

INTEGRATED BIOMEDICAL ENGINEERING AND HEALTH SCIENCES PROGRAM HESE THESIS PROJECT APPROVAL FORM

Health, Engineering Science and Entrepreneurship (HESE) Thesis Course: I will be enrolling in (Please select ONE):

IBEHS 4E09A/B	IBEHS 5E15A/B	
STUDENT NAME:	STUDENT NUMBER:	
EMAIL ADDRESS:	ACADEMIC YEAR:	
This is a full academic year project course.		
SUPERVISOR INFORMATION		
Name:	Department:	
Email:	Institution:	
Phone:	Position:	
Address:		
CO-SUPERVISOR INFORMATION (If Appl	icable) ^	
Name:	Department:	
Email:	Institution:	
Phone:	Position:	
Address:		
PROJECT INFORMATION		
Project Title:		
Project Topic Area:		
Start Date	End Date	

[^] Students may require a co-supervisor with an appointment at McMaster University, if their supervisor is not appointed by McMaster. The need for a co-supervisor will be determined on a case-by-case basis.



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Evaluation*:		
Evaluation Criteria:	Evaluated By:	Weight:
Total:		100%

Outline & Learning Objectives



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Logistics and Health & Safety		
	Yes	No
Do you authorize the publishing of your name, contact information and project title to <u>the iBioMed Project</u> Database webpage?		
Have you ensured the student has the necessary Health and Safety (EOHSS) requirements?		
Does the project require Research Ethics approval(s)?		
Are the students working in a clinical environment where they interact with patients? If yes, complete the questions below:		
Are you authorized to allow students to interact with patients?		
Has the student completed the required Health Screening procedures as indicated by the Health Screening Office?		
Have you completed the required risk management assessment forms?		

Supervisor Signature

(Name)

(Signature)

(Date)

Date:

FOR OFFICE USE ONLY:

Authorizing Signature:



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IBEHS Thesis Evaluation Samples

The student should discuss the evaluation criteria with their supervisor to ensure that there is clarity. You are strongly encouraged to include a midpoint progress evaluation in December worth 10-20% of the final grade so that you will know whether you are progressing well and meeting expectations. Below are some evaluation structures used in the past.

Research proposal - 5% Literature review - 15%Draft of thesis- 10% Thesis - 40% Work for data collection - 20%Final presentation - 10%	Background evaluation and data planning - 30% Database completion - 20% Analysis - 20% Presentation - 15% Original hypothesis/planning - 15%	PICO development - 25% Systematic research completion - 10% Filtering articles - 10% Systematic review table - 25%Abstract and results - 15%Manuscript - 15%
Early assessment feedback - 10%Literature review - 20% Progress presentation - 20%Final thesis - 50%	Critical literature review - 20% Experimental design - 5% Experimental procedure -10% Data gathering - 10% Data analysis - 5% Weekly communications - 10%Final report - 40%	Final paper- 50%Final presentation - 25%Lab performance - 25%
Lab meeting attendance - 10%Foundations on gait analysis - 15% Research methods - 15%Data analysis - 10% Final presentation - 20% Written thesis proposal - 30%	Project plan - 25% Depth, comprehension and problem-solving - 35%Report and background - 25% Literature references and documentation - 15%	Market assessment of bioink manufacturing - 10% Market assessment of bioprinters -10% Market assessment of companies selling tissue - 10% Patient landscape analysis - 10% Wet lab execution - 10% Weekly update meetings - 10% Final presentation and report - 40%
Final report - 30% Hands-on lab work - 30% Participation during group meetings - 20% Communication skills - 10% Time management - 10%	Lab meeting attendance - 10% Assessment on foundation - 15%Coding and analysis - 25% Research documentation for reproducibility - 25% Final presentation - 15%	Refining the scope of the project (business models, etc.) - 30% Back end database to assist in clinical data collection - 30% Assist research team with clinical study - 40%
Thesis report - 70% Journal paper based on experimental work - 30%	Research proposal/ literature review - 15% Mid-year report - 25% Written thesis - 25% Work performed to collect & analyze data - 35%	Literature review - 30% Participation - 20% Written thesis - 40% Oral presentation - 10%



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Literature review - 20%Data management plan - 10% Research progress update (December) - 15% Research progress update (March) - 15% Final report - 30% Lab book/data records - 10%	Lab performance - 50% Midterm presentation - 10%Final presentation - 20%Final report - 20%	Meeting participation - 15% Timeline and progression - 15% Reading list completion - 20% Drafting proposal - 20% Final paper - 30%
Literature review - 15% Design - 20% Experimentation - 40% Validation and analysis - 25%	Literature review - 15% Project proposal - 15% Project management - 10% Lab work - 20% Final report - 35% Health and safety training - 5%	Proposal - 10% HIREB approval forms - 10%Data collection - 30% Data analysis - 20% Abstract prep - 10% Manuscript -10%
3-minute thesis - 5% Research summary -20% Thesis early assessment - 20% Final thesis - 45% Conference presentation 10%	Experimental performance - 50% Lab performance - 10% Presentations - 20% Data analysis and reports - 20%	Literature review - 20% Weekly reports - 10% Group meeting presentations - 5% Lab performance - 20% Midterm report - 5% Final report - 20% Final presentation - 20%
Project management - 30% Experimental design - 10% Data analysis - 10% Effective communication - 10% Written reports - 40%	Proposal - 10% Proposal presentation - 10% Literature review - 20% Final presentation - 20% Final paper - 20% Lab participation - 20%	Meeting prep - 20% Question preparation - 20% Abstract preparation and final report - 20% Meeting organization - 20% Poster day presentation - 20%
Contribution to scientific knowledge - 65% Teamwork - 20% Integrity towards patients and patient materials - 15%	Literature review - 30% Lab performance - 40% Final report - 30%	3-minute thesis - 10% Abstract - 10% Poster - 30% Thesis paper - 50%
Timeline - 15% Research ethics submission - 15% Data collection and analysis - 15% Update and self-evaluation - 10% Abstract and conclusions - 15% 3MT - 5% Final report and self-assessment -25%	Defining phenomenon studied - 10% Justifying topic choice - 10% Presenting research question - 10% Describe data collection method - 10% Choosing and reporting data - 10% Quality of final report - 25% Student work/involvement - 25%	Oral presentation - 10% Research proposal document - 30% Oral presentation of thesis - 20% Overall performance appraisal - 10% Final written thesis - 30%



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Final written thesis - 45% Lab work - 35% Technical Presentation (April) - 15% 3-minute thesis - 5%	Experimental performance - 50% Lab performance - 10% Presentations - 20% Data analysis & reporting - 20%	Final report - 100%
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