# WASHTENAW COMMUNITY COLLEGE
## COURSE-SYLLABUS APPROVAL FORM (CSAF)

**For help screens, select a field and press F1**

## SECTION I. COURSE SUBMISSION INFORMATION

1. **Course:** (Enter proposed discipline, number & title here. If changing the number or title of an existing course, give old number or title in box 4 below.)

**Discipline/No:** GLG 109 **Title:** Common Rocks and Minerals

Division Code: MNS Department Code: PHYD Effective Term: ~~Fall 2001~~ W 2002

☐ Do not publish in Time Schedule
☐ Do not publish in College Catalog

2. **Type of Approval:** (applies to both new courses and changes)
- ☒ Full Approval
- ☐ Conditional Approval

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- ☐ This proposal previously received conditional approval for the Term: _____

3. **Reason for Submission:** This Course is being submitted for: (check all that apply)
- ☐ New Course Approval (Skip the rest of Section I and go directly to Section II.)
- ☒ Five-year Syllabus Review ☐ No changes to course
- ☐ Major Change(s)
- ☒ Minor Change(s) (If not due for review, submit sections I, II, and revised parts of Section III.)
- ☐ Reactivation of Inactive Course
- ☐ Inactivation (Submit Sections I and II only.)

4. **Change Information:** (Check all that apply. Make proposed changes in Section III, Course Syllabus.)

**Minor Changes**
- ☐ Course Discipline/Number (was _____)
- ☐ Course Title (was _____)
- ☒ Course Description
- ☐ Capacity (was: ____)
- ☐ Pre or Corequisites
- ☐ Course Objectives
- ☐ Distribution of Contact Hours (contact hours were: lect: _____ lab _____ clin _____ exp _____)
- ☐ Distance Learning - minor (Attach Preliminary Approval Form for Distance Learning & the Section Handout.)
- ☒ Other text, schedule, etc...

**Major Changes** (Major changes will be reviewed by Curriculum Committee.)
- ☐ Credit hours (credits were: _____)
- ☐ Core Elements: (Elements to be added: _____) (Elements to be removed: _____)
- ☐ Grading
- ☐ Course Objectives affecting core elements
- ☐ Total Contact Hours (total contact hours were: _____)
- ☐ Honors (Attach Honors Section Approval Form.)
- ☐ Distance Learning - major (Attach Preliminary Approval Form for Distance Learning & the Student Handout for the Distance Section.)
- ☐ Other _____

5. **Rationale for changes:**
Normal Updates.

## SECTION II. COURSE REVIEW INFORMATION AND SIGNATURES

1. **Department Review** (To be completed by department chair; if recommendation is no, initial and return to preparer with rationale attached.)

Will significant new resources be required? ☒ yes ☒ no (If yes, explain _____)
Have departments that may be affected by this course been consulted? ☐ yes ☒ no (Explain N/A)
Does the department support approval of this course? ☒ yes ☐ no

Print: Dave Thomas (Faculty/Preparer) Signature: Dave Thomas Date: 8/17/01

Print: Kathleen Butcher (Department Chair) Signature: KButcher Date: 8/1/01

2. **Division Review** (To be completed by division dean; if recommendation is no, initial and return with rationale attached.)

Will significant new resources be required? ☐ yes ☒ no (If yes, have they been secured? ☐ yes ☐ no)
Is this a curricular priority for your division? ☒ yes ☐ no (Comment _____)
What is your estimate of projected enrollment? normal

Recommendation ☒ Yes ☐ No M Stewart (Division Dean's Signature) 8/22/01 (Date)

3. **Curriculum Committee Review** (Attach additional comments if necessary.)

Recommendation ☐ Yes ☐ No _____ (Curriculum Committee Chair's Signature) _____ (Date)

4. **Vice President for Instruction and Student Services Approval** (Attach additional comments if necessary.)

