

Colorado School of Mines Digital Repository Policies and Services

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The Colorado School of Mines Digital Repository's purpose is to collect, record, and provide permanent open online access to and archive the research and scholarship of the Colorado School of Mines. The Repository contains digital works that reflect the intellectual and service environment of the campus.

In this context "open access" implies that researchers and any other interested parties may view the items included without having to pay to do so. Access is immediate, free, and unrestricted in most cases.

In addition to the works of Mines authors/creators, the Repository hosts select archival materials generated by Mines entities that document the history and intellectual life of Mines, as well as digital collections created from the Library's archival holdings.

The Repository and its users will adhere to the University's, the Library's, and the Campus Computing Center's Responsible Use Policies.

Repository resources will be allocated fairly amongst campus departments, research centers, or administrative and other campus groups.

The Repository uses DSpace software which supports a simple Community/Collection hierarchy. Communities hold a collection or collections, and the collection holds digital works. This software is provided by Colorado State University, and is part of the "Digital Collections of Colorado."

As outlined below, the Arthur Lakes Library offers submission services, and preservation services to support the users of the Repository.

Services Available from the Library

1. Community Creation Services

For departments, research centers, or administrative and other campus groups interested in maintaining their own Depository Community, Library staff will work with your staff to help create a new Community, as well as provide advice on metadata (information used to identify and describe works within the Repository) specific to your Community's needs and information on copyright issues.

When setting up a Community, the campus group must identify a Community Administrator to be responsible for managing all aspects of the Community, including the Community's Collections, and if appropriate, Collection Curators. Community Administrators and Collection Curators must limit their Depository work to their respective Communities. The Collection guidelines and workflows will be discussed and negotiated. For more information on Collection requirements, see the Collections Policy.

2. Submission Services to Established Collections

The Repository offers an easy-to-use web based process for submitting digital works one by one to an established Collection. Once authorized to do so, faculty, staff, students, departments, research centers, administrative and other campus groups can submit their works to the appropriate Collections.

Batch loading is possible for a very large number of items. In order to batch load these items, metadata and digital objects must be extant. Contact the Repository Administrator for more information.

3. Access Services

The Repository was established to provide open access to the products of the School's research and scholarship endeavors, to foster the preservation of these digital works for future generations, to promote increasingly rapid advances in scholarly communication, and to help deepen community understanding of the value of higher education.

The Repository is built with technology that assures the online stability of a work submitted to a Collection; making the citation to the work highly reliable and accessible.

Each work (the digital object) and the information about it (the metadata) will have a persistent URL so it can be easily cited by other researchers.

Works in the Repository will be indexed by Google / Google Scholar, other search engines, and OAI-PMH harvesters like OAIster making them more findable. Additionally, the Repository has an RSS feed that can be incorporated into readers and other web applications, boosting accessibility to the works.

4. Preservation Services

The Repository will provide long-term access to submitted works, as well as associated descriptive and administrative metadata, by employing a strategy combining the following: secure backup, storage media refreshment and file format migration including possible migration to preferred formats during submission, and replication in geographically distributed archives.

Submission and Withdrawal Policy

Submission

Works submitted to the Repository should meet the requirements outlined below:

1. Works must be produced or sponsored by the Mines faculty, research staff, or students. Submission of works produced by students must be sponsored by a faculty member.
2. Works are intended to be kept permanently and content should be deemed permanently valuable. Works are required to be in a "finished" or "fixed" state; not "in progress."
3. Works must be submitted to a Collection. Submitters need login authorization to submit works to a Collection.

4. Works must reflect the nature of the Collection to which they are submitted. Submitted works may be reviewed by the Collection or Repository Administrator.

5. Works must be in digital form. There are file formats that the Repository considers stable and therefore compatible with long-term preservation efforts. In general, these formats have the following characteristics: openly documented; supported by a range of software platforms; widely adopted; lossless data compression or no compression; non-proprietary; and do not contain embedded files or embedded programs. Although most digital formats will be accepted, submission in a common file format (PDF, CSV, DOC, XLS, JPG, TIF, TXT, XML, WAV, AVI, etc.) is encouraged in order to facilitate long-term preservation. PDF/A is the preferred version of PDF for archival preservation. Microsoft formats should be converted to PDF/A or CSV if possible. Executables and macros are discouraged for security reasons.

6. Works may be comprised of individual or multiple files. Any single file larger than 512MB in size may require assistance. For assistance with these files, contact the Repository Administrator.

