

**ADOPTED REGULATION OF THE COMMISSION ON
PROFESSIONAL STANDARDS IN EDUCATION**

LCB File No. R153-15

Effective June 28, 2016

EXPLANATION – Matter in *italics* is new; matter in brackets ~~omitted material~~ is material to be omitted.

AUTHORITY: §1, NRS 391.019.

A REGULATION relating to education; revising the required and elective courses that may be counted toward a comprehensive major or minor in mathematics; and providing other matters properly relating thereto.

Legislative Counsel's Digest:

Existing law requires the Commission on Professional Standards in Education to adopt regulations: (1) identifying fields of specialization in teaching which require the specialized training of teachers; and (2) setting forth the requirements a teacher must satisfy to qualify for an endorsement in each field of specialization. (NRS 391.019) Existing regulations authorize a teacher who possesses a secondary license which is endorsed for a recognized field of teaching to teach in: (1) departmentalized seventh or eighth grade; (2) a junior high school; (3) an approved middle school; or (4) a senior high school. Such an endorsement is based on an applicant's field of specialization or concentration, usually designated as his or her major, minor or area of concentration. (NAC 391.125) Existing regulations recognize mathematics as a comprehensive major or minor. (NAC 391.1301) Existing regulations also prescribe certain required courses that a major or minor in mathematics must include and certain elective courses that may be counted toward the hours of credit required for a comprehensive major or minor in mathematics. (NAC 391.13043) This regulation removes authorization for a person seeking a major or minor in mathematics to receive credit for a course in numerical analysis as an alternative to certain other required courses. This regulation also adds certain courses, including numerical analysis, to the list of elective courses that may be counted towards the required hours of credit toward a comprehensive major or minor in mathematics.

Section 1. NAC 391.13043 is hereby amended to read as follows:

391.13043 1. A comprehensive major in mathematics consists of 36 semester hours of credit which must include:

(a) At least 9 semester hours of credit in calculus courses.

(b) In addition to the semester hours required by paragraph (a), at least 27 semester hours of credit in courses involving:

- (1) Probability or statistics;
- (2) Number theory ; ~~for numerical analysis;~~
- (3) Linear algebra;
- (4) Abstract or modern algebra;
- (5) Finite mathematics or discrete processes; and
- (6) If necessary to complete 27 semester hours of credit:
 - (I) The history of mathematics;
 - (II) Euclidean geometry;
 - (III) Non-Euclidean geometry;
 - (IV) Mathematical computer applications, data structures or programming;
 - (V) Differential equations; ~~and~~
 - (VI) Real number analysis ~~and~~ ;
 - (VII) Multivariate calculus;*
 - (VIII) Numerical analysis; and*
 - (IX) Logic or methods of mathematical proof.*

2. A person who holds a bachelor's degree or a higher degree with a major in mathematics that was conferred by a regionally accredited college or university shall be deemed to have qualified for a comprehensive major in mathematics if he or she has satisfied the requirements of NAC 391.120.

3. A recipient of a comprehensive major in mathematics may teach in grades 7 to 12, inclusive, any course in mathematics included in the course of study adopted by the Board.

4. A comprehensive minor in mathematics consists of 24 semester hours of credit which must include:

(a) At least 6 semester hours of credit in calculus courses.

(b) In addition to the semester hours required by paragraph (a), at least 18 semester hours of credit in courses involving:

(1) Probability or statistics;

(2) Finite mathematics, discrete mathematics ~~+~~ *or* number theory ; ~~for numerical analysis;~~

(3) Linear, abstract or modern algebra; and

(4) If necessary to complete 18 semester hours of credit:

(I) Multivariate calculus;

(II) The history of mathematics;

(III) Differential equations;

(IV) Real number analysis;

(V) Euclidean geometry;

(VI) Non-Euclidean geometry; ~~and~~

(VII) Mathematical computer applications, data structures or programming ~~+~~ ;

(VIII) Numerical analysis; and

(IX) Logic or methods of mathematical proof.