Approval ☒ Yes ☐ No _____ (Vice President's Signature) _____ (Date)

Log File 10/15/01 ACS Code 115 Catalog File Date 10/15/01 Access Date 12/15/01

Core Elements Approved _____ DISTRIBUTED & FILED New Syllabus Date Fall 2001

OCT 19 2001

MELISSA C. HASLER

WASHTENAW COMMUNITY COLLEGE
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**SECTION III. COURSE SYLLABUS**

**For help screens, select a field and press F1.**

**A. COURSE DETAILS (discipline # and title will automatically be entered in 1 and 2 below upon saving or previewing)**

1. **Course Discipline & No.:** GLG 109 **2. Course Title:** Common Rocks and Minerals

3. **Course Description:** The identification of rocks and minerals is accomplished through laboratory and field studies. Emphasis is placed on Michigan's specimens. This course is intended for students interested in becoming teachers, ~~teachers~~, or ~~students needing a science elective~~ interested in rocks and minerals

4. **Credit Hours:** 3
   If Variable credit, Give Range:
   _____ to _____
   If repeatable for credit, how many times? _____

5. **Class Capacity:** 24
   (If nonstandard, attach Class Capacity Exception form.)

6. **Course Options:**
   - ☐ Distance learning (Attach preliminary distance approval form and Section Handout.)
   - ☐ Honors (Complete Part G.)
   - ☐ P/NP Grading (Attach rationale.)

7. **Contact Hours per Semester in:**
   - Lecture: 45
   - Lab: _____
   - Clinical: _____
   - Experiential: _____
   - **Total Contact Hrs:** 45

8. **Prerequisite(s):**
   None

9. **Corequisite(s):** (limit to 2)
   None

10. **a. Course Purpose:**
    - ☐ Program Specialty
    - ☒ Program Support
    - ☐ Nonprogram Specialty
    - ☒ Transfer
    - ☐ Enrichment
    - ☐ Basic Skills

**b. Is this course a requirement for a program?**
- ☐ Yes (specify the program(s) below)
- ☒ No

**c. Indicate schools to which you want Curriculum Services to send syllabus:**
(If transfer is approved, attach documentation.)
- ☒ EMU
- ☒ UM
- ☐ Other _____

**B. MAJOR INSTRUCTIONAL UNITS** A major instructional unit is a grouping of topics that naturally relate to one another. List in order the major instructional units. Add additional numbers as needed.

1. Minerals
2. The Rock Cycle
3. Igneous
4. Sedimentary Rocks
5. Metamorphic Rocks
6. Michigan's Rocks

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## C. CORE ELEMENT INFORMATION

**1. Core Element Submission Information:** (Please check all that apply)

☐ This course has been previously approved for core elements. List **currently** approved core elements: _____

☐ Please review this course for core elements marked in part 2 below. (Mark only core elements being added or those needing review because of proposed major changes to the course.)

☐ This course does not meet any core elements. Explain _____

**2. Proposed Core Element(s):** (Mark the boxes of only the elements to be reviewed at this time. For detailed information on the criteria for determining whether a course meets a core element, refer to the Core Element Annotations in the Curriculum Manual.)

☐ 1. To read and listen in a critical and perceptive way; to speak in an organized, clear, and effective manner.

☐ 2. To use information sources and information gathering techniques; to cite sources when producing written communications.

☐ 3. To develop, organize, and express thoughts in writing using Standard English.

☐ 4. To apply basic mathematics through the level of elementary algebra.

☐ 5. To represent and solve problems using mathematical techniques.

☐ 6. To interpret elementary descriptive statistics.

☐ 7. To comprehend and use concepts and ideas.

☐ 8. To develop, express, test, and evaluate ideas.

☐ 9. To analyze problems, develop solutions, and evaluate results in a clear, logical, and consistent manner.

☐ 10. To distinguish between fact and opinion; to recognize biases and fallacies in reasoning.