7. Works should be ready for dissemination and copyright owners must be able to grant non-exclusive rights to distribute and preserve the works. Please note that copyright owners retain copyright; see the Copyright and Licensing Policy for more information.

8. Batch loading is possible for a very large number of items. In these situations, both metadata and digital objects must be extant. Contact the Repository Administrator for more information.

9. Works must be described using a sufficient level of correct and quality metadata to facilitate searching and identification (see the Metadata Policy section of this document).

10. Disk space resources are not unlimited on the Repository. Disk space will be allocated fairly and no single Community or Collection will be allowed to monopolize available space.

11. Each Community must complete the "Colorado School of Mines Digital Repository Services Form".

12. In aggregate, materials under 1 TB in size will be stored, preserved and made accessible at no cost to the project. In aggregate, materials over 1 TB in size will be stored, preserved and made accessible at cost to the project. Note that in aggregate some data sets may be beyond the scope of the Repository and will need to be stored elsewhere. Metadata and related materials can be stored in the repository and will point to the external data sets.

Withdrawal

1. The Repository reserves the right to withdraw a work that is libelous, an invasion of privacy, or that does not reflect the nature of the Collection to which the work was submitted.

2. Requests for withdrawal must be directed to the Collection and Repository Administrators. After review of the request, the Collection Administrator(s) will contact the requestor to let him/her know a

work has been withdrawn, or, if withdrawal is not appropriate, to let the requestor know the reason(s) withdrawal was not completed.

3. If withdrawal is requested due to a copyright violation, the Collection and Repository Administrators will temporarily restrict access to the work and will notify the submitter. If it is found that copyright was violated, the work will be withdrawn.

4. The non-exclusive submission agreement preserves the creator's right to submit additional copies elsewhere. Works will not be withdrawn as a matter of course because the submitter and/or creator leave the university.

5. Works submitted to the Repository are assigned persistent URLs. If withdrawal is approved, the Repository will display a message alerting users that the content associated with the persistent URL has been withdrawn.

6. Metadata for withdrawn works, including information about the reason for withdrawal, will remain in the Repository and will be accessible only by Repository Administrators.

Collections Policy

1. The Repository's purpose is to collect, record, provide access to, and archive the research and scholarship of the Colorado School of Mines. The Repository contains permanently valuable digital works that reflect the intellectual and service environment of the campus.

The Repository provides permanent open access to the products of the University's research and scholarship endeavors, fosters the preservation of these digital works for future generations, promotes increasingly rapid advances in scholarly communication, and helps deepen community understanding of the value of higher education.

Works are not exclusive to the Repository. The author/copyright owner decides if their work in the Repository is published or made available on other online platforms.

2. Each Collection of works will meet these requirements:

Be part of a Community.

Have a Community Administrator who will:

1. Supply contact information to the Repository Administrator.
2. Accept digitally formatted works only.
3. Determine the Collection's required and optional metadata fields.
4. Determine the Collection's submission workflow.

5. Create additional Collection policies as needed that do not conflict with the Repository's umbrella policies.

3. The Digital Repository is intended to expand the scope of scholarly resources available worldwide through the Internet. By default, all works submitted to the digital repository will be made openly accessible, with the following exceptions:

When blocked on a time-limited basis (up to a maximum of two years) with the understanding that access thereafter becomes unlimited.

When the contract with the sponsor prohibits disclosure for a fixed time limit.

4. Each Collection is part of a Community, and the Collection Curator and Community Administrator will determine what constitutes appropriate works for submission.

Metadata Policy

Descriptive, or bibliographic, metadata describe the content of an object (see **Appendix I** for an example). The quality of the metadata facilitates searching for and discovery of resources. While there are many metadata schemes available (MARC, METs, etc.), the Library strongly recommends the Dublin Core as a minimum standard. This document provides best standards. Several of the metadata elements outlined below are listed as “required,” others are “recommended.”

1. Submitting a work requires a minimum set of depositor-supplied descriptive information (required):

Title – A name given to the work. Title should be descriptive of the object and should not be a filename or non-descriptive text. Similar to 245 field in MARC

Creator – The name of the person(s), institution, group, or agent primarily responsible for making the work. Similar to MARC 1xx field. Use last name, first name format

Date – A single date indicating when the work was completed or published. This date is associated with an event in the life cycle of the resource. Best in YYYY-MM-DD format

Subject/Keywords – The topic(s) of the work. At least one subject/keyword is required. Similar to MARC 6xx fields. Reference Library of Congress Subject Headings, MeSH, etc.

