

Course ID:	Course Title:		Fall 2017
BIO 105	The Organization and Diversity of Life	Prerequisite:	
		Credits:	3

Class Information Instructo		uctor Information	or Information Important Dates		
Days:	Wednesday and Friday	Instructor:	Dr. Chris Wang	First day of classes:	Wed., Sept. 6
Time:	9:45 - 11:00	Email:	chris.wang@ambrose.edu	Last day to add/drop, or change to audit:	Sun, Sept 17
Room:	A 1085-2	Phone:	(403) 410-2000 ext. 6910	Last day to request revised exam:	Mon, Oct. 23
Lab/ Tutorial:		Office:	L 2113	Last day to withdraw from course:	Mon, Nov 13
		Office Hours:	Wednesday and Friday: 11 am – 12 pm or by appointment (open door policy)	Last day to apply for coursework extension:	Mon, Nov 20
Final Exam:	Dec. 19			Last day of classes:	Mon, Dec 11

## **Course Description**

This course studies biological concepts and mechanisms using current examples from medicine and the environment.

Note: Credit for this course cannot be applied to a Bachelor of Science Degree. Students cannot take both BIO 105 and BIO 131 or BIO 133 for credit.

This course has an existing transfer credit agreement through Alberta Council on Admissions and Transfer. Visit www.transferalberta.ca for details.

#### **Expected Learning Outcomes**

Upon completion of this course, students should be able to:

1. develop an understanding of how science is conducted

2. develop an understanding of basic biological concepts necessary for biological literacy

3. apply higher-level thinking to biology concepts, with emphasis placed on those skills and content needed by educated citizens

4. explore biological issues of concern to the public, forming a foundation for life-long learning on scientific issues

*Campbell Biology: Concepts and Connections, First Canadian Edition.* J.B. Reece, M. R. Taylor, E. J. Simon, J. L. Dickey, and K. GE Scott. 2015. Pearson.

## **Other Learning Resources:**

- 1. Moodle:
- all course documents and materials are distributed via Moodle
- enroll and sign into the class on <a href="http://moodle.ambrose.edu/">http://moodle.ambrose.edu/</a>
- smart phone apps are available
- feel free to post and answer questions on Moodle

#### 2. Group Members:

Name	E-mail	Cell

# **Course Schedule**

Date	Tentative Lecture Topics	Reading	
		(Reece et. al.)	
Sep. 06	Introduction to BIO 105		
Sep. 08	Exploring Biology & Introduction to Evolutionary Biology	Ch. 1 and 13	
Sep. 13	Exploring Biology & Introduction to Evolutionary Biology	Ch. 1 and 13	
Sep. 15	Exploring Biology & Introduction to Evolutionary Biology	Ch. 1 and 13	
Sep. 20	Mechanisms of Evolution	Ch. 14	
Sep. 22	Mechanisms of Evolution	Ch. 14	
Sep. 27	Spiritual Emphasis Day (No Class)		
Sep. 29	Mechanisms of Evolution	Ch. 14	
Oct. 04	Speciation and Phylogeny	Ch. 15	
Oct. 06	Speciation and Phylogeny	Ch. 15	
Oct. 11	Speciation and Phylogeny	Ch. 15	
Oct. 13	Biodiversity of Vertebrate Animals	Ch. 21	
Oct. 18	In-Class Midterm 1		
Oct. 20	Biodiversity of Vertebrate Animals	Ch. 21	
Oct. 25	Symbiosis	Ch. 39	
Oct. 27	Symbiosis	Ch. 39	
Nov. 01	Ecosystem Ecology	Ch. 40	
Nov. 03	Ecosystem Ecology	Ch. 40	
Nov. 08	Fall Module Week (No Class)		
Nov. 10	Fall Module Week (No Class)		
Nov. 15	Conservation and Sustainability	Ch. 41	
Nov. 17	Conservation and Sustainability	Ch. 41	
Nov. 22	In-Class Midterm 2		
Nov. 24	Chemistry of Life	Ch. 2 and 3	
Nov. 29	Chemistry of Life	Ch. 2 and 3	
Dec. 01	Cellular Structure	Ch. 4	
Dec. 06	Cellular Structure	Ch. 4	
Dec. 08	Unifying Concepts of Animal Structure and Function	Ch. 25	

