1.0 BASIC COURSE INFORMATION
1.1 Course Number: Psychology 2830A
1.2 Course Name: Research in Psychology
1.3 Class Times: Tuesdays 10:30-11:30am and Thursdays 9:30-11:30am, W112
1.4 Instructor Information
   Instructor: Dr. Tara Dumas
   Office: V121
   E-mail: tdumas2@uwo.ca
   Office hours: Tuesdays from 9:00am-10:00am and Thursdays from 2:30-3:30pm
   Course website: http://owl.uwo.ca {UWO login ID & password}

2.0 CALENDAR DESCRIPTION
An advanced treatment of the collection, analysis, and interpretation of behavioural data, reviewing and extending the topics covered in Psychology 1100E; problems in the design and conduct of studies and experiments, operational definitions, experimental control and recording of behaviour, statistical treatment of data, including descriptive and inferential statistics.
Antirequisite: Psychology 2810 or the former 283Y
Prerequisite: at least 60% in Psychology 1100E.

3.0 COURSE LEARNING OBJECTIVES
By the end of the course students should be able to:
- choose appropriate statistical tests for data sets
- perform basic descriptive and inferential statistical procedures using hand calculations

4.0 DESCRIPTION OF CLASS METHODS
This course has two components:
1. lectures that are designed to help students become acquainted with the rationale behind statistical procedures and the calculations involved
2. active participation using example data sets will provide practice in the application of knowledge of statistical procedures

5.0 REQUIRED TEXTS
6.0 EVALUATION

<table>
<thead>
<tr>
<th>Evaluation Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes (4)</td>
<td>20%</td>
</tr>
<tr>
<td>Midterm Exam</td>
<td>35%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>40%</td>
</tr>
<tr>
<td>Class Participation</td>
<td>5%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
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</table>

**Quizzes**

Four different quizzes, each worth 5% of your total grade, are due throughout the term (see section 7.0 for due dates). Quizzes will help you to stay on top of course material, test your knowledge, and prepare for exams. You will access quizzes via our class page on OWL and complete them outside of class time. Quizzes will be time sensitive (30 minutes to complete each quiz) and will be available starting at the end of the class before the quiz due date until 10am on the day they are due. **Students who do not complete a quiz during the allotted window of time will receive a zero grade for that quiz. There will be no make-up quizzes.**

**Exams**

The midterm exam (worth 35% of your total grade) will be taken during class time and the final exam (worth 40% of your total grade) is scheduled for the December exam period. Both will be closed-book tests. If an exam is missed for a legitimate reason, appropriate documentation must be submitted to the Academic Counselling Office in a timely fashion (see Section 8.1 below for more details). Note that **there will not be a make-up midterm exam.** Following a student’s failure to write the midterm, and acting on the advice of the Academic Counselling Office to provide relief based on medical grounds, the student’s grade will be re-weighted so that his/her final exam will be worth 75% of his/her overall grade (midterm 35% + final 40%). Otherwise, the student’s midterm grade will be zero. Following a student’s failure to write the final exam, and again acting on the advice of the Academic Counselling Office to provide relief based on medical grounds, the student will be permitted to write a make-up final exam which will only occur on the date and time set aside for such make-up examinations. Otherwise, the student’s final exam grade will be zero. Note that accommodation will not be granted to facilitate travel arrangements. More details on exam dates and content will follow.

**Class Participation**

Class participation is critical to help you understand course material and to engage with the class. It is expected that you will follow along with all example problems covered in class. Five percent of your grade will come from the submission of work done in class. 10 times during the term you will be asked to submit the work you did during class (either independently or within a group) to the professor either via e-mail or via hard copy. Submissions received by the end of the day will receive a point (10 points in total over the term) and those submitted on subsequent days will receive a score of zero.
6.1 GRADES
Students at Huron University College should consider a grade in the range from 70-74 to be evidence of satisfactory performance in a 2100-level Psychology course. Grades in the B+ (75-79) or A (80-89%) ranges will only be awarded for performance that is demonstrably superior to the second-year standard associated with the Major or Minor modules. A grade of A+ (90-100%) will only be awarded very rarely and only for work that is truly exceptional.