5. A person who holds a bachelor's degree or a higher degree with a minor in mathematics that was conferred by a regionally accredited college or university shall be deemed to have qualified for a comprehensive minor in mathematics if he or she has satisfied the requirements of NAC 391.120.

6. A recipient of a comprehensive minor in mathematics may teach in grades 7 to 12, inclusive, any course in mathematics included in the course of study adopted by the Board up to and including Algebra II and Geometry I.

7. A person who received an endorsement to teach mathematics before January 14, 1998, but who has not fulfilled the requirements for calculus, may teach in grades 7 to 12, inclusive, any course in mathematics included in the course of study adopted by the Board up to and including Algebra II and Geometry I.

8. A person who receives an endorsement to teach mathematics on or after January 14, 1998, must complete a course in the methods of teaching mathematics to renew the endorsement.

**NEVADA DEPARTMENT OF EDUCATION
COMMISSION ON PROFESSIONAL STANDARDS IN EDUCATION**

**LEGISLATIVE REVIEW OF ADOPTED REGULATIONS AS REQUIRED
BY ADMINISTRATIVE PROCEDURES ACT, NRS 233B.066**

LCB File No. R153-15

Amendments to NAC 391.13043 – A Regulation relating to Education; revising the required and elective courses that may be counted toward a comprehensive major or minor in mathematics; and providing other matters properly relating thereto.

INFORMATIONAL STATEMENT

The following statement is submitted for adopted amendments to Nevada Administrative Code 391:

1. A clear and concise explanation of the need for the adopted regulation.

The need and purpose of the proposed amendments to NAC Chapter 391 are based on recommendations from the Nevada Department of Education. Proposed amendments are related to education; revising the required and elective courses that may be counted toward a comprehensive major or minor in mathematics. The regulation changes allow for a redistribution of credit hours to accept more calculus courses in lieu of other math courses.

2. Description of how public comment was solicited, a summary of public response, and an explanation how other interested persons may obtain a copy of the summary.

Persons wishing to comment upon the proposed action of the Commission on Professional Standards in Education were advised of their right to appear at the scheduled public hearing and their right to address comments, data, views or arguments, in written form, to the Commission Secretary, Nevada Department of Education, 9890 S. Maryland Parkway, Las Vegas, NV 89183. The Department of Education must have received written submissions **on or before March 2, 2016**. One person who is directly affected by the proposed action appeared to request time to make an oral presentation; the Commission on Professional Standards in Education heard and documented the public comment.

A copy of this notice and the regulation to be amended/adopted will be on file at the State Library and Archives, 100 Stewart Street, Carson City, Nevada, for inspection by members of the public during business hours. Additional copies of the notice and the regulation to be amended/adopted will be available at the Nevada Department of Education, 9890 S. Maryland Parkway, Las Vegas, NV 89183, and in all counties at

the main public library, for inspection and copying by members of the public during business hours. This notice and the text of the proposed regulation are also available at the State of Nevada Register of Administrative Regulations which is prepared and published monthly by the Legislative Counsel Bureau pursuant to NRS 233B.0653 and on the Internet at <http://www.leg.state.nv.us>. Copies of this notice and the proposed regulation will also be mailed to members of the public upon request. A reasonable fee may be charged for copies if it is deemed necessary.

Upon adoption of any regulation, the agency, if requested to do so by an interested person, either prior to adoption or within 30 days thereafter, will issue a concise statement of the principal reasons for and against its adoption and incorporate therein its reason for overruling the consideration urged against its adoption.

This notice of hearing has been posted at the following locations: Nevada Department of Education, both locations; 17 Nevada County School District Offices; 17 Nevada Public Libraries; Clark County Classroom Teachers Association; Washoe County Teachers Association; Nevada State Education Association, both locations; and Nevada State Library and Archives.

The public response can be summarized as one individual testified at the workshop or the hearing and no one provided written statements regarding this regulatory change. A copy of the summary and/or minutes of the public workshop/hearing is attached.