# **Requirements**:

# **Evaluation:**

Evaluation Methods	Due Date	Weighting
in-class assignments	Multiple (in-class)	30%
2 reflective assignments:		
1 <sup>st</sup> reflective assignment	Oct 18	5%
2 <sup>nd</sup> reflective assignment	Nov. 22	5%
Mid-term Exam 1	Oct. 18	15%
Mid-term Exam 2	Nov. 22	20%
Final Exam (The final exam is cumulative with concentration of materials after the 2 <sup>nd</sup> midterm exam)	Dec. 19	25%
Total		100%

# In-Class Assignments:

- work in a group of 4-5 students
- e.g. think-pair-share worksheet, problem solving questions, simple experimental design
- no make-up assignments even for excused absences
- attendance is required to receive marks for in-class assignments

# **Reflective Assignments:**

- this is an individual assignment
- use reflective writing to explore/explain/apply the course content learned to the daily medical/environmental issues in your own words
- select 2 topics based on
  - *e.g.* interesting/inspiring lecture materials or current scientific news from Biology News Net: <u>http://www.biologynews.net</u> California Academy of Science: <u>http://www.calacademy.org/</u>
  - *e.g.* book reviews (titles listed below are just a recommended list):
    - The Hot Zone: The Terrifying True Story of the Origins of the Ebola Virus by Richard Preston
    - The Immortal Life of Henrietta Lacks by Rebecca Skoolet
    - Origin of Species by Charles Darwin
    - The Language of God by Francis Collins
    - Seven Days that Divide the World by John Lennox
- use your own words and NO direct quotes
- keep each assignment to the limit of <u>1-2</u> typed double-spaced pages, including proper
- in-text citations and a reference list according to the enclosed citation guide
- assignments/papers are due at the *start* of class, <u>in hardcopy (paper) form</u>, on the due date. Late assignments are penalized 10% for each day *or part thereof* beyond the due date.

# Midterm Exams:

- only materials covered in the lectures will be tested
- study guides will be provided via course web page
- focus on understanding biological concepts rather than detail memorization

# Final Exam:

- is <u>comprehensive</u> with concentration on the materials covered after the 2<sup>nd</sup> midterm
- please note that students are expected to be available to the last day of the examination period. Travel or other absences from the University <u>will not</u> be accepted as sufficient justification for being excused from examinations (*Academic Calendar*)

# Grade Summary:

Percent (%) to Letter Grade	Grade	Grade Point	Description
Conversion			
90.00% - 100%	A+	4.0	
85.00% - 89.99%	А	4.0	Excellent
80.00% - 84.99%	A-	3.7	
77.00% - 79.99%	B+	3.3	
73.00% - 76.99%	В	3.0	Good
70.00% - 72.99%	В-	2.7	
67.00% - 69.99%	C+	2.3	
63.00% - 66.99%	С	2.0	Satisfactory
60.00% - 62.99%	C-	1.7	
55.00% - 59.99%	D+	1.3	
50.00% - 54.99%	D	1.0	Minimal Pass
00.00% - 49.99%	F	0	Fail

Because of the nature of the Alpha 4.00 system, there can be no uniform University-wide conversion scale. The relationship between raw scores (e.g. percentages) and the resultant letter grade will depend on the nature of the course and the instructor's assessment of the level of each class, compared to similar classes taught previously.

Please note that final grades will be available on student registration system. Printed grade sheets are not mailed out.

# Attendance:

- students are required to attend All the scheduled lectures and evaluation sessions
- a medical note (original and dated) is required to justify for the absence

#### Other:

## **Student Development and Support:**

<u>https://ambrose.edu/campus-life/student-success</u>

# • Ambrose Writing Centre:

- Beth Gripping
- email: writingcentre@ambrose.edu
- phone: (403) 410-2000 ext. 5904

#### • Ambrose Tutorial Service:

same as above

# • Accessibility:

email: accessibility@ambrose.edu

150 Ambrose Circle SW, Calgary, AB T3H 0L5 T 403-410-2000 TF 800-461-1222 info@ambrose.edu ambrose.edu

# **Ambrose University Academic Policies:**

#### Communication

All students have received an Ambrose e-mail account upon registration. It is the student's responsibility to check this account regularly as the Ambrose email system will be the professor's instrument for notifying students of important matters (cancelled class sessions, extensions, requested appointments, etc.) between class sessions. If students do not wish to use their Ambrose accounts, they will need to forward all messages from the Ambrose account to another personal account.