7.0 TENTATIVE SCHEDULE OF CLASSES

<table>
<thead>
<tr>
<th>Week</th>
<th>Dates</th>
<th>Quiz Info</th>
<th>Topic(s)</th>
<th>Chapter(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>7-Sept</td>
<td>--</td>
<td>Introduction to statistics</td>
<td>1</td>
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<tr>
<td>2.</td>
<td>12-Sept</td>
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<td>Research methods, measurement and data presentation</td>
<td>2,3</td>
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<td></td>
<td>14-Sept</td>
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<tr>
<td>3.</td>
<td>19-Sept</td>
<td>--</td>
<td>Descriptive statistics: Central tendency and variability</td>
<td>4,5</td>
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<tr>
<td></td>
<td>21-Sept</td>
<td>QUIZ 1 opens</td>
<td></td>
<td></td>
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<tr>
<td>4.</td>
<td>26-Sept</td>
<td>QUIZ 1 due</td>
<td>Inferential statistics: The normal distribution, z-scores, and estimating population parameters</td>
<td>6, 7</td>
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<td>28-Sept</td>
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<td>5.</td>
<td>3-Oct</td>
<td>--</td>
<td>Hypothesis testing &amp; one-sample t-test</td>
<td>8 (until pp. 182)</td>
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<tr>
<td></td>
<td>5-Oct</td>
<td>QUIZ 2 opens</td>
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<td>6.</td>
<td>10-Oct</td>
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<td>Fall Study Break – No Classes</td>
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<td>12-Oct</td>
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<tr>
<td>7.</td>
<td>17-Oct</td>
<td>QUIZ 2 due</td>
<td>T-tests: Testing differences between means</td>
<td>9</td>
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<tr>
<td></td>
<td>19-Oct</td>
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<tr>
<td>8.</td>
<td>24-Oct</td>
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<td>Statistical power, Type I and II errors</td>
<td>8 (pp. 183-185)</td>
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<td></td>
<td>26-Oct</td>
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<td>Midterm Exam</td>
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<td>9.</td>
<td>31-Oct</td>
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<td>One-factor Analysis of Variance (ANOVA)</td>
<td>10</td>
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<td></td>
<td>2-Nov</td>
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<tr>
<td>10.</td>
<td>7-Nov</td>
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<td>Two-factor ANOVA: Part 1</td>
<td>11</td>
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<td></td>
<td>9-Nov</td>
<td>QUIZ 3 opens</td>
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<tr>
<td>11.</td>
<td>14-Nov</td>
<td>QUIZ 3 due</td>
<td>Two-factor ANOVA: Part 2</td>
<td>11</td>
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<td></td>
<td>16-Nov</td>
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<tr>
<td>12.</td>
<td>21-Nov</td>
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<td>Correlation &amp; regression analysis</td>
<td>13, 14</td>
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<td>23-Nov</td>
<td>QUIZ 4 opens</td>
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<tr>
<td>13.</td>
<td>28-Nov</td>
<td>QUIZ 4 due</td>
<td>Nonparametric statistical tests</td>
<td>15</td>
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<td>30-Nov</td>
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<td>14.</td>
<td>5-Dec</td>
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<td>Review Class</td>
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Final Exam during December exam period. Date and time TBA
Appendix to Course Outlines

**Prerequisite Information**
Students are responsible for ensuring that they have successfully completed all course prerequisites. Unless you have either the requisites for this course or written special permission from your Provost and Dean to enrol in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites.

**Conduct of Students in Classes, Lectures, and Seminars**
Membership in the community of Huron University College and the University of Western Ontario implies acceptance by every student of the principle of respect for the rights, responsibilities, dignity and well-being of others and a readiness to support an environment conducive to the intellectual and personal growth of all who study, work and live within it. Upon registration, students assume the responsibilities that such registration entails. The academic and social privileges granted to each student are conditional upon the fulfillment of these responsibilities.

