

# *Biomedical Engineering Department*

## **MQP Review Form**

Project Title: \_\_\_\_\_

Student(s): \_\_\_\_\_

(list outside \_\_\_\_\_  
departments) \_\_\_\_\_

Advisor(s): \_\_\_\_\_

(list outside \_\_\_\_\_  
departments) \_\_\_\_\_

Terms and Credits: E \_\_\_\_\_ A \_\_\_\_\_ B \_\_\_\_\_ C \_\_\_\_\_ D \_\_\_\_\_

Total Credit: \_\_\_\_\_ Page Numbers: \_\_\_\_\_ Worth credit per student? Yes / No

Materials other than printed (e.g., CD's): \_\_\_\_\_

Sponsorship: WPI internal \_\_\_\_\_ Faculty research \_\_\_\_\_ External: \_\_\_\_\_

Did the project result in a(n) meeting abstract \_\_\_\_\_ meeting poster \_\_\_\_\_ meeting talk \_\_\_\_\_  
publication draft \_\_\_\_\_ publication \_\_\_\_\_ other \_\_\_\_\_

Was the project presented orally? Project Presentation Day \_\_\_\_\_ Research group meeting \_\_\_\_\_  
Off-campus presentation \_\_\_\_\_ Other (please specify)  
No presentation \_\_\_\_\_

Did the project win any awards? Please specify.

Did the project develop any Intellectual Property that should be protected? What steps were taken for protection?

Please rate the items listed below based on the following scale:

- N/A = Not Applicable
- 1 = Severely deficient
- 2 = Deficient
- 3 = Adequate
- 4 = Good
- 5 = Excellent

## I. Please rate how does the MQP demonstrate the following outcomes and assessment criteria?

### (a) An ability to design and construct experiments on living and non-living systems (2.1):

Please rate the extent to which design goals were clearly stated? **N/A 1 2 3 4 5**  
**Pages:** \_\_\_\_\_

Please rate the extent to which the MQP adequately addressed the design and implementation of effective experiments on living systems? **N/A 1 2 3 4 5**  
**Pages:** \_\_\_\_\_

Please rate the extent to which the MQP adequately addressed the design and construction of effective experiments on non-living systems? **N/A 1 2 3 4 5**  
**Pages:** \_\_\_\_\_

Please rate the extent to which tests, simulations and measurements were made in a structured manner for a specific purpose? **N/A 1 2 3 4 5**  
**Pages:** \_\_\_\_\_

### (b) An ability to analyze and interpret experimental data (2.2):

Please rate the extent to which appropriate statistical techniques were applied to analyze and interpret data? **N/A 1 2 3 4 5**  
**Pages:** \_\_\_\_\_

Please rate the extent to which data were analyzed in valid and meaningful ways to identify which design specifications were satisfied? **N/A 1 2 3 4 5**  
**Pages:** \_\_\_\_\_

Please rate the extent to which observed results, correlations, unexpected outcomes and unmet specifications were fully explained? **N/A 1 2 3 4 5**  
**Pages:** \_\_\_\_\_

Please rate the extent to which data limitations were considered? **N/A 1 2 3 4 5**  
**Pages:** \_\_\_\_\_

Please rate the extent to which the conclusions are supported by analysis? **N/A 1 2 3 4 5**  
**Pages:** \_\_\_\_\_

**(c) An ability to design systems, components and processes to meet desired needs (2.3):**

Please rate the extent to which design goals were clearly stated? N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

Please rate the extent to which the students synthesized data from previous coursework or other sources to impact the design? N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

Please rate the extent to which the students considered and incorporated a variety of realistic constraints, including economic factors such as cost-benefit, safety, reliability, aesthetic, ethic and social implications? N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

Please rate the extent to which the design process demonstrates critical, original and creative thinking? N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

**(d) An ability to function in a multidisciplinary team (2.4):**

Did the project involve and effectively incorporate participants (students or faculty advisors) from different majors or disciplines? N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

**(e) An ability to identify, formulate and solve BME problems (2.5):**

Please rate the extent to which the students established that they had correctly identified the problem through interviews with other stakeholders. N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