#### Registration

During the **Registration Revision Period** students may enter a course without permission, change the designation of any class from credit to audit and /or voluntary withdraw from a course without financial or academic penalty or record. Courses should be added or dropped on the student portal by the deadline date; please consult the List of Important Dates. After that date, the original status remains and the student is responsible for related fees.

Students intending to withdraw from a course after the Registration Revision Period must apply to the Office of the Registrar by submitting a "Request to Withdraw from a Course" form or by sending an email to the Registrar's Office by the **Withdrawal Deadline**; please consult the List of Important Dates on the my.ambrose.edu website. Students will not receive a tuition refund for courses from which they withdraw after the Registration Revision period. A grade of "W" will appear on their transcript.

Students wishing to withdraw from a course, but who fail to do so by the applicable date, will receive the grade earned in accordance with the course syllabus. A student obliged to withdraw from a course after the Withdrawal Deadline because of health or other reasons may apply to the Registrar for special consideration.

#### **Exam Scheduling**

Students, who find a conflict in their exam schedule must submit a Revised Examination Request form to the Registrar's Office by the deadline date; please consult the List of Important Dates. Requests will be considered for the following reasons only: 1) the scheduled final examination slot conflicts with another exam; 2) the student has three final exams within three consecutive exam time blocks; 3) the scheduled final exam slot conflicts with an exam at another institution; 4) extenuating circumstances. Travel is not considered a valid excuse for re-scheduling or missing a final exam.

#### **Electronic Etiquette**

Students are expected to treat their instructor, guest speakers, and fellow students with respect. It is disruptive to the learning goals of a course or seminar and disrespectful to fellow students and the instructor to use electronics for purposes unrelated to the course during a class session. Turn off all cell phones and other electronic devices during class. Laptops should be used for class-related purposes only. Do not use iPods, MP3 players, or headphones. Do not text, read, or send personal emails, go on Facebook or other social networks, search the internet, or play computer games during class. Some professors will not allow the use of any electronic devises in class. The professor has the right to disallow the student to use a laptop in future lectures and/or to ask a student to withdraw from the session if s/he does not comply with this policy. Repeat offenders will be directed to the Dean. If you are expecting communication due to an emergency, please speak with the professor before the class begins.

#### **Academic Policies**

It is the responsibility of all students to become familiar with and adhere to academic policies as stated in the Academic Calendar. Personal information (information about an individual that may be used to identify that individual) may be required as part of taking this class. Any information collected will only be used and disclosed for the purpose for which the collection was intended. For further information contact the Privacy Compliance Officer at privacy@ambrose.edu.

#### Extensions

Although extensions to coursework in the semester are at the discretion of the instructor, students may not turn in coursework for evaluation after the last day of the scheduled final examination period unless they have received permission for a course Extension from the Registrar's Office. Requests for course extensions or alternative examination time must be submitted to the Registrar's Office by the deadline date; please consult the List of Important Dates. Course extensions are only granted for serious issues that arise "due to circumstances beyond the student's control."

#### **Appeal of Grade**

An appeal for change of grade on any course work must be made to the course instructor within one week of receiving notification of the grade. An appeal for change of final grade must be submitted to the Registrar's Office in writing and providing the basis for appeal within 30 days of receiving notification of the final grade, providing the basis for appeal. A review fee of \$50.00 must accompany the appeal. If the appeal is sustained, the fee will be refunded.

#### **Academic Integrity**

We are committed to fostering personal integrity and will not overlook breaches of integrity such as plagiarism and cheating. Academic dishonesty is taken seriously at Ambrose University as it undermines our academic standards and affects the integrity of each member of our learning community. Any attempt to obtain credit for academic work through fraudulent, deceptive, or dishonest means is academic dishonesty. Plagiarism involves presenting someone else's ideas, words, or work as one's own. Plagiarism is fraud and theft, but plagiarism can also occur by accident when a student fails or forgets to acknowledge to another person's ideas or words. Plagiarism and cheating can result in a failing grade for an assignment, for the course, or immediate dismissal from the university college. Students are expected to be familiar with the policies in the current Academic Calendar that deal with plagiarism, cheating, and the penalties and procedures for dealing with these matters. All cases of academic dishonesty are reported to the Academic Dean and become part of the student's permanent record.