☐ 11. To use computer systems to achieve professional, educational, and personal objectives.

☐ 12. To apply the protocols of computer use and respect the legal and other rights of individuals or organizations.

☐ 13. To be aware of the artistic experience in personal and cultural enrichment, growth, and communication.

☐ 14. To be aware of the nature and variety of the human experience through the methods and applications of the humanities

☐ 15. To understand the basic principles of scientific inquiry.

☐ 16. To have a knowledge of basic human biological principles, including those related to wellness.

☐ 17. To understand the basic principles of the natural sciences, and their relationship to the environment.

☐ 18. To understand the basic principles and applications of technology.

☐ 19. To understand the principle of integrating technological elements into systems.

☐ 20. To understand the relationship of technology to individuals, society, and the environment.

☐ 21. To understand the methods and applications of the social sciences in exploring the dynamics of human behavior.

☐ 22. To understand those principles and values, including individual rights and civic responsibilities, which maintain and enhance democracy and freedom in a pluralistic society.

☐ 23. To have a working knowledge of the history, structure, and function of American social, political, and economic institutions.

☐ 24. To be aware of the contemporary global community, especially its geographical, cultural, economic, and historical dimensions.

DIRECTIONS: Each core element marked above must be included in the appropriate core element boxes next to the course objectives in SECTION D which directly support that core element.

**3. Courses That Partially Satisfy A Core Element In Combination With Other Courses:**

☐ If this course is part of a combination of courses that together meet a core element, mark this box. The courses must all be submitted and reviewed together for core element approval.

Other course(s) required _____

**Dean's Comments:**

**Curriculum Committee's Comments:**

**Vice President's Comments:**

COURSE OBJECTIVES AND/OR GOALS:

**Major Instructional Unit #1** **Heading: Minerals**

Objective #1. Given a set of common minerals students will analyze and describe their physical and chemical properties.

Objective #2. Using a mineral identification key students will correctly identify unknown mineral specimens with 90% accuracy in the laboratory.

Objective #3. Given twenty specimens on a quiz, students will correctly identify unknown minerals to 90% accuracy.

**Major Instruction Unit #2** **Heading: The Rock Cycle**

Objective #1. Given a diagram of the Rock Cycle, students will analyze and describe the processes of the cycle.

Objective #2. Using a worksheet, students will fill in missing blanks in the rock cycle sequence.

**Major Instructional Unit #3** **Heading: Igneous Rocks**

Objective #1. Given a rock key, text and a set of igneous rocks, students will correctly identify a set of igneous rocks with 90% accuracy in the laboratory.

**Major Instructional Unit #4** **Heading: Sedimentary Rocks**

Objective #1. Given a rock key, text and a set of sedimentary rocks, students will correctly identify a set of sedimentary rocks with 90% accuracy in laboratory.

**Major Instructional Unit #5** **Heading: Metamorphic Rocks**

Objective #1. Given a rock key, text and a set of metamorphic rocks, students will correctly identify a set of metamorphic rocks with 90% accuracy in the laboratory

**Major Instructional Unit #6** **Heading: Michigan's Rocks**

Objective #1. As a corollary of visiting a gravel pit on two occasions, students will organize, identify and assemble a collection of Michigan rocks for a grade.

Objective #2. As a corollary of visiting the U. of M. Museum of Natural History, students will complete a museum assignment worksheet and submit it for a grade.

