



Purpose: It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of Wharton County Junior College, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction.

Course Title - Historical Geology Laboratory

Course Prefix and Number - GEOL 1104

Department - Geology

Division – Math & Science

Course Type: (check one)

- Academic General Education Course (from ACGM – but not in WCJC Core)
- Academic WCJC Core Course
- WECM course (This course is a Special Topics or Unique Needs Course: Y or N)

Semester Credit Hours # : Lecture Hours # : Lab/Other Hours # 1:0:2

Equated Pay hours for course – 1.6

Course Catalog Description - Laboratory exercises include the study of plant and animal fossils and practical application of the principles of historical geology.

Prerequisites/Co-requisites - Credit for or concurrent enrollment in GEOL 1304

List Lab/ Other Hours
Lab Hours 2
Clinical Hours
Practicum Hours
Other (list)

Prepared by Danny Glenn

Date 09/08/2013

Reviewed by Department Head Danny Glenn

Date 09/08/2013

Accuracy Verified by Division Chair Kevin Dees

Date 09/08/2013

Approved by Dean or Vice President of Instruction *gghunt*

Date 09/08/2013



I. Topical Outline – Each offering of this course must include the following topics (be sure to include information regarding lab, practicum, clinical or other non-lecture instruction):

- Ch. 1 - Sedimentary Environments
- Ch. 2 - Geochronology & the Geologic Time Scale *
- Ch. 3 – Absolute Dating
- Ch. 4 - Introduction to Fossils & Fossilization * (& review for Lab Exam I)

Lab Exam I.

- Ch. 5 - Sponges
- Ch. 6 - Corals
- Ch. 7 - Bryozoans
- Ch. 8 - Brachiopods
- Ch. 9 - Bivalves*
- Ch. 10 - Gastropods
- Ch. 11 - Cephalopods* (& review for exam)

Lab Exam II. (FOSSIL PRACTICAL #1)

- Ch. 12 – Arthropods
- Ch. 13 – Echinoderms*
- Ch. 14 - Microfossils*
- Ch. 15 – Paleobotany* & Review for Practical

Lab Exam III. (FOSSIL PRACTICAL #2)

(*) after a topic means a quiz will be over the previous week’s material.

II. Course Learning Outcomes

Learning Outcomes Upon successful completion of this course, students will:	Methods of Assessment
1. Classify and interpret depositional environments using sedimentary rocks and fossils.	1. Exams and Quizzes, Discussions, Practicals
2. Taxonomically classify samples of geologically important fossil groups and use them to interpret the age of rocks on the Geologic Time Scale.	2. Exams and Quizzes, Discussions, Practicals
3. Apply relative and numerical age-dating techniques to construct geologic histories including the correlation of stratigraphic sections.	3. Exams and Quizzes, Discussions, Practicals
4. Reconstruct past continental configurations.	4. Exams and Quizzes, Discussions, Practicals
5. Integrate multiple types of data to interpret Earth history.	5. Group Power Point Presentation

III. Required Text(s), Optional Text(s) and/or Materials to be Supplied by Student.

Lab Manual –

Historical Geology a Paleontological Approach, by Danny Glenn, Revised Printing, Kendall/Hunt Publishers, 2013 ISBN:978-1-4652-3316-5

IV. Suggested Course Maximum - 24

V. List any specific spatial or physical requirements beyond a typical classroom required to teach the course.

Lab room with collections of specimens minerals, rocks, fossils, mapping materials and other geology materials needed for presentation. lecture and learning.

VI. Course Requirements/Grading System – Describe any course specific requirements such as research papers or reading assignments and the generalized grading format for the course

Concepts Exam – Ch. 1 through 4	20%
Fossil Practical – I	20%
Fossil Practical – II	20%
7 quizzes (Ave. of top 5)	20%
Completed Lab Manual	<u>20%</u>
	100%

A= 90-100

B= 80-89

C= 70-79

D= 60-69

F= 59 and below

VII. Curriculum Checklist

- **Academic General Education Course** (from ACGM – but not in WCJC Core)
No additional documentation needed

- **Academic WCJC Core Course**
Attach the Core Curriculum Review Forms

- Critical Thinking
- Communication
- Empirical & Quantitative Skills
- Teamwork
- Social Responsibility
- Personal Responsibility

- **WECM Courses**
If needed, revise the Program SCANS Matrix & Competencies Checklist.



Core Curriculum Review Form

Foundational Component Area: **Life & Physical Sciences**

Course Prefix & Suffix: _____

Core Objective: **Critical Thinking Skills**—to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information

Student Learning Outcome supporting core objective:

For each core objective, there must be at least two different methods of assessment.

SLO Status	Student Learning Outcome (SLO)	Learning Activity	Assessment
The SLO is:	Insert SLO (from Administrative Master Syllabi) below	Provide a brief name and description of the sample learning activity:	Provide a brief name and description of the sample quiz, exam, rubric, assignment, etc. for assessing the objective:
<input type="checkbox"/> Existing <input type="checkbox"/> Revised <input type="checkbox"/> New <input type="checkbox"/> State Mandated			
<input type="checkbox"/> Existing <input type="checkbox"/> Revised <input type="checkbox"/> New <input type="checkbox"/> State Mandated			
<input type="checkbox"/> Existing <input type="checkbox"/> Revised <input type="checkbox"/> New <input type="checkbox"/> State Mandated			

Department Head: _____

Date: _____



Core Curriculum Review Form

Foundational Component Area: **Life & Physical Sciences**

Course Prefix & Suffix: _____

Core Objective: **Communication Skills**—to include effective development, interpretation and expression of ideas through written, oral and visual communication

Student Learning Outcome supporting core objective:

For each core objective, there must be at least two different methods of assessment.

SLO Status	Student Learning Outcome (SLO)	Learning Activity	Assessment
The SLO is:	Insert SLO (from Administrative Master Syllabi) below	Provide a brief name and description of the sample learning activity:	Provide a brief name and description of the sample quiz, exam, rubric, assignment, etc. for assessing the objective:
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Department Head: _____

Date: _____



Core Curriculum Review Form

Foundational Component Area: **Life & Physical Sciences**

Course Prefix & Suffix: _____

Core Objective: **Empirical and Quantitative Skills**—to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions

Student Learning Outcome supporting core objective:

For each core objective, there must be at least two different methods of assessment.

SLO Status	Student Learning Outcome (SLO)	Learning Activity	Assessment
The SLO is:	Insert SLO (from Administrative Master Syllabi) below	Provide a brief name and description of the sample learning activity:	Provide a brief name and description of the sample quiz, exam, rubric, assignment, etc. for assessing the objective:
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Department Head: _____

Date: _____



Core Curriculum Review Form

Foundational Component Area: **Life & Physical Sciences**

Course Prefix & Suffix: _____

Core Objective: **Teamwork**—to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

Student Learning Outcome supporting core objective:

For each core objective, there must be at least two different methods of assessment.

SLO Status	Student Learning Outcome (SLO)	Learning Activity	Assessment
The SLO is:	Insert SLO (from Administrative Master Syllabi) below	Provide a brief name and description of the sample learning activity:	Provide a brief name and description of the sample quiz, exam, rubric, assignment, etc. for assessing the objective:
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