**Note:** Students are strongly advised to retain this syllabus for their records.

150 Ambrose Circle SW, Calgary, AB T3H 0L5 **T** 403-410-2000 **TF** 800-461-1222 info@ambrose.edu **ambrose.edu** 

# The CSE Citation Style: An Introduction

It is important to cite the original source when using an idea, quotation, data, image, etc. that is not your own. Failing to cite your sources constitutes plagiarism. The Council of Science Editors (CSE) style is a standard citation style used across many disciplines in the physical and life sciences. The CSE style encompasses three distinct systems:

- Name-Year: In-text citations appear in brackets, and consist of the author(s) last name, as well as the document's year of publication (e.g. Smith 2008). The end reference list appears in alphabetical order by author last name.
- **Citation-Sequence**: A superscript number (e.g. <sup>1</sup>) is assigned to a document the first time it appears in the text, and the same number is used whenever that work is cited. The references in the reference list are listed numerically in the order in which they first appeared in the text.
- **Citation-Name**: All references in the reference list are organized alphabetically by author last name, and assigned a number according to their order in the list. This number is then inserted in the text in superscript font (e.g. <sup>1</sup>) wherever the work is cited.

This guide describes the **Name-Year** system only, and is based on Chapter 29 of the 7<sup>th</sup> edition of *Scientific Style and Format: The CSE Manual for Authors, Editors, and Publishers,* which is located in the Reference section of both the Macdonald Campus Library (call number: T11 S386 2006) and the Life Sciences Library (call number: WZ 345 S416 2006). For instructions on using the other two systems, or a more detailed description of the Name-Year system, please consult the *Manual*.

# PART 1: IN-TEXT CITATIONS

The author's name and the year of publication are listed in parentheses at the end of the sentence:

This claim was later refuted (Jones 2008).

If the author's name is clearly mentioned in the text, it can be directly followed by the year of publication, in parentheses:

Jones (2008) later refuted this claim.

If both the author name and year are clearly mentioned in the text, there is no need to include a parenthetical reference:

In 2008, Jones refuted this claim.

If you are citing a specific part of a document (e.g. a direct quotation, or a figure, chart or table), include the page number on which that information is found:

"These results clearly contradict those published in 2004 by the Smith lab." (Jones 2008, p. 56).

## More than one author

If a document has two authors, include both surnames separated by "and". For works with three or more authors, include only the first author name, followed by "et al.":

- ... (Andrews and Gray 1995).
- ... (Gomez et al. 2003).

Prepared by Jan Sandink, Liaison Librarian Macdonald Campus Library, Aug. 2010; updated Jan. 2013

# Multiple works by different authors

If you are citing several sources at once, list them in chronological order, or alphabetically if two or more works were published in the same year, and separate each one with a semicolon:

... (Samson 1963; Carter and Bowles 1975; Grimes 1975; Anderson et al. 1992).

# Multiple works by the same author published in the same year

If you are citing two or more works written by the same author in the same year, add a designator (a, b, c...) to distinguish them. Use the same designators in the reference list:

... (Dubois 1976a; Dubois 1976b).

Dubois J. 1976a. Detection of trends in... Dubois J. 1976b. Distribution patterns of...

## Citing a secondary or indirect source

If you would like to cite a source that is cited in another document, it is always best to consult and then cite the original source. However, if you are unable to locate and verify the original source document, you must cite the secondary source while at the same time acknowledging the author of the original idea in both the in-text citation and end reference:

... (Rawls 1971, cited in Brown 2008)



Rawls J. 1971. A Theory of Justice. Cambridge (MA): Belknap Press. Cited in: Brown PG. 2008. The Commonwealth of Life: Economics for a Flourishing Earth. 2nd ed. Montreal (QC): Black Rose Books.

