.

Level 7 | Representation: Report, Display, Critique

Final presentation of the collection on a 1:1 scale along with appropriate documentation in the form of a report containing specific information regarding title of pieces, dimensions, materials, process preview, selected elements of research and bibliography will be the requirement for a completed project submission.

Format/Methodology:

Studio/Lecture/seminar/Field Trips-visits etc (according to project schedule)

School / Department:	SVAD
Session:	Spring
Course Title:	Design Portfolio
Cr. Hrs.:	3
Course Level:	Undergrad
Course Code:	D-JW 448
Course Instructor:	Saima Rana

Catalogue Description:

This 16 week course will help students enter the “real world”. It’s structured around equipping students on skills of “self selling and presenting their portfolios”. The course is aimed at equipping them select “perfect fit” careers, find better jobs and become professional and street smart. It will give students a realistic picture of their future professional lives and provides tools on coping with it.

Course Objectives:

Upon successful completion of this course, the students will be able to:

- Have the necessary professional communication skills. These include a wide array of tools like making CV's and presentations, preparing for job tests and interviews and the necessary computer skills to produce these.
- Knowledge about the local and international markets and their operations.
- Career planning, channels for job search, basics of entrepreneurship.
- The course will also assist students to be able to present their portfolios in various modern formats like USB's, digital photography, websites, CD's etc.
- Work ethics will also be touched upon to enable them to have long term and fruitful relations with employers.

Semester	No. of Courses	Category (Credit Hours)				Total Credit hrs/Semester
		Studio		Theory		
		Core/Pre-Requisite for Jewelry	Elective	Core/ Pre-Requisite for Jewelry	Elective	
1	7	12		9		21
2	6	12		6		18
3	5	11		6		17
4	5	11		6		17
5	5	11		3	3	17
6	3	12		3		15
7	3	9	3	3		15
8	2	12		3		15

Table 4.3: Curriculum course requirements

Standard 2-1: The curriculum must be consistent and supports the program's documented objectives.

- Describe how the program content (courses) meets the program objectives all course content (See Standard 2-1) is designed to meet the program objectives as stated in Standard 1-1
- Complete the matrix shown in Table 4.4 linking courses to program outcomes. List the courses and tick against relevant outcomes.

Courses / Groups of Course	Program Outcomes								
	1	2	3	4	5	6	7	8	9
Intro to Jewelry & Accessory making		X	X			X	X		
Design exploration & investigation I,II	X	X	X		X	X			
CAD for Jewelry and Accessory I,II,III	X	X		X	X	X	X	X	X
Jewelry Major I, II, III, IV, & V, Allied Thesis Research	X	X	X	X	X	X	X	X	X
Traditional Practices		X	X			X	X	X	
Jewelry Marketing I & II	X		X	X	X	X	X	X	X
T. Seminar I & II, Contemporary Seminar	X	X	X	X	X	X	X	X	X
Contemporary Materials and Technologies	X	X	X			X	X	X	X
Design Portfolio	X	X		X		X		X	
Professional Practice	X	X	X	X		X	X	X	X
Drawing Electives	X	X				X		X	
Theory Electives	X	X				X		X	

Table 4.4: Courses versus program outcomes

Standard 2-2: Theoretical background, problems analysis and solution design must be stressed within the program's core material.

Indicate which courses contain a significant portion (more than 30%) of the elements in standard

Elements	Courses
Theoretical background	Jewelry Seminar I & II, Marketing I & II, Islamic Studies, Pakistan Studies, Professional Practice
Problem analysis	Intro to Jewelry & Accessory making, Design Exploration & Investigation I & II, Major Studio I, II, III, IV & V, Contemporary Materials & Technologies, Traditional Practices
Solution design	Introduction to Jewelry & Accessory making, Major Studio I, II, III, IV & V, Cad for Jewelry & Accessory I,II,III, Design Portfolio

Table 4.5: Standard 2-2 requirement

Standard 2-3: The curriculum must satisfy the core requirements for the program, as specified by the respective accreditation body.

Please Refer to Standard 2-1 and Scheme of Study Diagram

Standard 2-4: The curriculum must satisfy the major requirements for the program as specified by HEC, the respective accreditation body / councils.

Please Refer to Standard 2-1 and Scheme of Study Diagram

Standard 2-5: The curriculum must satisfy general education, arts, and professional and other discipline requirements for the program, as specified by the respective accreditation body / council.

Please Refer to Standard 2-1 and Scheme of Study Diagram

Standard 2-6: Information technology component of the curriculum must be integrated throughout the program.

Please Refer to Standard 2-1 and Scheme of Study Diagram

Standard 2-7: Oral and written communication skills of the student must be developed and applied in the program.

Please Refer to Standard 2-1 and Scheme of Study Diagram

Criterion 3: Laboratory and Computing Facilities

The Department of Jewelry & Accessory Design integrate design skills with hands on skills for all studio courses and facilitate the students and faculty with technical knowledge by offering the following labs on campus.

1. Soldering and Casting Lab

Equipment: This lab includes soldering stations (gas fired torches), casting machine, Furnaces, ultrasonic machine, tumbler machine

Courses offered: Used for all Jewelry Major Studios, Traditional Practices, Contemporary Materials & Technologies

2. Machine Lab

Equipment: This lab contains sheet rolling mill, wire rolling mill, flex shafts, drill machines, grinder, polisher, heavy anvils, vulcaniser, wax injecting unit.

Courses offered: Used for all Jewelry Major Studios, Traditional Practices, Contemporary Materials & Technologies

Standard 3-1: Laboratory manuals/ documentation/ instructions for experiments must be available and readily accessible to faculty and students.

The above mentioned labs facilitate the students in accomplishing lab exercises and projects relating to the course offered in Jewelry & Accessory Design. Laboratory manuals and important safety instructions are given to the students at the beginning of the course.

SAMPLE HANDOUT 1

DEPARTMENT OF JEWELRY & ACCESSORY DESIGN

Beaconhouse National University

A GLOSSARY OF JEWELLERY TERMS AND TECHNIQUES

Techniques and concept go hand in hand or vice versa. Like any other trade, jewellery making has its own vocabulary- one which is rich in tradition and meanings. It is encouraged that students aspiring to pursue professional careers in jewellery learn these essential terms in order to develop an in-depth knowledge of Jewelry fabrication and Design.

Piercing and cutting

Using a saw blade to cut metal with accuracy and efficiency.

Filing

Removes material by pushing a cutting face over the surface of the metal. It is used to define forms cut by piercing.

Drilling

To make holes to access a predefined shape for cutting, riveting and to allow a piece to be hung.

Fretwork

The term used to describe perforations in sheet metal that form a pattern of positive and negative spaces.

Doming/swaging

These are simple processes for forming metal into specific shapes like domes, curves and channels.

Drawing wire and tube

This is done by 'drawing' or pulling the metal wire through a hole in the drawplate to make it thinner, to alter its shape or make tubes.

Forging and raising

Techniques to reshape the metal with controlled force, using different hammer faces and surfaces.

Fold forming

The term used to describe any form that has a fold in it, although in this case a folded sheet is forged to create extravagant three-dimensional, curvaceous, helix forms.

