

VICTORIA UNIVERSITY OF WELLINGTON  
*Te Whare Wānanga o te Ūpoko o te Ika a Māui*



**SCHOOL OF SOCIAL AND CULTURAL STUDIES**  
*Te Kura Mahinga Tangata*

**Institute of Criminology**

# **CRIM 321**

*Criminal Behaviour and Investigation: A  
Psychological Approach*

## **Course Outline**

**CRN 13074: 24 POINTS: Trimester 2, 2006**

**COURSE COORDINATOR: DR RUSSIL DURRANT**

Room 1120, Murphy Building

Tel: (04) 463 9980

Email: [russil.durrant@vuw.ac.nz](mailto:russil.durrant@vuw.ac.nz)

## Institute of Criminology

### **CRIM 321**

# **Criminal Behaviour and Investigation: A Psychological Approach**

#### **Course Co-ordinator:**

Dr Russil Durrant

#### **Contact Details:**

Murphy Building, MY 1120

Telephone: (04) 463 9980

Email: [russil.durrant@vuw.ac.nz](mailto:russil.durrant@vuw.ac.nz)

#### **Office Hours:**

Wednesday and Friday, 11am - 12noon; 3.00 - 4.00pm.

If you are not able to see Russil Durrant during this time please call or email to arrange an alternative time.

#### **Principal Lecturer:**

Dr Russil Durrant

#### **Other Lecturers:**

Dr Devon Polaschek, EA 618

Office Hours: Thursday 3 - 4pm during teaching sessions

Email: [devon.polaschek@vuw.ac.nz](mailto:devon.polaschek@vuw.ac.nz)

Melanie Takarangi, EA 417

Office Hours: Wednesday 9 - 10am

Email: [melanie.takarangi@vuw.ac.nz](mailto:melanie.takarangi@vuw.ac.nz)

#### **Lectures:**

Wed 1.10pm - 3pm; HM LT 001 (CRIM 321 only)

Mon, Wed, Thurs 5.10 - 6pm HM LT 206 (with PSYC 335)

Varying time slots – see teaching programme for details

#### **Tutorials:**

Fridays 1.10 - 2pm OR 2.10 - 3pm, HM LT 001

#### **Notice Board:**

The student notice boards are located on levels 9 and 11 of the Murphy Building

## **Course Outline**

CRIM 321 is a course designed to introduce students to the contribution that psychological perspectives can make to the study, understanding and investigation of crime and criminal behaviour. Two key themes will be covered in this course. The first is criminal actions, which focuses on the application of psychology to understanding criminal behaviour and addresses methods of altering that behaviour. The second theme is Investigative Processing. This concerns the application of psychology to police investigations, including the collection, examination and utilisation of investigative information and evidence.

## **Course Objectives**

By the end of CRIM 321 students should be able to:

1. Demonstrate an understanding of the key psychological approaches to understanding crime and criminal behaviour. (As assessed by tests)
2. Understand and be able to critically assess the different approaches to risk assessment, recidivism, and the rehabilitation of offenders. (As assessed by tests)
3. Develop an understanding of the role of psychology in criminal investigative analysis, including the application of psychology to police interviews, lie detection, and eyewitness testimony and identification. (As assessed by tests)
4. Demonstrate a deep understanding and critical awareness of one specific area in criminal and investigative psychology. (As assessed by an essay)

## **Course Structure**

The course combines lectures, class discussion, and tutorials in a format that aims to guide students through the major topic areas. Part of the course is taught jointly with PSYC 335, Psychology, Crime and Law.

## **Tutorials**

Every Friday there will be a tutorial session. While attendance is optional, these sessions have been designed to provide you with additional material that supplements the lecture content. As a result, there will be an expectation that students will draw on this material in their exams. Tutorials will start in the second week of semester.

During the first week, you will be allocated to one of two tutorial groups. One tutorial will be held from 1.10-2pm and the other from 2.10-3pm on a Friday afternoon. Once you have been allocated to one of these groups, you should always attend at that time. If, for an unforeseen reason, you cannot attend your given time one week, then please see the course co-ordinator and arrange to sit in on the other tutorial. All tutorials will take place in HM LT001.