#### **Organizations as authors**

If the author of a document is an organization, corporation, government department, university, etc., use an abbreviated form of the organization in the intext citation, by retaining the first letter of each word in the name, or some other recognized abbreviation:

... (FAO 2006).

#### PART 2: REFERENCE LIST

The reference list comes at the end of your paper and includes full bibliographic information for all of the sources cited in the text. The references are listed in alphabetical order by first author last name.

#### Components of references in the reference list

The following components, if available, are included when citing a source, in the following sequence:

Books and other monographs

Author(s) or Editor(s) Year of publication Title Content or medium designator Edition Secondary author(s) Place of Publication Publisher Pagination Series

Journal and newspaper articles

Author(s) Year of publication Article title Content or medium designator Journal or newspaper title Volume Issue Pagination

## Author(s) or Editor(s)

List the last names and initials of the authors in the order in which they appear in the original document, and separate each one with a comma. Mary-Beth Macdonald and Laurence G. Kaufman become Macdonald MB, Kaufman LG.

If the document has editors rather than authors, follow the names with a comma and "editor(s)":

Macdonald MB, Kaufman LG, editors.

# More than ten authors

Always include the names of the first ten authors. If there are more than ten, include the first ten author names only, followed by a comma and "et al."

## Secondary author(s)

Secondary authors include translators, illustrators, editors or producers, and may be included in the reference, in addition to the principal author(s), after the book title:

Marquez GG. 1988. Love in the time of cholera. Grossman E, translator. New York...

## Organizations as authors (29.3.6.1.2)

The full name of the organization must be identified in the reference list, but preceded by the abbreviation used in the text, in square brackets. Order the reference alphabetically by the full name, not the acronym:

[FAO] Food and Agriculture Organization of the United Nations. 2006. Gender and law: Women's rights in agriculture...

## Title

Include both the title and subtitle, retaining the punctuation used in the original document. For books and journal article titles, capitalize only the first word, as well as proper nouns, acronyms and initials. All significant words in journal titles may be capitalized:

Book: Plant cell culture: essential methods

Journal: Canadian Journal of Animal Science

## **Content designator**

Content designators describe the format of a document, and may be used to provide additional information with regards to the nature of a document (e.g. dissertations, theses, bibliographies, and certain types of journal articles such as editorials, letters to the editor, news, etc.). Content designators appear in square brackets directly after the title:

Bernier MH. 2009. Assessing on-farm water use efficiency in southern Ontario [thesis]. Montreal...



#### Medium designator

Medium designators indicate that the document is in a non-print format, such as "microfiche", "CD-ROM", or "Internet". Medium designators are required and appear in square brackets directly after the title:

Gooderham CB. 1917. Bee diseases [microfiche]. Ottawa...

#### **Place of Publication and Publisher**

The place of publication refers to the city where the publisher is located. This information is usually found on the title page of the book in question, or in the McGill catalogue record. If no place of publication can be found use the words [place unknown] in square brackets. If more than one city is listed, use only the first one that appears. Certain cities may stand alone (e.g. New York), but in order to avoid confusion, the country name may be written out or 2 letter ISO country code included (e.g. United Kingdom: GB). For Canadian or U.S. cities, the two letter province or state code may be included.

#### Pagination

If using only part of a published work (ie. a journal article, or a book chapter), indicate the pagination of the section you are referring to. Pagination is optional if you are referring to the entire work.

## Series

If the document is part of a series, you must add the series title and volume number at the end of the entry.

## PART 3: EXAMPLES (PRINT)

#### Journal article

# Author(s). Year. Article title. Journal name. Volume(Issue): Pages.

Holmberg S, Osterholm M, Sanger K, Cohen M. 1987. Drug-resistant salmonella from animals fed antimicrobials. New England Journal of Medicine. 311(2): 617-622.

#### Book

# Author(s). Year. Book Title. Edition. Place of Publication: Publisher.

Carson R. 1962. Silent spring. Boston (MA): Houghton Mifflin.

#### Chapter in a book

Author(s). Year. Chapter title. In: Book title. Edition. Place of Publication: Publisher. p. Pages of the chapter.

Carson R. 1962. Earth's green mantle. In: Silent spring. Boston (MA): Houghton Mifflin. p. 63-83.