Riveting

A simple means of cold joining two or more pieces by passing solid metal pegs or tubing through both pieces and spreading the ends to secure them

Annealing and pickling

Metal is heated to a certain specific temperature to make it more malleable through a process called annealing. The metal is then either air cooled or quenched in water before it is pickled, a process that uses a chemical solution to remove the black oxide layer that results from heating.

Soldering

The heating of two metals with a more fusible alloy, called a solder, binding them together.

Buffing

The final stage of creating high polish, in which fine abrasives are rubbed against metal to smooth away minor surface irregularities.

Chasing & Repousse

A technique in which steel tools (punches) are used to decorate and/or texture or emboss a surface. In chasing, tools are hammered into the front of the work, while for repousse, the sheet is worked from the front and the back.

Fusing

The technique of joining metals by melting them together.

Ingot

A massive unit of metal typically cast as the first step in creating sheet and wire of a more usable size.

Investment

A plaster that contains cristobalite to allow it to remain solid at high temperatures. It is used to make moulds in lost wax casting.

Karat

A proportional unit used to describe the purity of gold alloys.

Carat

A unit of weight, used in measuring gemstones.

Lost wax casting

A process through which a wax replica is encased in a mould that is subsequently cured, emptied & refilled with metal.

Patination

Coloring on the surface of the metals.

Granulation

A traditional technique of using grains or balls to create or complement a pattern.

Etching

The technique of using acid to corrode metal in a desired pattern.

Engraving

Process of making marks on metal by cutting away material using sharp steel tools called gravers, to achieve textures & patterns on metal.

Anodizing

The effect or colors achieved on a metal, through chemical solutions and electrical currents passed through it, to build up layers of transparent oxides on metal.

Besides the above jewellery terms, students are expected to have a broad understanding of terminology related to the basic elements and principles of design, art movements, art history and contemporary art.

SAMPLE HANDOUT 2**DEPARTMENT OF JEWELRY & ACCESSORY DESIGN****Beaconhouse National University**

Technical Notes

Melting pts.

24 K = 1063 C

22 K = 980 C

Pure Silver = 961 C

Sterling silver = 893 C ; composition = Ag 92.5 , Cu 7.5

24k gold = 100 percent

22k // = 91.6 //

18 // = 75 //

- solder ; hard , medium , soft
- Alloying metals ; Ag , Cu , Zn , Ni , Pd
- Brass ; Cu (60-70 percent) + Zn (30-40 percent)
- Soldering torch : Fuel ; acetylene , natural gas

Weights & Measurements

Troy

1 oz = 31.1 gms

penny weight (dwt)

Metric

1 gm = 1000 mg

1 inch = 2.54 cm

20dwt = 1 oz = 31.1 gms

Melting and Alloying

To achieve ;

- Strength
- Hardness
- Color
- Weight
- Cost

Wire drawing

- Melting
- Ingot
- Hammering
- Drawing
- Annealing
- MS sheets
- Draw plates ; hard steel , tungsten carbide , diamond drawing bits

Cutting

Scissors

Shears

Snips

Lever / fulcrum

Drilling

Hand drill , Bow drill , Bench drill , flex shaft
Burr / roughness---de-burring

Bending

- 1- controlled use of fingers & pliers
- 2- hammers – wooden & rawhide
- 3- limited use of steel hammers
- 4- annealing as required

Fold forming

Limitation ; to reproduce similar objects is not possible

Soldering is not used

Forging

Controlled hammering

Cross peen , firm stand

To remove silver sulphide

- Table salt
- Baking soda
- Liquid soap
- Mix ¼ cup of each to gallon of water

Rivets

Cold joining of metals and other materials; plastics , woods

Sea shells enameled , soft stones

Joining two or more pieces by drilling a hole and securing both ends by hammering

Tube rivets

Tube pieces are used instead of solid wire / rod

Flush rivets/invisible rivets

Projecting & cluttered rivets

Soldering

Joining with heat , solder ,& flux

Silver solder; pure silver + copper+ Zinc

Hard , medium , easy

Important points

Proper joint fitting

Thorough clean joint

Application of flux

Uniform heat

Suitable size of solder

Pickling

For silver ;10 % sulfuric acid

For gold ; 5% nitric acid

Always use brass tongs instead of steel tongs

Degreasing

Ultrasonic cleaning
Pressure steam cleaning
Hot air drying
Electro plating
Anode + ; cathode –
Chemical solution

Ultrasonic equipment

Alkaline solution ,soap sodium carbonate
Sound waves are used in us cleaning
Water drop test is used for degreasing
Pressurize steam 40 psi
Water mark
For drying ; centrifugal hot air blow

Plating

- 1- Container
Inert (material of the container should not react with chemicals)
 - 2- Rectifire AC to DC
 - 3- Chemicals ; silver chemical , gold chemical
Gold plating 2 micron
- Time
Voltage
Concentration
Temperature
Aqua regia (for dissolving metals)
HCL-3 parts ;NHO3 – 1 part

Practical Demos

- i. Melting of silver
- ii. Ingot making
- iii. Sheet rolling
- iv. Wire drawing
- v. Exposure to different processes in workshop(Ruby jeweler)
- vi. Completion of 1st project based on motifs using brass sheet 1.5"x 2"
- vii. Project 2 based on geometrical shapes (piercing & sawing)
- viii. Individual exercises for Riviting, Soldering, annealing, Pickling,
- ix. Project 3 ; piercing , sawing, scoring, bending(Alphabets- Initials)
- x. Project 4 ; band- material, copper/brass; thickness, 19/20 SWG; Width, 7-
mm; Size, any finger size; Finish,4 textures

SAMPLE HANDOUT 3

DEPARTMENT OF JEWELRY & ACCESSORY DESIGN

Beaconhouse National University

TOOLS/ MATERIALS FOR STUDIO CLASSES

Basic Tool Kit (available from Technical assistant)

A basic toolkit will be issued out to you at the beginning of the studio class. This includes:

Saw Frame
Dividers
Bow Drill
Steel Ruler 150mm
Center punch
Bench Hammer
Scribe
Pin vise
2 pliers – round nose and flat nose
2 large files – half round and flat
Set of needle files(x10)
Tweezers(x2)
Shears
Bee Wax
Safety glasses
Bench Brush

Jewelry studio carries stock of base metals like copper and brass sheets and wires. Additional materials & tools can be issued as and when required for each projects. Students are responsible for returning the tools issued in working order at the end of studio sessions.

Students will be required to compensate for any loss/damage issued against their names in the borrowing records. Students are required to bring and always keep with them, the following items for studio & design classes: Sketch Book - A4 size; Pencils, eraser, sharpener; Carbon paper / Tracing sheet; Masking paper tape

All development sketches, concept drawings and technical notes should be part of the sketch book which will serve as evidence of your working process for evaluation at the end of each assignment.

SAMPLE HANDOUT 4

DEPARTMENT OF JEWELRY & ACCESSORY DESIGN

Beaconhouse National University

RULES AND REGULATIONS

Health & safety rules for the Jewelry Studio

GENERAL PRECAUTIONS

1. Keep your work area clean. Cluttered areas and benches invite accidents.
2. Never EAT DRINK or SMOKE in the studio. These three activities are strictly forbidden within the studio.
3. Do not work by yourself. Have someone else with you at all times in the studio.