In the classroom, students are expected to behave in a manner that supports the learning environment of others. Students can avoid any unnecessary disruption of the class by arriving in sufficient time to be seated and ready for the start of the class, by remaining silent while the professor is speaking or another student has the floor, and by taking care of personal needs prior to the start of class. If a student is late, or knows that he/she will have to leave class early, be courteous: sit in an aisle seat and enter and leave quietly. Please see the *Code of Student Rights and Responsibilities* at:
http://www.huronuc.ca/CurrentStudents/StudentLifeandSupportServices/StudentDiscipline

**Technology**
It is not appropriate to use technology (such as, but not limited to, laptops, cell phones) in the classroom for non-classroom activities. Such activity is disruptive and is distracting to other students and to the instructor, and can inhibit learning. Students are expected to respect the classroom environment and to refrain from inappropriate use of technology and other electronic devices in class.

**Academic Accommodation for Medical/Non-Medical Grounds**
Students who require special accommodation for tests and/or other course components must make the appropriate arrangements with the Student Development Centre (SDC). Further details concerning policies and procedures may be found at:
http://www.sdc.uwo.ca/ssd/?requesting_acc

(a) **Medical Grounds for assignments worth 10% or more of final grade: Go Directly to Academic Advising**
University Senate policy, which can be found at
http://www.uwo.ca/univsec/pdf/academie_policies/appeals/accommodation_medical.pdf,
requires that all student requests for accommodation on medical grounds for assignments worth 10% or more of the final grade be made directly to the academic advising office of the home faculty (for Huron students, the “home faculty” is Huron), with supporting documentation in the form (minimally) of the Senate-approved Student Medical Certificate found at:
The documentation is submitted in confidence and will not be shown to instructors. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. The instructor will not normally deny accommodation where appropriate medical documentation is in place and where the duration it describes aligns with the due date(s) of assignment(s). Before denying a request for accommodation on medical grounds, the instructor will consult with the Provost and Dean. The instructor’s decision is appealable to the Provost and Dean.

(b) Accommodation on Medical Grounds for assignments worth less than 10% of final grade: Consult Instructor Directly
When seeking accommodation on medical grounds for assignments worth less than 10% of the final course grade, the student should contact the instructor directly. The student need only share broad outlines of the medical situation. The instructor may require the student to submit documentation to the academic advisors, in which case she or he will advise the student and inform the academic advisors to expect documentation. The instructor may not collect medical documentation. The advisors will contact the instructor when the medical documentation is received, and will outline the severity and duration of the medical challenge as expressed on the Student Medical Certificate and in any other supporting documentation. The student will be informed that the instructor has been notified of the presence of medical documentation, and will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. The instructor will not normally deny accommodation where appropriate medical documentation is in place and where the duration it describes aligns with the due date(s) of assignment(s). Before denying a request for accommodation on medical grounds, the instructor will consult with the Provost and Dean. The instructor’s decision is appealable to the Provost and Dean.

(c) Non-medical Grounds: Consult Instructor Directly
Where the grounds for seeking accommodation are not medical, the student should contact the instructor directly. Late penalties may apply at the discretion of the instructor. Apart from the exception noted below, academic advisors will not be involved in the process of accommodation for non-medical reasons.

Where a student seeks accommodation on non-medical grounds where confidentiality is a concern, the student should approach an academic advisor with any documentation available. The advisors will contact the instructor after the student’s request is received, and will outline the severity and duration of the challenge without breaching confidence. The student will be informed that the instructor has been notified that significant circumstances are affecting or have affected the student’s ability to complete work, and the student will be instructed to work as quickly as possible with the instructor on an agreement for accommodation. Before denying a request for accommodation where documentation has been submitted to an academic advisor, the instructor will consult with the Provost and Dean. The instructor’s decision is appealable to the Provost and Dean.

Statement on Academic Offences
Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic Offence, at the following Web site: http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf
**Statement on Academic Integrity**

The International Centre for Academic Integrity defines academic integrity as "a commitment, even in the face of adversity, to five fundamental values: honesty, trust, fairness, respect, and responsibility. From these values flow principles of behaviour that enable academic communities to translate ideals to action." (CAI Fundamental Values Project, 1999).

A lack of academic integrity is indicated by such behaviours as the following:
- Cheating on tests;
- Fraudulent submissions online;
- Plagiarism in papers submitted (including failure to cite and piecing together unattributed sources);
- Unauthorized resubmission of course work to a different course;
- Helping someone else cheat;
- Unauthorized collaboration;
- Fabrication of results or sources;
- Purchasing work and representing it as one’s own.