#### Edited book

# Editor name(s), editors. Year. Book title. Edition. Place of Publication: Publisher.

Springate-Baginski O, Blaikie P, editors. 2007. Forests, people and power: the political ecology of reform in South Asia. London (GB): Earthscan.

#### Chapter or article in an edited book

Author(s) of the part. Year. Chapter title. In: Editor name(s), editors. Book title. Edition. Place of Publication: Publisher. p. Pages of the chapter.

Banerjee A. 2007. Joint forest management in West Bengal. In: Springate-Baginski O, Blaikie P, editors. Forests, people and power: the political ecology of reform in South Asia. London (GB): Earthscan. p. 221-260.

#### Article in a dictionary or encyclopedia

Cite as you would an article in an edited book; if the author of the part is not specified, the editor assumes the place of the author.

#### Book in a series

# Author(s). Year. Book Title. Edition. Place of Publication: Publisher. (Series title; vol. #)

Tegos G, Mylonakis E, editors. 2012. Antimicrobial drug discovery: emerging strategies. Wallingford, Oxfordshire (GB): CABI. (Advances in molecular and cellular microbiology; vol.22).

#### Thesis or dissertation

# Author(s). Year. Title [content designator]. [Place of Publication]: Publisher (often a university).

Bernier MH. 2009. Assessing on-farm water use efficiency in southern Ontario [thesis]. [Montreal (QC)]: McGill University.

#### **Conference papers or proceedings**

Author(s). Year. Title of paper. In: Editor name(s), editors. Title of Volume. Number and name of conference; date of conference; location of conference. Place of publication: Publisher. p. Pages.



Clarke A, Crame JA. 2003. Importance of historical processes in global patterns of diversity. In: Blackburn TM, Gaston KJ, editors. Macroecology: concepts and consequences. Proceedings of the 43rd annual symposium of the British Ecological Society; 2002 Apr 17-19; Birmingham. Malden (MA): Blackwell. p. 130-152.

## PART 4: EXAMPLES (ELECTRONIC)

The proliferation of electronic information has introduced new challenges, as documents can exist in several different formats. Electronic sources are cited in the same way as their print counterparts, with some internet-specific items added: a medium designator (see description above), the date the document was last modified or updated (if available), the date cited, and the document URL or DOI (digital object identifier).

Opinions differ on how best to cite electronic journal articles. Generally, an electronic article based on a print source, in PDF format, is considered unalterable and is cited like a print article would be. Electronic articles in html or text format could easily be altered or exist in several versions, and should be cited respecting the rules for websites and other electronic documents.

When viewing journal articles online, the links that appear in your browser's address box may be temporary and will no longer work after a few days. Many databases and publishers will provide a permanent or persistent link, or, look for the article's DOI (digital object identifier), which is often listed along with the rest of the citation information.

## **Electronic article in PDF format**

Articles in pdf format, based on a print source, can be cited like a print journal article (example in Part 3).

#### Electronic article in HTML or text format

Author(s). Year. Article title. Journal name [medium designator]. [date updated; date cited]; Volume(Issue): Pages *(if available)*. Available from: URL or DOI

Woolf D, Amonette JE, Street-Perrott FA, Lehmann J, Joseph S. 2010. Sustainable biochar to mitigate global climate change. Nature Communications [Internet]. [cited 2010 Aug 18]; 1(Art. 56). Available from: http://www.nature.com/ncomms/journal/ v1/n5/full/ncomms1053.html

#### Electronic book

Author(s) or Editor(s). Year. Book Title [medium designator]. Edition. Place of Publication: Publisher; [date updated; date cited]. Available from: URL

Watson RR, Preedy VR, editors. 2010. Bioactive foods in promoting health: fruits and vegetables [Internet]. Amsterdam: Academic Press; [cited 2010 Apr 22]. Available from: www.sciencedirect.com/ science/book/9780123746283

#### Article in an electronic dictionary or encyclopedia

#### Cite as you would an article in an electronic book

Allaby M, editor. 2006. photosynthesis. In: Dictionary of Plant Sciences [Internet]. Rev. ed. Oxford: Oxford University Press; [cited 2010 Aug 31]. Available from: www.oxfordreference.com/views/ ENTRY.html?subview=Main&entry=t7.e5147