Type – The nature or genre of the resource. Image, moving image, text, etc.

Language – The language of the intellectual content of the resource. Like MARC 008/35-37, 41.

Rights – Information about rights held in and over the resource. Statement defining use for the digital object

2. Listed below are some of the other fields you can use to describe an item in the Colorado School of Mines Repository. By adding more descriptive information (metadata), your work will be easier to find and cite (recommended):

Abstract or Summary – Highly recommended for all works

Publisher – Highly recommended for previously published or disseminated works

Additional Contributors – Recommended for all works with additional contributors like editors or advisors

Series Name and Report Number – Recommended for works in a series (e.g. a working paper series)

Additional Identifiers – Recommended for works with an identifier like an ISBN, ISSN, or DOI for the publisher's version of the work. A unique Identifier is also required by Digitool for collection management.

Description – Recommended for works with supplementary material

Digital Origin – Designation of the source of a digital file (created in digital form, digitization of original non-digital form, etc.). Recommended for all works

Extent – Statement of the number and specific material of the units of the resource.
Recommended for all works

3. General input guidelines:

Avoid ending punctuation unless it is part of the content of the resource.

Do not use abbreviations if they make the record unclear. When in doubt, spell it out.

In general, capitalize the first word (of a title, for example) and proper names. Acronyms should be entered in capital letters. Capitalize descriptive elements using normal rules of writing.

Submitted works require a good faith effort to meet metadata standards.

The Library reserves the right to modify the content and formatting of the metadata to the extent necessary to meet these guidelines and best practices.

See **Appendix I** for an example.

Filename Requirements

As new collections are created, it is useful if there is consistency in the filenames assigned to digital objects. Each collection will impose its own restrictions on filenames but a few best practices are required:

1. Filenames must not include spaces.
2. The first character of a filename must be an ASCII letter.
3. The “base” filename must be followed by a single period and a suitable extension (example: foo.jpg). Multiple periods must be avoided.

Other examples:

P15754.tif

ihs-SHMU_01_13-01-05-full.jpg

aeg9051c.wav

RoyalSociety-ncn-t123.pdf

Preservation Policy

The Repository is committed to responsible and sustainable management of submitted works.

1. Digital preservation is an evolving field; therefore, the Repository’s long-term access strategies are shaped by the Open Archival Information System (OAIS) reference model (ISO 14721:2003) and informed by relevant international standards and emerging best practices.
2. Prudent efforts will be employed to preserve work in any digital format submitted to the Repository. See the list of recommended file formats above.
3. The Repository will provide long-term access to submitted works, as well as associated descriptive and administrative metadata.
4. All works submitted to the Repository will be assigned a web-addressable persistent identifier.

Copyright and Licensing Policy

When submitting a work to the Repository, submitters will be asked to warrant:

1. They are either the copyright owner of the work, or they have permission from the copyright owner(s) to submit the work.
2. The work does not infringe any copyright, patent, or trade secrets of any third party, and does not contain any libelous matter, nor invade the privacy of any person or third party.

Management Hierarchy

There are three management roles within the Mines Digital Repository:

1. Repository Administrator – Overall management of the Mines Digital Repository

The Repository Administrator is responsible for managing all aspects of the Repository, including coordinating the various communities and collections within the Repository. The Mines Repository Administrator is currently the Library's Systems Librarian.

2. Community Administrator – Management of a community within the Repository

The Community Administrator is an individual responsible for managing all aspects of a community, including the collections within the community. Each community will have one administrator who will help define specific procedures and guidelines. The community administrator will be a faculty or staff member from a department, research unit, and/or Library.

3. Collection Curator – Management of a collection within a community (Optional)

The Collection Curator is an individual responsible for managing all aspects of a collection within the Repository. Each collection will have one or more curators who will help define specific procedures and guidelines. The curator will be a faculty or staff member from a department, research unit, and/or Library.

Appendix I
Metadata Record Example

Title: The world in a crucible: laboratory practice and geological theory at the beginning of geology

Creator: Newcomb, Sally

Date: 2009

Subject: Geochemistry
Mineralogy

Type: Text

Language: English

Rights: Copyright restrictions may apply. User is responsible for all copyright compliance.

Publisher: Geological Society of America

Identifier: GEO2012100001

Series Name/Report Number: Special papers (Geological Society of America) ; 449

Digital Origin: Born digital

Extent: 204 pages, Ill., charts, graphs, tables