## Teaching Programme: CRIM 321, Trimester 2, 2006

	<i>Day</i>	<i>Date</i>	<i>Time</i>	<i>Room</i>	<i>Topic</i>	<i>Lecturer</i>	<i>Tutorial (Friday 1.10-2pm; OR 2.10-3pm)</i>
1	Wed	12 Jul	1.10-3pm	HM LT001	Introduction Psychology & Crime	RD	No Tutorial
2	Thu	20 Jul	5.10-6pm	HM LT206	Violent Offending	DP	Psychopathy
3	Mon Wed Thu	24 Jul 26 Jul 27 Jul	5.10-6pm 5.10-6pm 5.10-6pm	HM LT206	Violent Offending Violent Offending Violent Offending	DP DP MT	Violent Offending
4	Mon Wed Thu	31 Jul 2 Aug 3 Aug	5.10-6pm 5.10-6pm 5.10-6pm	HM LT206	Juvenile Delinquency Juvenile Delinquency Criminal Investigative Analysis	DP DP RD	Criminal Investigative Analysis
5	Mon  Wed Thu	7 Aug  9 Aug 10 Aug	5.10-6pm  5.10-6pm 5.10-6pm	HM LT206	Criminal Investigative Analysis Crime and the Public Crime and the Public	RD  RD RD	Media and Crime
6	Mon Wed	14 Aug 16 Aug	5.10-6pm 5.10-6pm	HM LT206	Drugs and Crime Drugs and Crime	RD RD	<b>TEST 1</b>
<b>19<sup>th</sup> Aug – 3 Sep Mid Trimester Break</b>							
7	Wed	6 Sep	1.10-3pm	HM LT001	Lie Detection and False Confessions	RD	False Confessions
8	Wed	13 Sep	1.10-3pm	HM LT001	Eyewitness Testimony and Identification	RD	Eyewitness Testimony
9	Wed	20 Sep	1.10-3pm	HM LT001	Mental Disorder & Criminal Responsibility	RD	Criminal Responsibility
10	Wed	27 Sep	1.10-3pm	HM LT001	Risk, Rehabilitation and Recidivism	RD	Risk Assessment
11	Wed	4 Oct	1.10-3pm	HM LT001	Risk, Rehabilitation and Recidivism	RD	Rehabilitation and Course Summary
12	Wed	11 Oct	1.10-3pm	HM LT001	<b>TEST 2</b>	RD	No tutorial

**Shaded areas denote joint class with PSYC 335**

RD = Russil Durrant; DP = Devon Polaschek; MT = Melanie Takarangi

## **Course Readings**

### **Essential Material**

You are expected to read the material provided in the course readings in advance of the lectures and tutorials in which it will be discussed. Readings will be available from Students Notes from the second week of semester (or as advised).

### **Violent Offending**

Anderson, C.A., & Bushman, B.J. (2002). Human aggression. *Annual Review of Psychology*, 53, 27-51.

Polaschek, D.L., & Collie, R.M. (2004). Rehabilitating serious violent offenders: An empirical and theoretical stocktake. *Psychology, Crime & Law*, 10, 321-334.

### **Juvenile Delinquency**

Losel, F. (2003). The development of delinquent behaviour. In D. Carson & R. Bull (Eds.), *Handbook of psychology in legal contexts*. Sussex, England: Wiley.

Moffit, T.E., Caspi, A., Harrington, H., & Milne, B.J. (2002). Male on the life-course-persistent antisocial pathways: Follow-up at age 26 years. *Development and Psychopathology*, 14, 179-207.

### **Criminal Investigative Analysis**

Canter, D. (2000). Offender profiling and criminal differentiation. *Legal and Criminological Psychology*, 5, 23-46.

Canter, D. (2003). *Mapping murder: the secrets of geographical profiling*. London: Virgin. (Chapter 15).

Canter, D. (2004). Offender profiling and investigative psychology. *Journal of Investigative Psychology and Offender Profiling*, 1, 1-15.

Homant, R.J., & Kennedy, D. B. (1998). Psychological aspects of crime scene profiling: validity research. *Criminal Justice and Behavior*, 25, 319-343.

### **Crime and the Public**

Ministry of Justice (2003). *Attitudes to crime and punishment: A New Zealand study* (pp. 65-69). Wellington: Ministry of Justice.

Romer, D., Hall Jamieson, K.H., & Aday, S. (2003). Television news and the cultivation of fear of crime. *Journal of Communication*, 53, 88-104.