#### Website

Title of website [medium designator]. Date of publication. Place of publication: Publisher; [date updated; date cited]. Available from: URL

Electronic Factbook [Internet]. 2007. Montreal (QC): McGill University; [updated 2007 Mar 30; cited 2013 Jan 11]. Available from: http://www.is.mcgill.ca/upo/factbook/indexupo.htm

#### **Online document**

# Author(s). Date of publication. Title [medium designator]. Edition. Place of publication: Publisher; [date updated; date cited]. Available from: URL

Kruse JS. 2007. Framework for sustainable soil management: literature review and synthesis [Internet]. Ankeny (IA): Soil and Water Conservation Society; [cited 2008 Aug 3]. Available from: http://www.swcs.org/documents/filelibrary/Beyon dTliteraturereview.pdf



# High School vs University

	High School	University
Time/Schedule	School day is highly structured and organized by teachers.	School day is structured by the student, as they are responsible for scheduling their own classes.
	Time often given in class for students to work on assignments.	Students are expected to study and work on assignments outside of class.
	Students may find that they have more time for extracurricular activities, as the competition to get good grades is not as high and students may not have to put in large amounts of study time in order to get good grades.	Students have less time to devote to extracurricular activities because academic expectations are higher and more study time is required.
Academics	The academic pool is smaller and competition to get good grades is less. Students may be able to earn good grades with minimal effort.	The academic pool is larger and competition to get good grades is higher. Students find that study habits need to be improved in order to maintain the marks they were able to achieve in high school. Minimum effort will most likely result in poor grades.
	Assignments are usually spaced evenly over the semester and introduced by the teacher as the class progresses through the term.	Professors provide an outline (course syllabus) of the entire course on the first day of class, which include all assignment and test dates for the entire term, and the latter part of a course may be weighted more heavily with due dates than in the beginning of the term.
Ac	Students are not expected to work ahead on course content.	Students are expected to prepare for classes, by doing readings ahead of time.
	Teachers may make allowances for assignments to be handed in late.	Due dates are not usually flexible. Students are expected to be actively working on assignments throughout the term and not leaving things to the last minute.
	Frequent feedback with regards to marks.	Students are expected to track their own academic progress and seek help as needed.
Teacher/Student Relationship	Teachers are often charged with the task of motivating students to learn.	Students are charged with the task of finding their own motivation to learn.
	Daily student/teacher contact.	Less regular student/professor contact.
	Teachers provide regular review, feedback, and guidance regarding course content.	Students are expected to take the initiative to ask questions in class, or to contact their professors by email or in person during office hours, if they need help with course content.
	Teachers may provide frequent reminders about assignment due dates.	Few or no reminders about assignment due dates.

	High School	University
Family ement	Communication is open and information, such as performance and attendance, is freely shared between parents and school representatives.	Students are the only ones who have access to their personal student information. Students must provide written authorization allowing parents or other family members access to their student information.
Parent/Family Involvement	Parents contact teachers and counsellors directly with concerns.	University staff, academic advisors and counsellors are bound by privacy legislation and can only answer student progress questions as they would generally apply to any student.
Advising	Parents and Guidance Counsellors recommend academic pathways for students to follow, based on students' interests and academic performance.	University Academic Advisors and Career Counsellors provide clarification and advice about academic and career requirements. Students must become invested in their own educational goals and career decisions.
Academic Advising	Students often have a limited understanding of the options available to them.	Students start to explore multiple options before committing to a specific academic program or career. Students are expected to act on guidance and advice provided.
Status	Students are often assigned a personal, academic, or social status by the people around them—their parents, friends, teachers, or community.	Students can redefine themselves, along with their status, as they wish.
Value Judgements	Students value judgements are heavily influenced by their parents, friends, teachers, or communities points of view, as a result, value judgements are often assumed by the student without question.	Students start to view the world around them through their own eyes. Students begin to question previously held beliefs. The 'status-quo' is challenged and students begin to develop their own opinions, perspectives and values.

Adapted from Western Michigan University. (2013-2014). High School vs. College. In Western Michigan Parent/Family Guide Academic Year 2013-14. Retrieved from http://www.wmich.edu/parents/documents/2013-western-michigan-university-final-WEB.pdf.