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## E. INSTRUCTIONAL METHODS AND EVALUATION

**1. Instructional Methods:** (Check the appropriate boxes and describe as needed.)

- ☒ Lecture/Discussion
- ☒ Field Trips
- ☐ Clinical Instruction
- ☐ Team Assignments
- ☐ Self-Paced Learning
- ☐ Telecourse
- ☐ Internet Instruction
- ☐ Video Seminar
- ☐ Computer Simulations
- ☒ Laboratory Assignments
- ☐ On-Site Work Experience
- ☐ Interactive TV
- ☐ Other

**2. Evaluation Criteria:**

- ☒ Attendance
- ☐ Quizzes
- ☐ Class Discussion
- ☒ Tests
- ☐ Papers
- ☐ Midterm
- ☐ Portfolio
- ☐ Final Exam
- ☒ Projects
- ☐ Home Work
- ☒ Reports
- ☐ Presentations
- ☐ Clinical/Work
- ☐ Performances
- ☒ Other Laboratory and Field Trip

**3. Attendance Requirements:** (For Certification or nonevaluative purposes.)

Attendance is mandatory to excel in this course.

## F. EQUIPMENT, FACILITIES, TEXTS, MATERIALS, AND SUPPLIES

**1. Special Equipment/Facilities :** (Check the appropriate boxes and describe as needed.)

- ☒ Lab equipment
- ☒ Testing Center
- ☐ LRC Reserves
- ☐ Student Competitions
- ☒ Computers need software
- ☐ Off-Campus Sites
- ☐ CD ROM
- ☐ Student Tutors
- ☒ Field Trips
- ☐ Distance Learning Classroom
- ☐ Other

**2. Texts:** (Please indicate if no text is required.)

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Title: Simon and Schuster's Guide to Rocks and Minerals
Author:
Publisher: Simon and Schuster
Copyright Yr: latest
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Est. Cost:
Other Texts:

**3. Supplies and/or Uniforms Student will have to Own or Acquire for Course:**
(e.g. calculators, uniforms, tools, and software, etc., excluding pen, pencil, paper, or textbooks.)

| Descriptions | Cost Estimates |
|---|---|
| Magnifying lens (10x) | $20.00 |
| Magnet | $1.00 |
| Colored Pencils, Rulers | $2.00 |

**4. Reference Materials Students Will Use:**
(e.g. journals, books, manuals, maps, LRC reserves, etc.)

**5. Audio/Visual and Computer Materials Students Will Use:**
(e.g. films, video tapes, slides, audio tapes, software, CDs, etc.)

| Title | Source |
|---|---|
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All Level 1 P

## Geology



### GLG 100: Introduction to Earth Science

**Prerequisites: College Level Entrance Scores**
**Corequisites: None**
**30 lecture, 45 lab, 0 clinical, 0 other, 75 total contact hours**
**Fulfills Core Elements: 3 7 15 17**

This course provides practical training in earth science including work with soils, minerals, rocks, glaciers, volcanism, plate tectonics, meteorology, oceanography, and astronomy.

### GLG 103: Field Geology — 3 Credits

**Prerequisites: College Level Entrance Scores**
**Corequisites: None**
**45 lecture, 0 lab, 0 clinical, 0 other, 45 total contact hours**
**Fulfills Core Elements: 5 7 17**

Students examine the processes that have formed and are forming the landscape by studying formations at local sites.

### GLG 104: Weather — 3 Credits

**Prerequisites: College Level Entrance Scores**
**Corequisites: None**
**22.5 lecture, 22.5 lab, 0 clinical, 0 other, 45 total contact hours**
**Fulfills Core Elements: 5 7 17**

Atmospheric processes and phenomena that produce the day-to-day weather changes experienced throughout the world are studied. Emphasis is placed on empirical observation of cloud types, development, and movement. Weather map interpretation and analysis including elementary weather forecasting techniques are presented. Field trips are included. GLG 104 is normally offered only in the spring term.

### GLG 109: Common Rocks — 3 Credits

**Prerequisites: College Level Entrance Scores**
**Corequisites: None**
**45 lecture, 0 lab, 0 clinical, 0 other, 45 total contact hours**
**Fulfills Core Elements: 7 17**

The identification of rocks and minerals is accomplished through laboratory and field studies. Emphasis is placed on Michigan specimens. This course is intended for students interested in becoming teachers, or needing a science elective.