4. Wear proper apparel. Do not wear loose clothing, gloves, necklaces, rings, bracelets or other jewelry that may get caught in moving parts.
5. Bare feet are not allowed in any studio or shop. Sandals, open-toe shoes, or high heels should be avoided. (Non-slip safety shoes are recommended.)
6. Wear protective hair covering to contain long hair. Hair must be tied back at all times.
7. Always use safety glasses. Use a dust mask if a cutting operation is dusty. Use a properly selected respirator where toxic fumes may be generated.
8. Do not work or operate tools while under the influence of drugs, alcohol, or medication to avoid loose concentration and drowsiness.
9. Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted.
10. Keep children and visitors out of work areas.
11. Report any problems with tools to the technicians. Do not repair tools or replace blades, bits, etc., unless you have been authorized and trained by the technician.
12. Return all tools to designated storerooms or tool rooms for the convenience of easy location of tools for yourself as well as for fellows.

REMEMBER TO BE CAREFUL AND ASK PLENTY OF QUESTIONS WHEN WORKING IN THE STUDIO.

SAMPLE HANDOUT 5

DEPARTMENT OF JEWELRY & ACCESSORY DESIGN

Beaconhouse National University

CARING OF EQUIPMENT & MACHINES

1. You may not operate any tools or equipment without prior instructions from instructors or technicians.
2. For your own safety, read the instruction manual before operating a tool. Learn the tools' applications and limitations, as well as the specific hazards peculiar to it.
3. Keep guards of power tools in place and in working order.
4. Electrically ground all tools where required. If a tool is equipped with a three-prong plug, it should be plugged into a three-slot electrical receptacle. If an adapter is used to accommodate to a two-slot receptacle, the adapter must be attached to a known ground. Never remove the third prong from a plug.
5. Remove adjusting keys and wrenches before operating equipment. They can become lethal projectiles.
6. Maintain tools in top condition. Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
7. Disconnect tools before servicing or when changing accessories such as blades, bits, cutters, etc.
8. Consult the owner's manual for recommended accessories and use them. The use of improper accessories may cause hazards.
9. Report all damaged or inoperable equipment to the studio technician. **DO NOT USE DAMAGED EQUIPMENT.**

OPERATION OF EQUIPMENT

1. Don't force or assign pressure to a tool. It will & *knows* how to do *it* job better for which it is designated. Use the right tool for the right process.
2. Always secure your work; practice this so that both you and the piece can have firm control for carrying out required process. Use clamps or a vise to hold your work. This is safer than using your hand and leaves both hands free to operate the tool.
3. Don't overreach. Keep proper footing and balance of your body posture at all times.
4. Avoid accidental starting. Make sure switch is in the "OFF" position before plugging in the power cord. Do not use equipment that is tagged or labeled as inoperative or under repair.
5. Never stand on a tool. Serious injury may occur if the tool is tipped or if the cutting edge is accidentally contacted.
6. Feed work into a blade or cutter only against the direction of rotation of the blade or cutter.
7. Never leave a tool running unattended. Turn off the power. Don't leave a tool until it comes to a complete stop.
8. Make sure a tool is disconnected from the power supply while a motor is being mounted or repaired.
9. Be sure you have been instructed in and approved for the use of any piece of equipment you intend to use.

SPECIFIC HAZARDS YOU SHOULD BE AWARE OF

Processes like enameling, etching and other jewellery related techniques utilize diverse processes and materials, many of which can be a serious risk to the health if unprepared or unprotected.

Make sure you are always fully active for the class; loose concentration, bad health and sleep-states, and drowsiness have greater risks for accidents.

Cutting, filing, and sanding can create dusts which are often harmful.

Soldering, brazing, enameling, and melting metal create toxic fumes. The infrared light from these processes can also be a threat to vision.

Repetitive hammering required for metalsmithing can be a serious threat to hearing, as well as repetitive motion disorders.

Corrosives for cleaning, etching, and patination must be handled with extreme caution.

With this in mind, metals students should have: safety glasses, approved dust mask or respirator, rubber gloves, and hearing protection.

VENTILATION

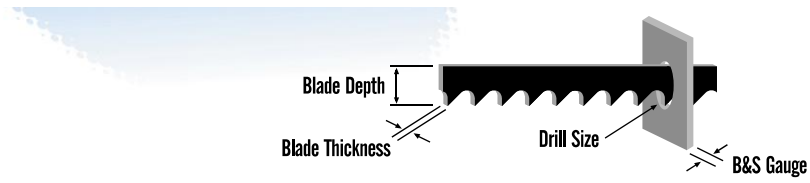
The following areas in the studio have special ventilation devices that must be turned ON when work is in process:

Soldering –Annealing- Casting- Etching- Patinas- Polishing

Check with the studio technician or instructor for the location of the various controls and their operation.

Be sure to keep the ventilation in operation during any metal working process for that particular area and turn it off before leaving the studio.

TECHNICAL HANDOUT CHARTS



SAW BLADE & DRILL SIZES

Blade Size	Blade Thickness	Blade Depth	Teeth Per Inch	Drill Size Equivalent	B&S Gauge Recommended
8/0	0.0063"	0.0126"	89.0	80	26 <i>(or thinner)</i>
7/0	0.0067"	0.0133"	84.0	80	24-26
6/0	0.0070"	0.0140"	76.0	79	24-26
5/0	0.0080"	0.0157"	71.0	78	22-24
4/0	0.0085"	0.0175"	66.0	77	22-24
3/0	0.0095"	0.0190"	61.0	76	22
2/0	0.0100"	0.0204"	56.0	75	20-22
1/0	0.0110"	0.0220"	53.5	73	20-22
1	0.0115"	0.0240"	51.0	71	18-20
2	0.0134"	0.0276"	43.0	70	18-20
3	0.0140"	0.0290"	40.5	68	16-18
4	0.0150"	0.0307"	38.0	67	16-18
5	0.0160"	0.0331"	35.5	65	14-16
6	0.0173"	0.0370"	33.0	58	12-16
7	0.0189"	0.0405"	30.5	57	12-14
8	0.0197"	0.0440"	28.0	55	12 <i>(or thicker)</i>













FILE CUTS, STYLES, & SHAPES

File Cuts

Swiss Cut No	6	4	2	1	0	00	Full Size Files	
	6	4	2	0			Needle/Rifflers	
	6	4	2	1	0	00	Escapement	
	173	117	97	79	64	51	41	Teeth Per Inch

File Styles

Full Size Files	4" to 8" cut length (not including tangs). Should be secured in a handle for comfort. Used for removing material from large areas.
Habilis Files	8" to 9" overall length. Handles are thick and shaped for comfort. For in-between jobs, too big for needle files and too small for full size files.
Needle Files	4" to 6" overall length. Handles are knurled or covered with vinyl grips. Used for small surfaces and getting into tight areas.
Escapement Files	5" to 6" overall length. Length of cut is shorter than a typical needle file (1½" to 2½"). Also known as square handle needle files.
Rifflers	6" to 7" overall length. Uniquely shaped, curved profiles with double ends. For getting into tight areas, especially for filing curves.
Silversmith's Rifflers	7" overall length. Slightly larger than standard rifflers. Double ended. Available in a smaller range of shapes and cuts.
Valtitan Files	Available in Full and Needle File sizes. Specially hardened for working with platinum and stainless steel. Yellow tangs for easy identification.

