

**Maulana Abul Kalam Azad University of Technology, WB**  
**(Formerly known as West Bengal University of Technology)**  
**Syllabus of B. Sc. In Animation & Film Making**  
**Effective from academic session 2023-24**

**Semester- 5**

**Paper Name: Human Locomotion**

**Paper Code: BAFM 501**

**Credit Points – 3**

**Total Contact Hours – 45**

**Course Objective:** The course is designed to provide a detailed Introduction to the numerous process of human motion, and obtain knowledge of animation blocking for human movement.

**Course Outcome:**

SL No.	Course Outcome	Mapped Unit
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M2, M3, M4
4	Analyze the problems	M2, M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Ability to explain the human motion	10	25	1	1,5		
M2	Ability to explain blocking of character animation	15	25	1,2,3,4,	1,5		
M3	Ability to explain body mechanism of walk	10	25	2,3,4,5,6	1,5		
M4	Ability to produce human walk cycle	10	25	2,3,4,5,6	1,5		
	Total Lecture	45	100				

**BAFM 501 (3 Credits) – 45 hours**

SL No.	Topic/Module	Hours
1	<b>Module 1 - Human Pose Study:</b> <ul style="list-style-type: none"><li>• Detailed Introduction to the human pose</li><li>• Creation of different human pose in Maya.</li><li>• The fundamentals of key posing.</li></ul>	10
2	<b>Module 2 – Process of walk cycle:</b> <ul style="list-style-type: none"><li>• What is blocking.</li><li>• Design human walk pose.</li><li>• Walk cycle blocking process.</li></ul>	15
3	<b>Module 3 – Break down Study:</b> <ul style="list-style-type: none"><li>• The basic process of break down pose.</li><li>• Walk cycle break down process.</li></ul>	10
4	<b>Module 4 – Graph editor Study:</b> <ul style="list-style-type: none"><li>• What is graph editor.</li><li>• Graph editor process for animation.</li><li>• How graph editor effects animation.</li><li>• Smooth animation ion graph editor</li></ul>	10

**Suggested Software: Maya**

**Suggested Reading:**

- 1.3D Animation Essentials by Andy Beane.
- 2.Animators’ survival kit by Richard Williams

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**Paper Name: Human Locomotion**  
**Paper Code: BAFM 591 (P)**  
**Credit Points – 2**  
**Total Contact Hours – 30**

**Course Objective:** The course is designed to provide a detailed Introduction to the numerous process of human motion, and obtain knowledge of animation blocking for human movement

**Course Outcome:**

SL No.	Course Outcome	Mapped Unit
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M2, M3, M4
4	Analyze the problems	M2, M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Ability to explain the human motion	5	25	1	1,5		
M2	Ability to explain blocking of character animation	5	25	1,2,3,4,	1,5		
M3	Ability to explain body mechanism of walk	10	25	2,3,4,5,6	1,5		
M4	Ability to produce human walk cycle	10	25	2,3,4,5,6	1,5		
	Total Practical	30	100				

**BAFM 591(P) (2 Credits) – 30 hours**

SL No.	Topic/Module	Hours
1	<b>Module 1 - Human Pose Study:</b> <ul style="list-style-type: none"><li>Detailed Introduction to the human pose</li><li>Creation of different human pose in Maya.</li><li>The fundamentals of key posing.</li></ul>	5
2	<b>Module 2 – Process of walk cycle:</b> <ul style="list-style-type: none"><li>What is blocking.</li><li>Design human walk pose.</li><li>Walk cycle blocking process.</li></ul>	5
3	<b>Module 3 – Break down Study:</b> <ul style="list-style-type: none"><li>The basic process of break down pose.</li><li>Walk cycle break down process.</li></ul>	10
4	<b>Module 4 – Graph editor Study:</b> <ul style="list-style-type: none"><li>What is graph editor.</li><li>Graph editor process for animation.</li><li>How graph editor effects animation.</li><li>Smooth animation ion graph editor</li></ul>	10

**Suggested Software:** Maya

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**Semester- 5**

**Paper Name: Body Mechanics**

**Paper Code: BAFM 502**

**Credit Points – 3**

**Total Contact Hours – 45**

**Course Objective:** The course is designed to provide Process of human body language with advance motion concept human movement, and Obtain knowledge of human body reaction in complex movement.

**Course Outcome:**

SL No.	Course Outcome	Mapped Unit
1	Remembering	M1, M2
2	Understanding the course	M1, M2, M3, M4
3	Applying the general problem	M2, M3, M4
4	Analyze the problems	M2, M3, M4
5	Evaluate the problems after analyzing	M3, M4
6	Create using the evaluation process	M3, M4

Module Number	Content	Total Hours	%age of questions	Covered CO	Covered PO	Blooms Level (If applicable)	Remarks (If any)
M1	Ability to explain the human body language	10	25	1	1,5		
M2	Ability to explain complex character action	15	25	1,2,3,4,	1,5		
M3	Ability to explain ball throw movements	10	25	2,3,4,5,6	1,5		
M4	Ability to explain Graph editor for Ball throw	10	25	2,3,4,5,6	1,5		
	Total Lecture	45	100				

**BAFM 502 (3 Credits) – 45 hours**

<b>SL No.</b>	<b>Topic/Module</b>	<b>Hours</b>
1	<b>Module 1 - Design Key Pose:</b> <ul style="list-style-type: none"><li>• Detailed Introduction to the human pose</li><li>• Creation of different human pose in Maya.</li><li>• The fundamentals of key posing.</li></ul>	10
2	<b>Module 2 – Blocking of Ball Throw Animation:</b> <ul style="list-style-type: none"><li>• What is blocking.</li><li>• Design ball throw pose.</li><li>• Ball throw blocking process.</li></ul>	15
3	<b>Module 3 – Ball Throw Animation:</b> <ul style="list-style-type: none"><li>• The basic process of break down pose.</li><li>• Ball throw break down process.</li></ul>	10
4	<b>Module 4 – Graph editor Study:</b> <ul style="list-style-type: none"><li>• What is graph editor.</li><li>• Graph editor process for animation.</li><li>• How graph editor effects animation.</li><li>• Smooth animation in graph editor.</li></ul>	10

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**Semester- 5**

**Paper Name: Body Mechanics**

**Paper Code: BAFM 592(P)**

**Credit Points – 2**

**Total Contact Hours – 30**

**Course Objective:** The course is designed to provide Process of human body language with advance motion concept human movement, and Obtain knowledge of human body reaction in complex movement.

**Course Outcome:**

SL No.	Course Outcome	Mapped Unit
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M3	Ability to explain ball throw movements	10	25	2,3,4,5,6	1,5		
M4	Ability to explain Graph editor for Ball throw	10	25	2,3,4,5,6	1,5		
	Total Practical	30	100				

**BAFM 592 (P) (2 Credits) – 30 hours**

SL No.	Topic/Module	Hours
1	<b>Module 1 - Design Key Pose:</b> <ul style="list-style-type: none"><li>• Detailed Introduction to the human pose</li><li>• Creation of different human pose in Maya.</li><li>• The fundamentals of key posing.</li></ul>	5
2	<b>Module 2 – Blocking of Ball Throw Animation:</b> <ul style="list-style-type: none"><li>• What is blocking.</li><li>• Design ball throw pose.</li><li>• Ball throw blocking process.</li></ul>	5
3	<b>Module 3 – Ball Throw Animation:</b> <ul style="list-style-type: none"><li>• The basic process of break down pose.</li><li>• Ball throw break down process.</li></ul>	10
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