### GLG 110: Geology of the National Parks and Monuments — 2 Credits

**Prerequisites: College Level Entrance Scores**
**Corequisites: None**
**30 lecture, 0 lab, 0 clinical, 0 other, 30 total contact hours**
**Fulfills Core Elements: 2 5 17**

The geological settings of specific National Parks and Monuments are studied including the principles and processes which shaped them. Slide programs and maps are used to illustrate geological features.

Approved by M. Shobalter per phone call 1-18-02



**4 Credits**

**l Entrance Scores**

**al, 0 other, 75 total contact hours**
**15 17**

The physical features and processes of the earth are studied. Plate tectonics along with the interpretation of topographic maps and the study of common rocks and minerals are included. A three day field trip is required with food and housing expenses the responsibility of the student.

### GLG 125: Historical Geology — 4 Credits

**Prerequisites: GLG 100** – "C" or better.
**Corequisites: None**
**30 lecture, 45 lab, 0 clinical, 0 other, 75 total contact hours**
**Fulfills Core Elements: 7 15 17**

The development of North America as a typical continent is presented including the formation of mountains, plains, the evolution of life, and the identification of fossils. Several field trips are taken. A three day field trip is required with food and housing expenses the responsibility of the student. Students who have experience equivalent to GLG 100 may contact the instructor for permission to waive the prerequisite.

### GLG 202: Earth Science for Elementary Teachers — 4 Credits

**Prerequisites: College Level Entrance Scores**
**Corequisites: None**
**45 lecture, 45 lab, 0 clinical, 0 other, 90 total contact hours**
**Fulfills Core Elements: 15 17**

This course presents the content and methodology necessary for success in teaching earth science in the elementary school. It includes laboratory activities, laboratory projects, lesson planning and student presentations. Content topics include rocks and minerals, volcanism, mountain building, dinosaurs, and weather. Methodology topics include behavioral objectives, lesson plans, presenting lessons, and student-centered approaches.

### GLG 219: Field Studies in Geology — 1- 4 Credits

**Prerequisites: College Level Entrance Scores**
**Corequisites: None**
**0 lecture, 0 lab, 0 clinical, 15 other, 15 total contact hours**
**Fulfills Core Elements: None**

In this course students learn about geology through field experiences either on or off campus. Sometimes travel is involved. Students learn the geology and the geologic history of a given locale, read and/or construct maps, and identify field rocks and fossils. Topics vary in scope, place, and design each semester. Examples include learning the geology of the Grand Canyon by rafting through it for a week or determining the mass, volume and density of the largest boulder on campus. Some semester topics require that students be in good health. Pre- and post-course meetings are held in addition to the field study activities. Students are responsible for their own travel expenses, fees, personal health and life insurance, and any other expenses when the semester topic requires it. Students may be asked to sign appropriate risk and release forms.

*Office of Curriculum & Articulation Services*
Sent: 10/19/01

# WASHTENAW COMMUNITY COLLEGE

## Course Transfer Agreement

The Washtenaw Community College course listed below is being submitted for review for equivalency credit. Please review the attached syllabus and complete all of the items below indicating if the course is approved for equivalency credit.

**Course Number & Name:** GLG 109 Common Rocks and Minerals

**Credits:** 3

is ☑ is not ☐ approved for transfer at **Eastern Michigan University**

The course above will transfer as Rocks of Michigan - Geol 229 (3)
**Course Name** **Credit Hours**

Please describe what type of course this will transfer as:

- ☐ A Basic Skills Course
- ☑ A General Elective Course
- ☐ Other, Please explain: _____

Approved by:

Carol C Lees
**Registrar/Director of Student Records/Credit Evaluator**

11/12/01
**Date**

Please return to:
**Curriculum & Articulation Services, SC 234**
**Washtenaw Community College**
**4800 East Huron River Drive**
**PO Box D-1**
**Ann Arbor, MI 48106-1610**