 <h3>Barrette File</h3> <p>THICKNESS: tapered WIDTH: tapered</p> <p>Tapered in both width and thickness with only one cutting edge and safe sides that angle sharply back. The triangular profile allows this file to get into tight spaces to file one surface without effecting adjacent surfaces.</p>	 <h3>Equalling File</h3> <p>THICKNESS: parallel WIDTH: parallel</p> <p>Rectangular profile with parallel sides and thickness. All four sides have teeth: double cut on top and bottom, single cut on both sides. This file is used primarily for filing slots and corners. It also makes a good general purpose file due to it's wide, flat cutting surface.</p>	 <h3>Hand File</h3> <p>THICKNESS: tapered WIDTH: parallel</p> <p>Similar in profile to an equalling file, with four parallel sides. The hand file has a slightly tapered thickness and is cut on only three sides, leaving one safe edge. The top and bottom are double cut, while the side is single cut. This file has a wide variety of uses.</p>	 <h3>Pillar File</h3> <p>THICKNESS: tapered WIDTH: parallel</p> <p>Parallel in width and tapered in thickness, like a hand file. The pillar file is double cut on the top and bottom and has two safe edges. It is typically more slender than a hand file and available in several widths. The safe edges allow precise filing without effecting adjacent surfaces.</p>
 <h3>Half Round File</h3> <p>THICKNESS: tapered WIDTH: tapered</p> <p>With one curved and one flat surface, the half round file is well-suited for many applications, including: removing material from the inside and outside of curved surfaces. It is tapered in width and thickness and comes to a point, allowing it to get into tight areas.</p>	 <h3>Marking File</h3> <p>THICKNESS: tapered WIDTH: tapered</p> <p>Similar in profile to a half round file, but cut only on the curved surface, leaving the flat side safe. The sides and thickness are tapered, coming to a fine point at the end. The uncut flat surface makes this a safer file when filing inside curves.</p>	 <h3>Round File</h3> <p>DIAMETER: tapered</p> <p>Round profile gradually tapers to a point. This file is double cut along its entire length. The round file is used to enlarge holes, file a bevel on curved edges and to round off radii. <i>Also available with a parallel (non-tapered) profile, perfect for filing seats for hinge knuckles.</i></p>	 <h3>Square File</h3> <p>THICKNESS: tapered WIDTH: tapered</p> <p>Square profile gradually tapers to a point, with all four sides double cut along their length. This is a good general purpose file with many uses, including: scoring lines for bending 90° angles, refining slot corners, and making round holes into square holes.</p>
 <h3>Three Square</h3> <p>THICKNESS: tapered WIDTH: tapered</p> <p>Also called a triangular file, the sides of this file gradually taper to a point. All three sides are double cut. When used along a corner of the file, it will create a V-groove with a 60° angle. Useful for filing/refining seats in prongs.</p>	 <h3>Crossing File</h3> <p>THICKNESS: tapered WIDTH: tapered</p> <p>This file is similar in profile to a half-round file and is used primarily for filing interior curved surfaces and compound curves. The crossing file has two curved surfaces, one having a larger radius than the other. Both are double cut.</p>	 <h3>Knife File</h3> <p>THICKNESS: tapered WIDTH: tapered</p> <p>The knife file is best suited for filing grooves and getting into narrow slots, keyways and acute angles. The sharp profile has teeth on two sides with a safe top edge. Width and thickness taper to a fine point.</p>	 <h3>Warding File</h3> <p>THICKNESS: parallel WIDTH: tapered</p> <p>Similar in profile to the equalling file, but with tapered sides that come to a point. Useful for removal of burs and for filing narrow slots. Double cut top and bottom with single cut edges.</p>

 <p>Raising Hammers Used in conjunction with a raising stake to form sheet metal into bowls, vases, and other hollow forms. This hammer is used on the outside surface of the metal, with the sheet positioned on the raising stake at a slight angle. The cross sections of both faces are rectangular with a slight vertical curve. Size and weight vary.</p>	 <p>Forming Hammers Used on the inside surface of bowls and other forms to create or refine the curved surface and for sinking or stretching such forms. Used with both steel stakes and wood forms. The hammer faces are domed, either slightly or more pronounced and should closely match the curve of the form being hammered.</p>	 <p>Planishing Hammers Used to refine the outer surface of curved and flat forms, removing the hammer marks introduced during raising or forming. The faces can be round or square with a slightly curved or completely flat surface. Because this is a finishing hammer, the faces should be polished to a mirror finish. Size and weight vary.</p>
 <p>Creasing/Bordering Hammer As a creasing hammer, it is used to form radial crimps, or creases, in a metal disc. This is the first step in some raising techniques. As a bordering hammer, it is used to form a rim on a bowl or platter. Cross section is a narrow rectangle with a pronounced vertical curve. Typical weight is 200-300 grams.</p>	 <p>Embossing Hammer Similar in shape to a forming hammer, this hammer is used to create elevated areas by striking metal from behind, similar to repoussé. Faces are typically smaller in diameter than a forming hammer and have a higher dome. Each hammer has two different size faces.</p>	 <p>Chasing Hammer The large face of this specialized hammer is used to strike the end of chasing tools and punches, not for direct contact with your work. Easily identified by its uniquely shaped handle: bulbous at one end and thin where the head is attached. The "springy" handle increases hammer control and reduces hand fatigue.</p>
 <p>Riveting Hammer The wedge-shaped end is perfect for spreading the heads of rivets, while the flat end, which can have either a square or round cross section, works well for refining rivet heads. Also useful as a general purpose hammer.</p>	 <p>Goldsmith's Hammer Very similar in design to a riveting hammer, with one cross peen face and one flat face. A well balanced, light-weight hammer used for riveting and light forging.</p>	 <p>Cross Peen Hammer Although it's more commonly associated with blacksmithing, the cross peen hammer is a good general purpose hammer. Uses include: forging, riveting, striking steel tools, etc.</p>
 <p>Ball Peen Hammer Probably the most recognizable style of hammer outside of the field of metalsmithing. A good general purpose hammer with one flat face and one rounded "peen" face. Useful for spreading or "peening" rivet heads, striking steel tools, and light forging.</p>	 <p>Brass Mallet Brass mallets are used in situations where you want to prevent your metal from being thinned or marked by the face of the hammer or for striking steel stamps. When used with stamping tools, the brass mallet prevents unwanted movement because it has less reverberation than steel hammers.</p>	 <p>Dead Blow Mallet Inside the head of this hammer is a cavity that is filled with steel shot. Upon impact, the shot moves from one end of the head to the other, stabilizing the hammer, reducing reverberation and providing increased driving force. The plastic (or rubber) head prevents the work surface from being marked and further reduces shock.</p>
 <p>Wood Mallet Simple wood mallets can be adapted for a wide variety of tasks by cutting, filing and sanding the hardwood heads into different shapes. Wedge-shaped wood mallets are especially useful for forming crimps before raising metal forms. Softer than steel and brass, the wood face will not mark your work surface.</p>	 <p>Rawhide Mallet Similar to a wood mallet because it will not mark your metal, only more durable. The head is made of leather that has been rolled into a cylinder shape and impregnated with shellac. Available in a wide variety of face diameters. Also available with a lead center for increased driving force.</p>	 <p>Plastic Mallet For hammering in situations where you don't want to mark your work surface. Available with a metal head that has removable plastic faces or as a one piece head made entirely of plastic. Plastic material is typically high density, non-porous nylon.</p>

