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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

Zone 1: Required I nformation

|  | Current Version | Proposed Version |
| :---: | :---: | :---: |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |
|  | Submitting a New/Change to a Program Proposal? Visit this link for the mandatory Quality Assurance Requirements | Submitting a New/Change to a Program Proposal? Visit this link for the mandatory Quality Assurance Requirements |
| Program Code: | HBSC. PHAP | HBSC. PHAP |
| AcademicLevel: | Undergraduate | Undergraduate |
| StartTerm: | Fall 2001 | Fall 2001F-W 2013-14 |
| EndTerm: | No Specified End Date | No Specified End Date [?] |
| InstitutionUnit: | - Lakehead University <br> - Faculty of Science and Environmental Studies | - Lakehead University <br> - Faculty of Science and Environmental Studies |
| Title: | Honours BSc (Physics) with Major Concentration in Applied Bio-Molecular Science | Honours BSc (Physics) with Major Concentration in Applied Bio-Molecular Science |
| DegreeType: | HBSC | HBSC |
| Major: | PHAP | PHAP |
| Minor: |  |  |
| Specialization: |  |  |
| Rationale for this proposal: |  |  |
|  | HBSC (Phys) w/Concn Apbi | HBSC (Phys) w/Concn Apbi |
| Credits: |  |  |
| Requirements: |  |  |
|  | Four Year program <br> A program designed for students interested in medical physics, medicine, biotechnology instrumentation, or biological physics research. Courses which count towards the Major Concentration in Applied Bio-Molecular Science are indicated below with an asterisk. A cumulative average of $70 \%$ in all Physics courses as well as all courses used toward the Applied Bio-Molecular Science Major Concentration is required. | Four Year program <br> A program designed for students interested in medical physics, medicine, biotechnology instrumentation, or biological physics research. Courses which count towards the Major Concentration in Applied Bio-Molecular Science are indicated below with an asterisk. A cumulative average of $70 \%$ in all Physics courses as well as all courses used toward the Applied Bio-Molecular Science Major Concentration is required. |
|  | First Year: <br> (a) Physics 1101 <br> (b) Mathematics 1171 and 1172 <br> (c) Chemistry 1110* and 1130* <br> (d) One full course equivalent elective <br> (e) Computer Science 0411 or 1411 <br> (f) Biology 2171* | First Year: <br> (a) Physics 11011 1XXX and Physics II 1XXX <br> (b) Mathematics 1171 and 1172 <br> (c) Chemistry 1110* and 1130* <br> (d) One full course equivalent elective <br> (e) Computer Science 0411 or 1411 <br> (f) Biology 2171* |
|  | Second Year: <br> (a) Physics 2151, 2211, 2311, 2331 and 2332 <br> (b) Mathematics 2111 and 2131 <br> (c) Biology 2230* <br> (d) Chemistry 2211* <br> (e) One half-course elective | Second Year: <br> (a) Physics 2151, 2211, 2311, 2331 and 2332 <br> (b) Mathematics 2111 and 2131 <br> (c) Biology 2230* <br> (d) Chemistry 2211* <br> (e) One half-course elective |
|  | Third Year: <br> (a) Physics 2111, 3113, 3211, 3231 and 3511 <br> (b) One half-course elective in Physics <br> (c) Mathematics 3131 <br> (d) Biology 2711* and 2910* <br> (e) One half-course elective | Third Year: <br> (a) Physics 2111, 3113, 3211, 3231 and 3511 <br> (b) One half-course elective in Physics <br> (c) Mathematics 3131 <br> (d) Biology 2711* and 2910* <br> (e) One half-course elective |
|  | Fourth Year: <br> (a) Physics 4411 and 4412 <br> (b) One half-course elective in Physics <br> (c) One half-course elective in Physics at the third or fourth year level <br> (d) One half-course elective in Physics at the fourth year level <br> (e) Three half-courses (excluding Physics) from the Applied Bio-Molecular Science List of Recommended Courses (see Applied Bio-Molecular Science Programs) <br> (f) One FCE elective | Fourth Year: <br> (a) Physics 4411 and 4412 <br> (b) One half-course elective in Physics <br> (c) One half-course elective in Physics at the third or fourth year level <br> (d) One half-course elective in Physics at the fourth year level <br> (e) Three half-courses (excluding Physics) from the Applied Bio-Molecular Science List of Recommended Courses (see Applied Bio- Molecular Science Programs) <br> (f) One FCE elective |
|  | Notes: <br> 1. An Honours Physics Thesis (Physics 4501) can be used in place of the lab courses (Physics 4411 and 4412) or as an open elective. It cannot be used to replace Physics electives. <br> 2. Students can switch to the Honours Physics program after second year. <br> 3. Due to course rotation some courses may need to be taken out of sequence. | Notes: <br> 1. An Honours Physics Thesis (Physics 4501) can be used in place of the lab courses (Physics 4411 and 4412) or as an open elective. It cannot be used to replace Physics electives. <br> 2. Students can switch to the Honours Physics program after second year. <br> 3. Due to course rotation some courses may need to be taken out of sequence. |