Please rate the extent to which the students established clear objectives for the problem? N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

Please rate the extent to which the students considered reasonable alternative solutions? N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

Please rate the extent to which the proposed solution was tested and implemented effectively? N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

Please rate the extent to which the end results were consistent with the original specifications? N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

**(f) An ability to communicate effectively (2.6):**

Please rate the clarity and logical organization of the MQP report? N/A 1 2 3 4 5

Please rate the quality of grammar and style?	N/A	1	2	3	4	5
Please rate the clarity with which complex ideas or arguments are presented using graphs, tables and adequate explanations?	N/A	1	2	3	4	5
Please rate the professional appearance of the MQP report?	N/A	1	2	3	4	5

**(g) Understanding the impact of the engineering solutions in a global and societal context (2.7):**

Please rate the extent to which the students addressed the potential effects of their work on the well-being of people, animals, and the environment?	N/A	1	2	3	4	5
	<b>Pages:</b>	_____				

**(h) Knowledge of contemporary issues (2.8):**

Please rate the extent to which the MQP report addressed an important contemporary biomedical issues?	N/A	1	2	3	4	5
	<b>Pages:</b>	_____				

Please rate the extent to which the MQP was influenced by contemporary biomedical issues?	N/A	1	2	3	4	5
	<b>Pages:</b>	_____				

**(i) Use of modern engineering tools (2.9):**

Please rate the extent to which the students used appropriate state-of-the-art design, computer simulation, analysis or presentation software, manufacturing techniques, evaluation techniques, etc. in their MQP?	N/A	1	2	3	4	5
	<b>Pages:</b>	_____				

**(j) Demonstrate an understanding of professional and ethical responsibilities (3.1):**

Please rate the extent to which relevant ethical issues and implications were identified?	N/A	1	2	3	4	5
	<b>Pages:</b>	_____				

Please rate the extent to which ethical issues were carefully reviewed?	N/A	1	2	3	4	5
	<b>Pages:</b>	_____				

Please rate the extent to which potential conflicts of interest were considered and resolved?	N/A	1	2	3	4	5
	<b>Pages:</b>	_____				

**(k) Recognize the need for and have the ability to engage in life-long learning (3.2):**

Please rate the extent to which the references demonstrate an ability to gather data from a wide variety of professional resources?	N/A	1	2	3	4	5
	<b>Pages:</b>	_____				

Please rate the extent to which the students acquired and applied knowledge not obtained from prior course work?

N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

Please rate the extent to which the literature review demonstrates that the students can integrate effectively ideas from a variety of sources?

N/A 1 2 3 4 5  
Pages: \_\_\_\_\_

**II. Please rate the quality of various sections of the MQP report:**

TITLE PAGE	N/A	1	2	3	4	5
TABLE OF CONTENTS	N/A	1	2	3	4	5
AUTHORSHIP PAGE	N/A	1	2	3	4	5
ABSTRACT	N/A	1	2	3	4	5
TABLE OF FIGURES	N/A	1	2	3	4	5
TABLE OF TABLES	N/A	1	2	3	4	5
INTRODUCTION/PROBLEM IDENTIFICATION	N/A	1	2	3	4	5
PROJECT APPROACH	N/A	1	2	3	4	5
SPECIFIC AIMS	N/A	1	2	3	4	5
BACKGROUND/LITERATURE REVIEW	N/A	1	2	3	4	5
DESIGN	N/A	1	2	3	4	5
PROCEDURE/METHODS	N/A	1	2	3	4	5
RESULTS	N/A	1	2	3	4	5
ANALYSIS AND DISCUSSION	N/A	1	2	3	4	5
CONCLUSIONS	N/A	1	2	3	4	5
RECOMMENDATIONS	N/A	1	2	3	4	5
BIBLIOGRAPHY	N/A	1	2	3	4	5
GLOSSARY	N/A	1	2	3	4	5

APPENDICES

N/A 1 2 3 4 5

**III. Please rate whether this MQP satisfies capstone design requirements?**

1 2 3 4 5

**Reviewer's Comments:**