DIFFERENCES AMONG PLIERS

 <p>Flat Nose Pliers</p> <p>Useful for a variety of tasks, including: bending angles in wire and sheet, holding small beads, holding bezel wire during filing, and opening and closing jump rings. Both jaws are perfectly flat with a rectangular cross-section.</p>	 <p>Round Nose Pliers</p> <p>Primarily used to bend wire for jump rings, chain making, filigree work, and wire wrapping. Both jaws have a round cross-section and taper to a fine point at the tips, making them great for getting into tight areas.</p>	 <p>Chain Nose Pliers</p> <p>Perfectly suited for getting into tight areas and for precision work. Useful for opening small jump rings, bending thin gauge wire, and holding small beads. Cross section of the jaws is flat where they meet and round on the outside. Jaws taper to fine point.</p>	 <p>Bent Nose Pliers</p> <p>Preferred by some people over chain nose pliers because the bent jaws provide better access to tight areas. Especially useful for "tucking in" wire ends in beads. Cross section and taper is the same as chain nose pliers, but the jaws bend to one side.</p>
 <p>Concave & Convex</p> <p>This is a forming plier used for bending gentle curves in wire and sheet. The cross section of the concave jaw is closely matched by the curve of the convex jaw. Both jaws have a consistent width.</p>	 <p>Flat & Half Round</p> <p>The half round jaw has a gentle curve, making it suitable for bending ring shank stock and for making large diameter loops. The upper jaw is rectangular and is preferred by some over concave because it is less likely to dent the material being bent.</p>	 <p>Flat & Round</p> <p>This forming plier is used for making small loops and jump rings and for bending tight curves in sheetstock. The lower jaw is round and tapered like a round nose plier, while the upper jaw is like a flat nose plier.</p>	 <p>Concave & Round</p> <p>Similar to the concave/convex forming plier, but more useful for making smaller diameter loops and jump rings. The tapered lower jaw provides a range of diameters for wrapping wire and sheet.</p>
 <p>Wire Wrapping</p> <p>This specialized plier is perfectly suited for making small quantities of jump rings and for wire wrap artists. Unlike other concave/round pliers, the lower jaw of this plier is stepped instead of tapered, providing three or four constant diameters.</p>	 <p>Rosary Pliers</p> <p>Typically used by beading artists, the rosary plier is a combination of round nose plier and side cutter. The round jaws are great for wrapping wire and holding beading cord, while the integrated cutter means you don't have to switch tools as often.</p>	 <p>Compound Parallel Jaw</p> <p>A compound joint ensures that the jaws of these pliers remain parallel throughout their range of movement. This action makes them perfect for working with difficult to hold items such as round beads. Available in flat nose and chain nose styles.</p>	 <p>Bow Opening</p> <p>Designed to easily open bows, loops and rings. The small grooves on the outer surface of the jaws "grab" wire, holding it securely. The specially designed joint opens the jaws when the handles are squeezed and a spring returns them to the closed position.</p>
 <p>Diagonal Cutters</p> <p>For cutting wire or small pieces of sheetstock. This is the most commonly used cutter and is available in standard bevel cut, flush cut and super flush cut. The tapered ends allow it to get into tight areas.</p>	 <p>End Cutters</p> <p>The cutting edges of these cutters are set at right angles to provide easier access to tight areas. Better suited to cutting protruding wire ends than diagonal cutters.</p>	 <p>Oblique Cutters</p> <p>Similar in design to end cutters, but with jaws that are slightly offset to one side. The offset provides increased clearance. Available in flush cut and super flush cut versions.</p>	 <p>Sprue Cutters</p> <p>Designed specifically for cutting casting sprues. The compound joint and spring action provide maximum leverage with minimum effort. Also useful for cutting thick stock and hard materials.</p>

Cutter Styles and Wire Ends



Bevel Cutters require more cutting force and leave a large pinch on wire ends, but are very durable.



Flush Cutters require less force and leave a small pinch, but are not as strong and wear faster.



Super Flush Cutters require minimal cutting force and leave almost no pinch.



Double Flush Cutters require the least amount of force and leave no pinch on wire ends.

Standard 3-2: There must be adequate support personnel for instruction and maintaining the laboratories.

All Labs are supervised and maintained by qualified senior technicians. Technician's are trained in their specialized fields and have a command on the machinery. They are responsible for keeping the tools and machinery in working conditions. Students are given a brief about the equipment and how to handle the machinery .The technicians along with the course instructor help and supervise the students while working in the labs on the projects. They guide the students to explore and develop the technical skills while working on the machine. This makes the students understand the handling of the machines on their own.

Standard 3-3: The University computing infrastructure and facilities must be adequate to support program's objectives.

The facilities mentioned in the shared/common computer labs are adequate to support the objectives of the Bachelor in Jewelry & Accessory Design program. Labs are open for students to utilise other than the course contact hours only under supervision.

Criterion 4: STUDENT SUPPORT AND ADVISING

Student must have adequate support to complete the program in time and must have opportunity to interact with their instructors and receive timely advice about program requirements and career alternatives. To meet this criterion the standards in this section must be satisfied.

Standard 4-1: Courses must be offered with sufficient frequency and number for students to complete the program in a timely manner.

- Students are provided with the department's vision and courses
- Students are explained in detail about the mandatory and elective courses.
- Students are encouraged to take electives from the other departments.

Standard 4-2: Courses in the major area of study must be structured to ensure effective interaction between students, faculty and teaching assistants.

- The courses are planned to provide students with effective learning. The studio /class are divided into three sections. Class begins with a detail discussion on the theme to be worked on followed by a presentation /notes. Students are given a task to be completed in a given time. At the end teachers and students have a mutual discussion on the work they had done in class.

Standard 4-3: Guidance on how to complete the program must be available to all students and access to academic advising must be available to make course decisions and career choices.

- The students are informed about the new programs and requirements by advertising in newspapers and updating the university website.
- Students are given counseling sessions by the senior faculty and if students are still not sure then they are referred to the professional career counselor.
- BNU has a professional career counselor on board; students are advised to consult the counselor on regular bases.
- The University provides a platform for students to interact with practitioners by conducting seminars, talks etc. Students are encouraged to participate in the professional societies.

Criterion 5: PROCESS CONTROL

The processes by which major functions are delivered must be in place, controlled, periodically reviewed, evaluated and continuously improved. To meet this criterion a set of standards must be satisfied.

Standard 5-1: The process by which students are admitted to the program must be based on quantitative and qualitative criteria and clearly documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

- **PROGRAM ADMISSION CRITERIA**

Applicants who have passed Intermediate in minimum 2nd division are eligible to apply to the B.Des in Jewelry and Accessory.