**Academic Integrity: Importance and Impact**

Being at university means engaging with a variety of communities in the pursuit and sharing of knowledge and understanding in ways that are clear, respectful, efficient, and productive. University communities have established norms of academic integrity to ensure responsible, honest, and ethical behavior in the academic work of the university, which is best done when sources of ideas are properly and fully acknowledged and when responsibility for ideas is fully and accurately represented.

In the academic sphere, unacknowledged use of another’s work or ideas is not only an offence against the community of scholars and an obstacle to academic productivity. It may also be understood as fraud and may constitute an infringement of legal copyright. A university is a place for fulfilling one’s potential and challenging oneself, and this means rising to challenges rather than finding ways around them. The achievements in an individual’s university studies can only be fairly evaluated quantitatively through true and honest representation of the actual learning done by the student. Equity in assessment for all students is ensured through fair representation of the efforts by each.

Acting with integrity at university constitutes a good set of practices for maintaining integrity in later life. Offences against academic integrity are therefore taken very seriously as part of the university’s work in preparing students to serve, lead, and innovate in the world at large. A university degree is a significant investment of an individual’s, and the public’s, time, energies, and resources in the future, and habits of academic integrity protect that investment by preserving the university’s reputation and ensuring public confidence in higher education.

**Students found guilty of plagiarism will suffer consequences ranging from a grade reduction to failure in the course to expulsion from the university. In addition, a formal letter documenting the offence will be filed in the Provost and Dean’s Office, and this record of the offence will be retained in the Provost and Dean’s Office for the duration of the student’s academic career at Huron University College.**

All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is
subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com. Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating.

Personal Response Systems (“clickers”) may be used in some classes. If clickers are to be used in a class, it is the responsibility of the student to ensure that the device is activated and functional. Students must see their instructor if they have any concerns about whether the clicker is malfunctioning. Students must use only their own clicker. If clicker records are used to compute a portion of the course grade:

- the use of somebody else’s clicker in class constitutes a scholastic offence,
- the possession of a clicker belonging to another student will be interpreted as an attempt to commit a scholastic offence.

**Policy on Special Needs**

Students who require special accommodation for tests and/or other course components must make the appropriate arrangements with the Student Development Centre (SDC). Further details concerning policies and procedures may be found at:

[http://www.sdc.uwo.ca/ssd/?requesting_acc](http://www.sdc.uwo.ca/ssd/?requesting_acc)

**Attendance Regulations for Examinations**

A student is entitled to be examined in courses in which registration is maintained, subject to the following limitations:

1) A student may be debarred from writing the final examination for failure to maintain satisfactory academic standing throughout the year.

2) Any student who, in the opinion of the instructor, is absent too frequently from class or laboratory periods in any course will be reported to the Provost and Dean of the Faculty offering the course (after due warning has been given). On the recommendation of the Department concerned, and with the permission of the Provost and Dean of that Faculty, the student will be debarred from taking the regular examination in the course. The Provost and Dean of the Faculty offering the course will communicate that decision to the Provost and Dean of the Faculty of registration.

**Class Cancellations**

In the event of a cancellation of class, every effort will be made to post that information on the Huron website, [http://www.huronuc.ca/AccessibilityInfo](http://www.huronuc.ca/AccessibilityInfo) (“Class Cancellations”).

**Mental Health @ Western**

Students who are in emotional/mental distress should refer to Mental Health @ Western [http://www.uwo.ca/uwocom/mentalhealth/](http://www.uwo.ca/uwocom/mentalhealth/) for a complete list of options about how to obtain help.

**Academic Advising**

For advice on course selections, degree requirements, and for assistance with requests for medical accommodation [see above], students should contact an Academic Advisor in Huron’s Student Support Services ([huronsss@uwo.ca](mailto:huronsss@uwo.ca)). An outline of the range of services offered is found on the Huron website at: [http://www.huronuc.ca/CurrentStudents/AcademicAdvisorsandServices](http://www.huronuc.ca/CurrentStudents/AcademicAdvisorsandServices)

Department Chairs and Program Directors and Coordinators are also able to answer questions about their individual programs. Their contact information can be found on the Huron website at: [http://www.huronuc.ca/Academics/FacultyofArtsandSocialScience](http://www.huronuc.ca/Academics/FacultyofArtsandSocialScience)