Wood, J., & Tendayi Viki, G. (2004). Public perceptions of crime and punishment. In J.R. Adler (Ed.). *Forensic psychology: Concepts, debates and practice* (pp. 16-38).

Cullompton: Willan Publishing.

## **Drugs and Crime**

- Albery, I.P., McSweeney, T., & Hough, M. (2004). Drug use and criminal behaviour: indirect, direct, or no causal relationship? In J.R. Adler (Ed.). *Forensic psychology: concepts, debates and practice* (pp. 140-152). Cullompton: Willan.
- Boles, S.M., & Miotto, K. (2003). Substance abuse and violence: A review of the literature. *Aggression and Violent Behavior, 8*, 155-174.
- Wilkins, C., & Casswell, S. (2003). Organized crime in cannabis cultivation in New Zealand: An economic analysis. *Contemporary Drug Problems, 30*, 757-777.

## **Lie Detection and False Confessions**

- Iacono, W.G., & Patrick, C.J. (2006). Polygraph ("lie detector") testing: Current status and emerging trends. In I.B. Weiner & A.K. Hess (Eds.). *The handbook of forensic psychology* (pp. 552-589). Hoboken, NJ: Wiley.
- Kassin, S.M., & Gudjonsson, G.H. (2004). The psychology of confessions: A review of the literature and issues. *Psychological Science in the Public Interest, 5*, 33-67.
- Knight, J. (2004). The truth about lying. *Nature, 428* (15 April), 692-694.

## **Eyewitness Testimony and Identification**

- Wells, G.L., & Olson, E.A. (2003). Eyewitness testimony. *Annual Review of Psychology, 54*, 277-295.

## **Mental Disorder and Criminal Responsibility**

- Slovenko, R. (1999). The mental disability requirement in the insanity defence. *Behavioral Sciences and the Law, 17*, 165-180.
- Zapf, P.A., Golding, S.L., & Roesch, R. (2006). Criminal responsibility and the insanity defence. In I.B. Weiner & A.K. Hess (Eds.). *The handbook of forensic psychology* (pp. 332-364). Hoboken, NJ: Wiley.

## **Risk, Rehabilitation and Recidivism**

- Andrews, D.A., Bonta, J. (2003). *The psychology of criminal conduct* (third edition). Cincinnati, OH: Anderson Publishing Co. (Chapter 8).
- Gendreau, P., Goggin, C., French, S., & Smith, P. (2006). Practicing psychology in correctional settings. In I.B. Weiner & A.K. Hess (Eds.). *The handbook of forensic psychology* (pp. 722-751). Hoboken, NJ: Wiley.
- Ward, T., & Brown, M. (2004). The good lives model and conceptual issues in offender rehabilitation. *Psychology, Crime & Law, 10*, 243-27.

# Course Assessment

## Summary

There are four pieces of assessment for this course.

<b>In Class Test 1</b>	<b>20%</b>
<b>Article Review</b>	<b>10%</b>
<b>Essay</b>	<b>40%</b>
<b>In Class Test 2</b>	<b>30%</b>

### 1. In Class Test 1

Date: Friday 18th August

Percentage of final grade: 20%

Location: HM LT001

Time: 1.10-2.00pm OR 2.10pm-3.00pm

A test will be held during your normal tutorial time and location on Friday the 18<sup>th</sup> August. The test will cover all lecture and tutorial material presented in weeks 1 through to 5. Further detail on the content of the test will be provided during the semester.

### 2. Article Review

Date due: 4pm, Friday 4 August

Percentage of final grade: 10%

Maximum Length: 3 pages (12 point font, double spaced)

The aim of this assessment is to summarise and critically review an article. Details of this assessment, including the article that is to be analysed, will be provided in the first week of semester.

### 3. Essay

Date due: 4pm, Friday 22nd September

Percentage of final grade: 40%

Maximum word length: 3000 words

A choice of essay topics will be provided by the second week of the semester. Students will be required to submit an essay on ONE of these topics.

### 4. In Class Test 2

Date: Wednesday 11 October

Percentage of final grade: 30%

Location: HM LT001

Time: 1.10-3.00pm

A test will be held during your normal lecture time and location on Wednesday the 11<sup>th</sup> of October. This test will cover all lecture and tutorial material presented in weeks 6 to 11. Further detail on the content of the test will be provided during the semester.



