



Student Name: _____ Banner Number _____

Certificate in Genetics Checklist

Application for the Certificate in Genetics should be undertaken by graduating students in their **final year** of studies. The Certificate will be handed out at graduation and shown on a student's transcript.

Note: It is the responsibility of students to complete the required courses, and to provide the departmental Certificate Coordinator with confirmation (using this checklist) that the necessary courses have been taken usually before the last day of classes in their final year of study.

Certificate Coordinators

Melanie Dobson (Biochemistry and Molecular Biology) dobson@dal.ca 494-7182, Tupper 10J

Elizabeth Welsh (Biology) ewelsh@dal.ca 494-7110, LSC 3130

Certificate requirements:

1. A minimum grade of a **B-** is required in **four** mandatory courses:

- BIOL 2020.03: Cell Biology _____
- BIOL 2030.03: Genetics and Molecular Biology _____
- BIOC 2300.03: Introduction to Biochemistry _____
- BIOC 3400.03: Nucleic Acid Biochemistry and Molecular Biology _____

2. A minimum grade of **B-** in **12 credit hours** chosen from the following list of courses. At least 6 credit hours must be at the 4000 level.

2000 level

- BIOL 2040.03: Evolution _____

3000 level

- BIOL 3036.03: Transgenic Organisms _____
- BIOL/MARI 3042.03: Molecular Ecology _____
- BIOL 3044.03: Ecological Genetics _____
- BIOL 3046.03: Molecular Evolution _____
- BIOL 3102.03: Microbial Eukaryotes: Biodiversity and Evolution _____
- MICI 3114.03: Virology _____
- NESC 3670.03/PSYO 3670.03: Genes, Brain and Behaviour _____

4000 level At least 6 credit hours must be at the 4000 level.

- BIOC 4010.03: Bioinformatics _____
- BIOC 4027.03/MICI 4027.03: Molecular Mechanisms of Cancer _____
- BIOC 4403.03: Genes and Genomes _____
- BIOC 4404.03: Gene Expression _____
- BIOC 4501.03: Medical Biotechnology _____
- BIOC 4835.03/BIOL 4035.03: Human Genetics _____
- MICI 4114.03: Advanced Topics in Molecular and Medical Virology _____
- MICI 4033.03: Advanced Microbial Genetics _____

3. Other required courses

- CHEM 2441.03, **or** CHEM 2401.03 and CHEM 2402.03 _____

4. A minimum grade of **B-** in **3 credit hours** or more of independent research on a topic involving molecular genetics, transmission genetics or population genetics. Students should confirm with the department's Certificate Coordinator that the research topic qualifies for the Certificate prior to the start of the research course.

- BIOC 4001.03 Special Topics _____
- BIOC 4604.03 and BIOC 4605.03 Research project I and II _____
- BIOL 4900.06 Honours Research and Thesis _____
- BIOL 4901.03 and BIOL 4902.03 Honours Research and Thesis I and II _____
- BIOL/MARI 4806.03 Special Topics _____
- BIOL/MARI 4807.03 Special Topics _____

5. Title of research project. _____

Supervisor's Name and Department _____

Provide a brief summary (maximum of 250 words) of your genetics research project in the box below.

6. Approved by _____
Signature of Genetics Certificate Coordinator

Date _____