|  | Current Version | Proposed Version |
| :---: | :---: | :---: |
|  | Please Complete Each Section and provide explanations for both Yes and No answers. | Please Complete Each Section and provide explanations for both Yes and No answers. |
| Student Enrolment: |  | [?] |
| Student Enrolment Other Units: |  | [?] |
| Additional Resources: |  | [?] |
| Teaching Loads: |  | [?] |
| Teaching Support Services: |  | [?] |
| Outside Support: |  | [?] |

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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

Zone 1: Required I nformation

|  | Current Version | Proposed Version |
| :--- | :--- | :--- |
|  | QUALITY ASSURANCE |  |
|  | QUALITY ASSURANCE |  |

Zone 2: Budgetary Considerations

## Current Version

Please Complete Each Section and provide explanations for both Yes and No answers.

Student Enrolment:
Student Enrolment Other Units: Additional Resources:

Teaching Loads:
Teaching Support Services:

Outside Support:

## Proposed Version

Please Complete Each Section and provide explanations for both Yes and No answers


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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

## Zone 1: Required I nformation

|  | Current Version | Proposed Version |
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|  | QUALITY ASSURANCE | QUALITY ASSURANCE |
|  | Submitting a New/Change to a Program Proposal? | Submitting a New/Change to a Program Proposal? |
|  | Visit this link for the mandatory Quality | Visit this link for the mandatory Quality |
|  | Assurance Requirements | Assurance Requirements |
| Program Code: | HBSC.PHYS | HBSC.PHYS |
| AcademicLevel: | Undergraduate | Undergraduate |
| StartTerm: | Fall 1999 | Fall 1999F-W 2013-14 |
| EndTerm: | No Specified End Date | No Specified End Date [?] |
| InstitutionUnit: | - Lakehead University <br> - Faculty of Science and Environmental Studies | - Lakehead University <br> - Faculty of Science and Environmental Studies |
| Title: | Honours BSC (Physics Major) | Honours BSc (Physics Major) |
| DegreeType: | HBSC | HBSC |
| Major: | PHYS | PHYS |
| Minor: |  |  |
| Specialization: |  |  |
| Rationale for this proposal: |  |  |
| Description: | HBSC (Physics) | HBSC (Physics) |
| Credits: |  |  |
| Requirements: | Four Year program | Four Year program |
|  | A cumulative average of 70\% in all Physics courses is required. | A cumulative average of $70 \%$ in all Physics courses is required. |
|  | First Year: <br> (a) Physics 1101 <br> (b) Mathematics 1171 and 1172 <br> (c) Chemistry 1110, 1130 <br> (d) One and one-half FCE elective. <br> (e) Computer Science 0411 or 1411 | First Year: <br> (a) Physics 1101Physics I 1XXX and Physics II 1XXX <br> (b) Mathematics 1171 and 1172 <br> (c) Chemistry 1110, 1130 <br> (d) One and one-half FCE elective. <br> (e) Computer Science 0411 or 1411 |
|  | Second Year: <br> (a) Physics 2111, 2151, 2211, 2311, 2331 and 2332 <br> (b) Mathematics 2111 and 2131 <br> (d) One FCE elective | Second Year: <br> (a) Physics 2111, 2151, 2211, 2311, 2331 and 2332 <br> (b) Mathematics 2111 and 2131 <br> (d) One FCE elective |
|  | Third Year: <br> (a) Physics 3113, 3211 and 3231 <br> (b) Physics 4113 or 4171 <br> (c) Physics 3371 or 4211 <br> (d) A Physics half-course elective at the third or fourth year level <br> (e) Mathematics 3131 and 3133 <br> (f) One FCE elective | Third Year: <br> (a) Physics 3113, 3211 and 3231 <br> (b) Physics 4113 or 4171 <br> (c) Physics 3371 or 4211 <br> (d) A Physics half-course elective at the third or fourth year level <br> (e) Mathematics 3131 and 3133 <br> (f) One FCE elective |
|  | Fourth Year: <br> (a) Physics 4115,4411 and 4412 <br> (b) Physics 4113 or 4171 (the one not previously taken) <br> (c) Physics 3371 or 4211 (the one not previously taken) <br> (d) A Physics half-course elective at the third or fourth year level <br> (e) Two FCE electives | Fourth Year: <br> (a) Physics 4115, 4411 and 4412 <br> (b) Physics 4113 or 4171 (the one not previously taken) <br> (c) Physics 3371 or 4211 (the one not previously taken) <br> (d) A Physics half-course elective at the third or fourth year level <br> (e) Two FCE electives |