## **Mandatory Course Requirements**

There are no mandatory course requirements for this course.

## **Marking Guidelines for the Essay**

Written assignments should be handed in on A4 paper (on one side only) and should be typed. The Institute insists on a high standard of written work from students. You should therefore ensure that you check thoroughly for spelling mistakes and grammatical errors. Careful proof reading is therefore essential.

The following indicate the criteria that are used in essay assessment. Further details on the marking guidelines for the essay will be provided by the second week of the semester.

1. **Scope:** Does the essay include all the facts, theories and discussions relevant to the essay question? Is it comprehensive?
2. **Critical analysis:** Does the writer show an adequately critical appraisal? Is the criticism constructive? Are the arguments coherent and logically valid? Is it free from irrelevancies and unsupported generalisations?
3. **Originality:** Is there clear evidence of original thinking? Does the writer contribute new viewpoints, or marshal and categorize his/her facts in a new way?
4. **Organisation:** Is the essay clearly organised? Does the material flow in a coherent and logical fashion?
5. **Bibliography:** Are the references comprehensive and up to date? Are the sources good ones? Are all the important references included? Are the references correctly cited according to standard convention?
6. **Communication:** Does the essay communicate the writer's ideas and knowledge well? Are conclusions adequately and logically drawn? Is it concisely written and grammatically correct? Is it legible?

## **Assignment Box**

Assignments must be placed in the assignment box on level 9 in Murphy Building by 4 pm on the due date.

**They MUST NOT be placed in individual staff pigeonholes, or under staff office doors, or handed to lecturers or tutors.**

This is to ensure that all work is properly recorded when submitted, and to avoid problems that have arisen in the past, when work has 'gone missing'.

At 4 pm administration staff will empty the box, date-stamp work and record its receipt, before handing it to the appropriate markers.

**Students must always make and keep a photocopy of the assignment before handing it in. Faxed or e-mailed assignments will not be accepted.**

Unless students have followed this procedure, we will accept no responsibility for pieces of written work claimed to have been handed in.

## **Identifying your Essay or Assignment – Front Sheet**

Please include the School's Assignment Cover Sheet (a sample of which can be found at the back of this course outline) as a front sheet when submitting your assignments. This ensures that you have provided essential information. You may wish to have a front page of your own on your assignment, but the top sheet must be the School's Assignment Cover Sheet. Further copies can be found at the School's Administration office on level 9 of Murphy building, and also on the School's assignment box.

## **Extensions**

The coursework must be handed in by the **due date**. You are expected to keep to this deadline, as otherwise it is unfair to other students. Extensions will be granted only in exceptional circumstances, and should be sought from Russil Durrant **prior to the deadline**. An example of an exceptional circumstance would be illness supported by a letter from a medical practitioner. Please note that lack of organisation, word-processing failures and other work demands are not "good reasons". Late submissions of work without permission will be penalised by the following deductions:

One grade = period up to 24 hours past due date.

Two grades = period more than 24 hours up to 72 hours past due date.

**Work that is handed more than 72 hours late without permission will not be accepted.**

## **Workload**

Taking into account class attendance, reading for tutorials, preparation for assignments and so on, students should spend around 18 hours per week working for CRIM 321.

## **Communications**

Further information about this course, including lecture outlines, handouts and other material will be provided to students via Blackboard throughout the semester. Students should check Blackboard regularly for updates on course material.

## **General University Policies and Statutes**

Students should familiarise themselves with the University's policies and statutes, particularly the Assessment Statute, the Personal Courses of Study Statute, the Statute on Student Conduct and any statutes relating to the particular qualifications being studied; see the Victoria University Calendar available in hard copy or under 'About Victoria' on the VUW home page at [www.vuw.ac.nz](http://www.vuw.ac.nz).