3. The Number of Persons Who:

- a) Attended Hearing: Workshop: 13; Hearing: 15;
- b) Testified at Workshop: 1; Hearing: 0
- c) Submitted Written Statements: Workshop: 0; Hearing: 0

4. For each person identified in paragraphs (b) and (c) of number 3 above, the following information if provided to the agency conducting the hearing: (a) name; (b) telephone number; (c) business address; (d) business telephone number; (e) electronic mail address; and (f) name of entity or organization represented.

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5. A description of how comment was solicited from affected business, a summary of their response and an explanation of how other interested person may obtain a copy of the summary.

Comments were solicited through the public hearing notice of March 16, 2016. At the workshop Persons wishing to comment upon the proposed action of the Commission on Professional Standards in Education were advised of their right appear at the scheduled public hearing and their right to address comments, data, views or arguments, in written form, to the Commission Secretary, Nevada Department of Education, 9890 S. Maryland Parkway, Las Vegas, NV 89183. The Department of Education must have received written submissions **on or before March 2, 2016**. No person who is directly affected by the proposed action appeared to request time to make an oral presentation; the Commission on Professional Standards in Education proceeded.

A copy of this notice and the regulation to be amended/adopted will be on file at the State Library and Archives, 100 Stewart Street, Carson City, Nevada, for inspection by members of the public during business hours. Additional copies of the notice and the regulation to be amended/adopted will be available at the Nevada Department of Education, 9890 S. Maryland Parkway, Las Vegas, NV 89183, and in all counties at the main public library, for inspection and copying by members of the public during business hours. This notice and the text of the proposed regulation are also available at the State of Nevada Register of Administrative Regulations which is prepared and published monthly by the Legislative Counsel Bureau pursuant to NRS 233B.0653 and on the Internet at <http://www.leg.state.nv.us>. Copies of this notice and the proposed regulation will also be mailed to members of the public upon request. A reasonable fee may be charged for copies if it is deemed necessary.

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This notice of hearing has been posted at the following locations: Nevada Department of Education, both locations; 17 Nevada County School District Offices; 17 Nevada Public Libraries; Clark County Classroom Teachers Association; Washoe County Teachers Association; Nevada State Education Association, both locations; and Nevada State Library and Archives.

The response from affected businesses can be summarized as non-existent as no businesses testified at the workshop or the hearing and none provided written statements regarding this regulatory change. A copy of the summary and/or minutes of the public hearing may be obtained by contacting Kim Bennett, Assistant to the Commission on Professional Standards in Education, Nevada Department of Education, 702-668-4317, or

by writing to the Nevada Department of Education at 9890 S. Maryland Parkway, Suite 221, Las Vegas, NV 89183.

- 6. If the regulation was adopted with or without change to any part of the proposed regulation, a summary of the reasons for adopting.**

The Commission on Professional Standards in Public Education adopted the proposed regulation language at the public hearing held on March 16, 2016 as presented. There were no further amendments that needed to be made proposed regulation.

- 7. The estimated economic effect of the adopted regulation on the business that it is to regulate and on the public. These must be stated separately and each case must include:**

There will be no economic effect of the regulation on the business that it regulates.
There is no estimated economic effect on the public.

- 8. The estimated cost to the agency for enforcement of the adopted regulation.**

There is no additional cost to the agency for enforcement of this regulation.

- 9. A description of any regulations of other state or governmental agencies which the regulation overlaps or duplicates and a statement explaining why the duplication or overlapping is necessary. If the regulation overlaps or duplicates a federal regulation, the name of the regulating federal agency.**

No other state or governmental agency regulations will be overlapped or duplicated by the above noted regulation. There is no duplication or overlap of federal regulations.

- 10. If the regulation includes provisions which are more stringent than a federal regulation that regulates the same activity, a summary of such provisions.**

There are none.

- 11. If the regulation provides a new fee or increases an existing fee, the total annual amount the agency expects to collect and the manner in which the money will be used.**

This regulation does not provide for a new fee or increase an existing fee.