As part of the admission process, all the applicants are required to take an Admission test and appear in an interview.

- **PROGRAM/CREDIT TRANSFER**

The School refers all transfer cases to the University Equivalence Committee. The Equivalence Committee, after thorough scrutiny in light of the HEC guidelines, gives approval for all transfers.

- **EVALUATION OF ADMISSION CRITERIA**

The admission criterion is reviewed annually in light of the HEC guidelines. The Board of Studies meets twice a year and reviews all matters regarding the program. In addition Academic Council of the University also reviews the

Admission procedure and subsequent approval is taken from the

Standard 5-2: The process by which students are registered in the program and monitoring of students progress to ensure timely completion of the program must be documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

- Jewelry and Accessory program is offered from third semester. Students are required to complete the foundation year passing with at least 2.5 GPA.
- Students are registered in this program by going through a thorough portfolio review and an interview.
- Students academic progress is monitored by their work and class participation. Students are evaluated after every 4 weeks to ensure the standard of the course is maintained.

Standard 5-3: The process of recruiting and retaining highly qualified faculty members must be in place and clearly documented. Also processes and procedures for faculty evaluation, promotion must be consistent with institution mission statement. These processes must be periodically evaluated to ensure that it is meeting with its objectives.

- BNU strongly believes in identifying and hiring faculty who are design practitioners and innovators in their field. Keeping with the vision of the Jewelry & Accessory department strong emphasis is laid on recruiting individuals who have strong linkages with academia, industry and craft sector.
- The hiring of the faculty is an extensive process. The identified personal have to provide the HR office with their cv and portfolio (electronic). The cv's are sifted and the best candidate is called in for an interview with the head of the department. By the approval of HOD an interview is scheduled with the Dean of the school. Candidate is hired on visiting basis for initial three months to evaluate the faculty and after completing the three month period an interview with the Vice chancellor and approval by the Board of Governors is conducted to hire them on permanent basis.
- Indicate methods used to retain excellent faculty members.
- The faculty is evaluated and promoted on regular bases as laid out by the Higher education commission.
- The faculty evaluation and HOD assessment plays an integral role in promotions and redesigning the course.

Standard 5-4: The process and procedures used to ensure that teaching and delivery of course material to the students emphasizes active learning and that course learning outcomes are met. The process must be periodically evaluated to ensure that it is meeting its objectives.

- To maintain the standard of education the Jewelry & Accessory department has made internal Performa's to evaluate the courses. Every semester under the supervision of HOD an assessment is conducted to ensure students are getting the best learning outcomes.

Standard 5-5: The process that ensures that graduates have completed the requirements of the program must be based on standards, effective and clearly documented procedures. This process must be periodically evaluated to ensure that it is meeting its objectives.

- The Academic Coordinator maintains a complete record of the students. These records are reviewed at the start and end of every semester to ensure the students are progressing and meeting all requirements of the program. This procedure allows administration to keep a check on student's performance.
- At the time of graduation the record of each student is thoroughly analyzed to ensure that students have fulfilled all requirements of the program to be able to get a degree.

Criterion 6: Faculty

Faculty members must be active in their discipline and have the necessary technical depth and breadth to support the program. There must be enough faculty members to provide continuity and stability, to cover the curriculum adequately and effectively, and to allow for scholarly activities. To meet this criterion the standards in this section must be satisfied.

Standard 6-1: There must be enough full time faculties who are committed to the program to provide adequate coverage of the program areas/ courses with continuity and stability. The interests and qualifications of all faculty members must be sufficient to teach all coursed, plan, modify and update coursed and curricula. All faculty members must have a level of competence that would normally be obtained through graduate work in the discipline. The majority of the faculty must hold a Ph. D. in the discipline.

Complete the following table indicating program areas and number of faculty in each area.

Sr.	Course	Course Code	Cr. Hours	Teacher	Qualification
2nd Year					
1	Intro to jewelry & Accessory making	D-JW 221	6	Sumaira Malik	MA Interior Design Accredited jewelry profession (GIA)
2	CAD for jewelry and accessory I	D-JW 222	3	Zil-e-Batool	Candidate MA Art & Design
3	Design: Exploration & Investigation I	D-JW 2363	3	Mahvish Salim	MA in Art & Design
4	Jewelry Seminar	D-JW	3	Faseeh Saleem Zeb Bilal	
5	Jewelry & accessory design Studio-I Fundamentals	D-JW 261	6	Sumaira Malik	MA Interior Design Accredited Jewelry profession (GIA)
6	Design: Exploration & Investigation II	D-JW 2463	3	Mahvish Salim	MA in Art & Design
7	Jewelry Seminar II	D-JW	3	Faseeh Saleem Zeb Bilal	MA in Art & Design
8	CAD for jewelry and accessory II	D-JW 222	2	Zil-e- Batool	Candidate MA Art & Design
9	Pakistan Studies				

3rd Year					
1	Jewelry & accessory design Studio-II Intermediate	D-JW361	6	Sana Aziz	B Des(Hons) Jewellery and Metalworks
2	CAD for jewelry and accessory III	D-JW 323	2	Zil-e- Batool	Candidate MA Art & Design
3	Traditional Practices	D-JW 482	3	Sumaira Malik	MA Interior Design Accredited jewelry profession (GIA)
4	Marketing I & II	D-JW 346, D-JW 347	3,3	SaimaRana	MBA
5	Jewelry & accessory design Studio-III Advanced	D-JW381	9	Sana Aziz	B Des(Hons) Jewelry and Metalwork
6	Contemporary materials and technologies	D-JW483	3	Sahr Bashir	M. Des
4th Year					
1	Jewelry & accessory design Studio-IV Independent study	D-JW 461	9	1. Sahr Bashir 2. Sumaira Malik	M.Des MA Interior Design Accredited jewelry profession (GIA)
2	Professional Practice	D-JW 484	3	Sahr Bashir	M. Des
3	Jewelry & accessory design Studio-V Graduate collection	D-JW 481	9	1.Sahr Bashir 2. Sumaira Malik	MDES MA Interior Design Accredited jewelry profession (GIA)
5	Design Portfolio	D-HC 448	3	SaimaRana	MBA

Table 1.16: Faculty Distribution by Program Area

- FACULTY RESUMES

Standard 6-2: All faculty members must remain current in the discipline and sufficient time must be provided for scholarly activities and professional development. Also, effective programs for faculty development must be in place.

- SVAD provides the opportunity to excel in specialized fields by encouraging faculty to participate in conferences, art & design residencies and workshops.
- Various Art and design education Master Programs are offered in house to improvise faculty academic backgrounds while continuing teaching.
- The contract of working 30 hours per week for the permanent faculty helps in practicing art and design in specialized fields.

Standard 6-3: All faculty members should be motivated and have job satisfaction to excel in their profession.

- The entire faculty members are provided with a pleasant working environment which contributes in teaching, research and practice in the specialized fields. Workstations with high tech computers and internet connectivity provide excess to digital libraries globally.
- Faculty can undertake professional development training and also get study leave for improving their qualification at any other Institution locally or internationally, subject to providing a service bond.
- The performance of faculty is appraised on annual basis and they are awarded annual increment.
- All the above features help in motivating the faculty in their job and emerge willingness and desire to remain a member of organization.
- Survey of faculty self assessment is conducted every year to reflect and provide input on work environment and their own performance.