### **Student and Staff Conduct**

The Statute on Student Conduct together with the Policy on Staff Conduct ensure that members of the University community are able to work, learn, study and participate in the academic and social aspects of the University's life in an atmosphere of safety and respect. The Statute on Student Conduct contains information on what conduct is prohibited and what steps are to be taken if there is a complaint. For information about complaint procedures under the Statute on Student Conduct, contact the Facilitator and Disputes Advisor or refer to the statute on the VUW policy website at: [www.vuw.ac.nz/policy/studentconduct](http://www.vuw.ac.nz/policy/studentconduct). The Policy on Staff Conduct can be found on the VUW website at: [www.vuw.ac.nz/policy/staffconduct](http://www.vuw.ac.nz/policy/staffconduct)

### **Academic Grievances**

If you have any academic problems with your course you should talk to the tutor or lecturer concerned; the class representatives may also be able to help you. If you are not satisfied with the result of that meeting, see the Head of School or the relevant Associate Dean; VUWSA Education Coordinators are available to assist in this process. If, after trying the above channels, you are still unsatisfied, formal grievance procedures can be invoked. These are set out in the Academic Grievance Policy which is published on the VUW website at: [www.vuw.ac.nz/policy/academicgrievances](http://www.vuw.ac.nz/policy/academicgrievances)

### **Academic Integrity and Plagiarism**

Academic integrity is about honesty – put simply it means *no cheating*. All members of the University community are responsible for upholding academic integrity, which means staff and students are expected to behave honestly, fairly and with respect for others at all times.

Plagiarism is a form of cheating which undermines academic integrity. The University defines plagiarism as follows:

*The presentation of the work of another person or other persons as if it were one's own, whether intended or not. This includes published or unpublished work, material on the Internet and the work of other students or staff.*

It is still plagiarism even if you re-structure the material or present it in your own style or words.

*Note: It is however, perfectly acceptable to include the work of others as long as that is acknowledged by appropriate referencing.*

Plagiarism is prohibited at Victoria and is not worth the risk. Any enrolled student found guilty of plagiarism will be subject to disciplinary procedures under the Statute on Student

Conduct and may be penalized severely. Consequences of being found guilty of plagiarism can include:

- an oral or written warning
- cancellation of your mark for an assessment or a fail grade for the course
- suspension from the course or the University.

Find out more about plagiarism, and how to avoid it, on the University's website:

[www.vuw.ac.nz/home/studying/plagiarism.html](http://www.vuw.ac.nz/home/studying/plagiarism.html)

### **Students with Impairments**

The University has a policy of reasonable accommodation of the needs of students with disabilities. The policy aims to give students with disabilities the same opportunity as other students to demonstrate their abilities. If you have a disability, impairment or chronic medical condition (temporary, permanent or recurring) that may impact on your ability to participate, learn and/or achieve in lectures and tutorials or in meeting the course requirements, please contact the course coordinator as early in the course as possible. Alternatively, you may wish to approach a Student Adviser from Disability Support Services (DSS) to discuss your individual needs and the available options and support on a confidential basis. DSS are located on Level 1, Robert Stout Building: telephone: 463-6070, email: [disability@vuw.ac.nz](mailto:disability@vuw.ac.nz)

The School of Social and Cultural Studies' Disability Liaison person is Dr Rhonda Shaw, MY1022, telephone: 463 6134 E-m: [Rhonda.Shaw@vuw.ac.nz](mailto:Rhonda.Shaw@vuw.ac.nz).

### **Student Support**

Staff at Victoria want students to have positive learning experiences at the University. Each faculty has a designated staff member who can either help you directly if your academic progress is causing you concern, or quickly put you in contact with someone who can. In the Faculty of Humanities and Social Sciences the support contact is Dr Allison Kirkman, Murphy Building, MY407, telephone: 463 5676. Assistance for specific groups is also available from the Kaiwawao Maori, Manaaki Pihipihinga or Victoria International.

In addition, the Student Services Group (email: [student-services@vuw.ac.nz](mailto:student-services@vuw.ac.nz)) is available to provide a variety of support and services. Find out more at: [www.vuw.ac.nz/st\\_services/](http://www.vuw.ac.nz/st_services/)

VUWSA employs Education Coordinators who deal with academic problems and provide support, advice and advocacy services, as well as organising class representatives and faculty delegates. The Education Office (tel. 463-6983 or 463-6984, email at [education@vuwsa.org.nz](mailto:education@vuwsa.org.nz)) is located on the ground floor, Student Union Building.