Criterion 7: INSTITUTIONAL FACILITIES

Institutional facilities, including library, classrooms and offices must be adequate to support the objective of the program. To satisfy this criterion a number of standards must be met.

Standard 7-1: The institution must have the infrastructure to support new trends in learning such as e-learning.

The infrastructure and facilities of the university that support new trends in learning are search engines such as:

- J Stor: is a digital library founded in 1995 encompassing past and current digitized academic journals, books and primary sources of information.
- Art Stor : is an organization that builds and distributes online resources of a digital library with 1.4 million images related to the arts, architecture, humanities, and sciences, and Shared Shelf, a Web-based cataloging and image management software service that allows institutions to catalog, edit, store, and share local collections.
- Apple Lab: state of the art lab with apple computers and latest software's, printers and scanners.
- Library: Best resources available through books and collections of articles.

Standard 7-2: The library must possess an up-to-date technical collection relevant to the program and must be adequately staffed with professional personnel.

The university has a library serving the faculty, students, researchers and staff. The library has a diverse collection of materials. Qualified and experienced professionals, all dedicated towards providing high quality, up to date services, manage the library.

Professional Development

The librarians have been trained in MARC records development and cataloging in a new integrated Library System (ILS). Further, training in the use of the software has been given. Any Archives and Records Finance Course for all librarians and representatives of each university department have been trained. The need for this has arisen as a new Archives and a Records Finance program has been initiated at the University.

Library Committee

The BNU Library is guided by the Library Committee for effective management. Dean, Heads of schools are members and library liaisons are nominated from all departments.

Annual Report

The Chief Librarian prepares an annual report to present to the Vice Chancellor of the University, highlighting the accomplishment, problems and needs of the library. Utilization of resources and statistical data is presented in this report.

Library Budget

Annual Budget of BNU Library is Rs. 5.9 million

List of All Materials in BNU Library

Sr.#	Name of Item	Quantity 2014
1	Books	12486
2	Photocopies of Books	66
3	Downloaded E-Books	2000
4	DVD's (movies for TFT)	1036
5	Downloaded Movies (for TFT)	500
6	VHS's	626
7	Art Catalogues	1075
8	Theses	459
9	Reports	1881

Journals / Magazine , Newspapers

Sr.No	Name of Item	Quantity
1	Journals / Magazines (Subscribed)	35
	Journals / Magazines (Complementary)	60
2	Daily Newspapers	13

Online Resources

Sr.No	Name of Source	Availability
1	EVERGREEN OPAC	Online
2	HEC Digital Library	Online
3	ARTSTOR	Online
4	JSOTR	Online

Library Staff

Sr.No	Campuses / Library	No. of Staff Members
1	City Campus	1
2	Tarogil Campus (SLASS Library)	4
3	Tarogil Campus (SVAD Library)	2
Total Staff Members		7

BNU Library URL

http://WWW.bnu.edu.pk/index.php?option=com_content&view=article&id=165&Itemid=484

Library Membership

Membership:	1437
Faculty:	0198
Students:	1179
Staff:	0060

Standard 7-3: Class-rooms must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibilities.

- The classrooms have adequate space for studio work. The Studios are equipped with custom made Jewelry workbenches which accommodate the needs of the students. Each student is allocated an individual workbench to facilitate fabrication and storage of work. Each studio is also equipped with common tables for shared equipment like heavy bench vices, steel plates and sandbags for drawing, bending, shaping and scoring large metal forms.

- The faculty offices are fully equipped with desktop computers with internet and wifi connectivity, printers and scanners for each of the permanent faculty members of the department. In house intercom system between faculty offices throughout the university helps to facilitate communication between faculty members and different studios and working areas within the university.
- Stationary materials and printing services required for preparation of teaching materials, handouts and documentation are all available in the office.

CRITERION 8: INSTITUTIONAL FACILITIES
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The institution's support and the financial resources for the program must be sufficient to provide an environment in which the program can achieve its objectives and retain its strength

Facility	Description
Land	The total land area of Beaconhouse National University's New Campus is 33 acres.
Buildings	<p>The built-up area of the Beaconhouse National University New Campus is 322,000 sqft. In Phase – I, the New Campus has three academic blocks, one central block and one administration block.</p> <p>The first academic block comprising 107,000 sqft areas is operational at the New Campus. The second academic block comprising 56,000 sqft areas has been operational since September, 2011. The Administration Block comprising 32,498 sft was made operational in December 2013. The remaining buildings are at different stages of construction.</p>
Roads network & Parking	BNU has an internal road network of 1.5 Km. This black top road ring links different academic and administrative buildings. Walkways on the sides of the roads have been constructed for easy movement of students and staff. Fire hydrants at different points along the road have also been provided. The New Campus in phase – I has a parking space for 400 cars. The adjoining areas of the campus can accommodate more than 600 vehicles.
Lawns & Open Spaces	BNU is an environment friendly organization. In the campus design phase special attention was paid to maintaining bio-diversity of the area. More than 50 % of the campus spaces have been left open and green. Each of the academic and other blocks has a lawn attached to it and is equally used by students, faculty and staff for academic and recreational purposes.

	The total cost of the planned landscape is Rs.10 m.
ICT	BNU's focus on information and communication technologies is evident from the 1800 nodes system planned for the campus. Already 600 nodes are active providing the users internet connection and IP telephony facility. This back bone is also meant for IP surveillance and access control systems for the buildings.
Sports facilities	Students are given ample opportunity to participate in sports and extra-curricular events at BNU are not too infrequent. The University already has set up different indoor and outdoor sports facilities for students. A football field with dimensions of 180 ft x 330 ft is available. This facility also has a cricket turf for hard ball matches. The university has also set up badminton courts and table tennis play areas for students.
Canteen	With current full-time canteen operations catering to the needs of the university community, BNU is making significant investment in setting up a four floor purpose built cafeteria for its students, faculty and staff. Work on the structure is underway. Once completed this facility will provide dine in and take away options to the users. The lower ground floor will comprise an executive dining hall for faculty and senior staff of the university. The ground floor would comprise of a restaurant area offering variety of foods and drinks. The first floor of the cafeteria would be reserved for female students and contain a common room and a prayer area. The top floor of the cafeteria would include separate gyms and work out areas for male and female students. The new canteen would provide campus community the opportunity to relax in their free time. Like other campus areas, the cafeteria would have Wi-Fi facilities on all floors.
Furniture	Ergonomically designed furniture has been planned across the campus. Services of design firms have been hired to meet the bespoke requirements for studios and classrooms.

Standard 8-1: There must be sufficient support and financial resources to attract and retain high quality faculty and provide the means for them to maintain competence as teachers and scholars.

- The faculty of Department of Jewelry and Accessory Design receives salary according to the market standards along with standard service benefits i.e. Provident Fund, Annual Leave, Medical Leave, and Medical Insurance.
- The Institute has sufficient budgeted fund to support the faculty. The Institution also has funds to support faculty needs for teaching and research purposes.
- The Department of Jewelry and Accessory Design has their Coordinator to handle all Administrative and Coordination tasks, so that the faculty is free to concentrate on teaching and research. The Department has technicians to help manage the studio labs.

Standard 8-2: There must be an adequate number of high quality graduate students, research assistants and Ph.D. students.

- The Department of Jewelry and Accessory Design does not have a Masters Program therefore, there are no graduate students currently.

Standard 8-3: Financial resources must be provided to acquire and maintain Library holdings, laboratories and computing facilities.

- LIBRARY
 - *Please refer to Standard 7- 2*
- LABORATORY
 - *Please refer to Criterion 3*
- COMPUTING FACILITIES
 - *Please refer to Standard 2- 1*

Criterion 1 - Program Mission, Objectives and Outcomes	Weight = 0.05				
	Score				
	5	4	3	2	1
Does the program have documented outcomes for graduating students?	5				
Do these outcomes support the program objectives?	5				
Are the graduating students capable of performing these outcomes?	5				
Does the department assess its overall performance periodically using quantifiable measures?	5				
Is the result of the program assessment documented?	5				
Total Encircled Value (TV)	25				
Score 1 (S1) = {TV / (No. of Questions * 5)} * 100 * Weight	5.00				

Criterion 2 - Curriculum Design and Organization	Weight = 0.20				
	Score				
	5	4	3	2	1
Is the curriculum consistent?	5				
Does the curriculum support the program's documented objectives?	5				
Are theoretical background, problem analysis and solution design stressed within the program's core material	5				
Does the curriculum satisfy the core requirements laid down by respective accreditation bodies? (Refer to appendix A of the Self Assessment Report Manual)	5				
Does the curriculum satisfy the major requirements laid down by HEC and the respective councils / accreditation bodies? (Refer to appendix A of Self Assessment Manual)	5				
Does the curriculum satisfy the general education, arts and professional and other discipline requirements as laid down by the respective body / councils? (Refer to appendix A of Self Assessment Manual)		4			
Is the information technology component integrated throughout the program?	5				
Are oral and written skills of the students developed and applied in the program?	5				
Total Encircled Value (TV)	39				
Score 2 (S2) = {TV / (No. of Questions * 5)} * 100 * Weight	20.00				

Criterion 3 - Laboratories and Computing Facilities	Weight = 0.10				
	Score				
	5	4	3	2	1
Are laboratory manuals / documentation / instructions etc. for experiments available and ready accessible of faculty and students?	5				
Are there adequate number of support personnel for instruction and maintaining the laboratories?	5				
Are the University's infrastructure and facilities adequate to support the program's objectives?		4			
Total Encircled Value (TV)	14				
Score 3 (S3) = {TV / (No. of Questions * 5)} * 100 * Weight	9.33				

Criterion 4 - Student Support and Advising	Weight = 0.10				
	Score				
	5	4	3	2	1
Are the courses being offered in sufficient frequency and number for the students to complete the program in a timely manner?	5				
Are the courses in the major area structured to optimize interaction between the students, faculty and teaching assistants?	5				
Does the University provide academic advising on course decisions and career choices to all students?	5				
Total Encircled Value (TV)	15				
Score 4 (S4) = {TV / (No. of Questions * 5)} * 100 * Weight	10.00				

Criterion 5 - Process Control	Weight = 0.15				
	Score				
	5	4	3	2	1
Is the process to enroll students to a program based on quantitative and qualitative criteria?	5				
Is the process above clearly documented and periodically evaluated to ensure that it is meeting its objectives?	5				
Is the process to register students in the program and monitoring their progress documented?	5				
Is the process above periodically evaluated to ensure that it is meeting its objectives?	5				
Is the process to recruit and retain faculty in place and documented?	5				
Are the processes for faculty evolution & promotion consistent with the institution mission?	5				
Are the processes in 5 and 6 above periodically evaluated to ensure that they are meeting their objectives?	5				
Do the processes and procedures ensure that teaching and delivery of course material emphasize active learning and that course learning outcomes are met?	5				
Is the process in 8 above periodically evaluated to ensure that it is meeting its objectives?	5				
Is the process to ensure that graduates have completed the requirements of the program based on standards and documented procedures?	5				
Is the process in 10 above periodically evaluated to ensure that it is meeting its objectives?	5				
Total Encircled Value (TV)	55				
Score 5 (S5) = {TV / (No. of Questions * 5)} * 100 * Weight	15.00				

Criterion 6 - Faculty	Weight = 0.20				
	Score				
	5	4	3	2	1
Are there enough full time faculty members to provide adequate coverage of the program areas / courses with continuity and stability?	5				
Are the qualifications and interests of faculty members sufficient to teach all courses, plan, modify and update courses and curricula?	5				
Do the faculty members possess a level of competence that would be obtained through graduate work in the discipline?	5				
Do the majority of faculty members hold Ph.D. degree in their discipline?		4			
Do faculty members dedicate sufficient time to research to remain current in their disciplines?	5				
Are there mechanisms in place for faculty development?	5				
Are faculty members motivated and satisfied so as to excel in their professions?	5				
Total Encircled Value (TV)	34				
Score 6 (S6) = {TV / (No. of Questions * 5)} * 100 * Weight	19.43				

Criterion 7 -Institutional Facilities	Weight = 0.10				
	Score				
	5	4	3	2	1
Does the institution have the infrastructure to support new trends such as e-learning?		4			
Does the library contain technical collection relevant to the program and is it adequately staffed?	5				
Are the class rooms and offices adequately equipped and capable of helping faculty carry out their responsibilities?	5				
Total Encircled Value (TV)	14				
Score 7 (S7) = {TV / (No. of Questions * 5)} * 100 * Weight	9.33				

Criterion 8 - Institutional Support	Weight = 0.10				
	Score				
	5	4	3	2	1
Is there sufficient support and finances to attract and retain high quality faculty?	5				
Are there an adequate numbers of high quality graduate students, teaching assistants and Ph.D. students?	5				
Total Encircled Value (TV)	10				
Score 8 (S8) = {TV / (No. of Questions * 5)} * 100 * Weight	10.00				

Overall Assessment Score = S1 + S2 + S3 + S4 + S5 + S6 + S7 + S8 =	98.10
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Remarks:

Weaknesses:

1. Specialized tools and machinery will ensure the outcomes fabricated to be more suitable for mass production and industrial use i.e. microscopes, gem lab, burnout rotating furnace, wax welder, temperature control unit for enameling surfaces, micro motor for stone setting, hinge cutting apparatus, casting unit for metals like brass and copper etc.
2. Frequent faculty-student exchange programs with international universities in the discipline can add value to the program vision.
3. Teacher/student participation especially at international trade fairs will not only add to the exposure of the department but also keep in sync with global and international trends
4. Training programs and workshops for faculty and technical staff can further enhance skills and quality of teaching
5. Although the library at BNU is very resourceful, a generous budget allocated to the library will help in broadening new vistas of knowledge, growth, development and inspiration.
6. Specialized design software like matrix, rhinoceros, jewel CAD used by the industry is always considered to be secondary in the tier of priorities. Their availability could help students be better equipped to deal with market requirements.