## **OTHER CONTACT INFORMATION**

Head of School:

Assoc. Professor Jenny Neale, MY1013  
Tel: 463 5827 E-m: [Jenny.Neale@vuw.ac.nz](mailto:Jenny.Neale@vuw.ac.nz)

Liaison person for international students:

Professor Mike Hill, MY1001  
Tel: 463 6741 E-m: [Mike.Hill@vuw.ac.nz](mailto:Mike.Hill@vuw.ac.nz)

Liaison person for Maori and Pacific students:

Assoc. Professor Jeff Sissons, MY1017  
Tel: 463 6131 E-m: [Jeff.Sissons@vuw.ac.nz](mailto:Jeff.Sissons@vuw.ac.nz)

School Manager:

Kaye McKinlay, MY918 Tel: 463 6546  
E-m: [Kaye.Mckinlay@vuw.ac.nz](mailto:Kaye.Mckinlay@vuw.ac.nz)

School Administrators:

Monica Lichti, Adam Meers and Catherine Urlich  
MY921, Tel: 463 5317, 463 5258 and 463 5677  
E-m: [sacs@vuw.ac.nz](mailto:sacs@vuw.ac.nz)

## Referencing Guidelines

The following format for referencing is from the *Publication Manual* of the American Psychological Association (2001). We encourage you to learn and use the following format for referencing as part of the coursework done for the Institute of Criminology. The following examples are for the more common types of referencing which you will come across. However, if you need further information, please consult the latest edition of the Manual in the library.

### 1. Periodicals

#### (a) **One author publication**

In your reference list, cite as follows:

Henderson, L.N. (1985). The wrongs of victim's rights. *Stanford Law Review*, 38, 937- 1021.

- In text, use the following each time the work is cited: (Henderson, 1985); or Henderson (1985) argues that . . .

#### (b) **Two author publication**

In your reference list, cite as follows:

Hawkins, J. D., & Weis, J.G. (1985). The social development model: An integrated approach to delinquency prevention. *Journal of Primary Prevention*, 6, 73-97.

- In text, use the following each time the work is cited: (Hawkins & Weis, 1985); or Hawkins and Weis (1985) argue that . . .

#### (c) **Three or more author publication**

In your reference list, cite as follows:

Lang, A.R., Goeckner, D.J., Adesso, V.J., & Marlatt, G.A. (1975). Effects of alcohol on aggression in male social drinkers. *Journal of Abnormal Psychology*, 84, 508-518.

- In text, use the following the *first* time the work is cited: (Lang, Goeckner, Adesso & Marlatt, 1975), and everytime *after* this first citation as: (Lang et al. 1975).

## 2. **Books**

### (a) **Reference to a one author book**

In your reference list, cite as follows:

Pratt, J. (1992). *Punishment in a perfect society*. Wellington: Victoria University Press.

- In text, use the following each time the work is cited: (Pratt, 1992); or Pratt (1992) asserts that . . .

### (b) **Reference to a two author book, second edition**

In your reference list, cite as follows:

Downes, D. & Rock, P. (1982). *Understanding deviance* (2nd ed.). Oxford: Clarendon Press.

- In text, use the following each time the work is cited: (Downes & Rock, 1982); or Downes and Rock (1982) suggest that . . .

### (c) **Reference to a chapter in an edited book**

In your reference list, cite as follows:

Ford, D.A. & Regoli, M.J. (1993). The criminal prosecution of wife assaulters: Process, problems, and effects. In N.Z. Hilton (Ed.), *Legal Responses to Wife Assault: Current Trends and Evaluation* (pp. 127-164). California: Sage.

- In text, use the following each time the work is cited: (Ford & Regoli, 1993); or Ford and Regoli (1993) claim that . . .

*Office use only*

Date Received:

(Date Stamp)

# School of Social and Cultural Studies

**Te Kura Mahinga Tangata**

**ANTHROPOLOGY**

**CRIMINOLOGY**

**SOCIOLOGY & SOCIAL POLICY**

**SOCIAL SCIENCE RESEARCH**

## Assignment Cover Sheet

(please write legibly)

**Full Name:** \_\_\_\_\_

**Student ID:** \_\_\_\_\_ **Course (eg ANTH101):** \_\_\_\_\_

**Tutorial Day:** \_\_\_\_\_ **Tutorial Time:** \_\_\_\_\_

**Tutor (if applicable):** \_\_\_\_\_

**Assignment Due Date:** \_\_\_\_\_

### CERTIFICATION OF AUTHENTICITY

*I certify that this paper submitted for assessment is the result of my own work, except where otherwise acknowledged.*

*Signed:* \_\_\_\_\_ *Date:* \_\_\_\_\_