Zone 2: Budgetary Considerations

## Current Version

Please Complete Each Section and provide explanations for both Yes and No answers.

Student Enrolment:
Student Enrolment Other Units: Additional Resources:

Teaching Loads:
Teaching Support Services:

Outside Support:

## Proposed Version

Please Complete Each Section and provide explanations for both Yes and No answers

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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History) Change Type: New Version

|  | Current Version | Proposed Version |
| :---: | :---: | :---: |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |
|  | Submitting a New/Change to a Program Proposal? | Submitting a New/Change to a Program Proposal? |
|  | Visit this link for the mandatory Quality | Visit this link for the mandatory Quality |
|  | Assurance Requirements | Assurance Requirements |
| Program Code: | BSC.MATHPHYS | BSC.MATHPHYS |
| AcademicLevel: | Undergraduate | Undergraduate |
| StartTerm: | Fall 1999 | Fall 1999F-W 2013-14 |
| EndTerm: | No Specified End Date | No Specified End Date [?] |
| InstitutionUnit: | - Lakehead University <br> - Faculty of Science and Environmental Studies | - Lakehead University <br> - Faculty of Science and Environmental Studies |
| Title: | BSc (Mathematics and Physics Majors) | BSc (Mathematics and Physics Majors) |
| DegreeType: | BSC | BSC |
| Major: | MAPY | MAPY |
| Minor: |  |  |
| Specialization: |  |  |
| Rationale for this proposal: |  |  |
| Description: | BSc (Mathematics \& Phys) | BSc (Mathematics \& Phys) |
| Credits: |  |  |
| Requirements: Three Year program Three Year program |  |  |
|  | Three Year program | Three Year program |
|  | A mark of $60 \%$ in the Mathematics and Physics courses of each year is required. | A mark of $60 \%$ in the Mathematics and Physics courses of each year is required. |
|  | The electives must be approved by the Chairs of the Department of Mathematical Sciences and | The electives must be approved by the Chairs of the Department of Mathematical Sciences and |
|  | Physics. | Physics. |
|  | First Year: | First Year: |
|  | (a) Mathematics 1171, 1172, 1271 and 1272 <br> (b) Physics 1101 | (a) Mathematics $1171,1172,1271$ and 1272 <br> (b) Physics $110111 \times X X$ and Physics II $1 \times X X$ |
|  | (c) One FCE elective. Group I or II courses are | (c) One FCE elective. Group I or II courses are |
|  | recommended. (See Faculty of Social Sciences | recommended. (See Faculty of Social Sciences |
|  | and Humanities, First Year Arts Program Grouping | and Humanities, First Year Arts Program Grouping |
|  | Requirements) | Requirements) |
|  | (d) One FCE elective(s) in Science | (d) One FCE elective(s) in Science |
|  | Second Year: | Second Year: |
|  | (a) Mathematics 2111, 2131, 2255, 2275 | (a) Mathematics 2111, 2131, 2255, 2275 |
|  | (b) Physics 2111 and 2211 | (b) Physics 2111 and 2211 |
|  | (c) One FCE elective(s) in Physics | (c) One FCE elective(s) in Physics |
|  | (d) One FCE elective(s) | (d) One FCE elective(s) |
|  | Third Year: | Third Year: |
|  | (a) Mathematics 3131 and 3133 | (a) Mathematics 3131 and 3133 |
|  | (b) Physics 3211 and 3113 | (b) Physics 3211 and 3113 |
|  | (c) One FCE elective(s) in Physics | (c) One FCE elective(s) in Physics |
|  | (d) Two FCE electives | (d) Two FCE electives |

Zone 2: Budgetary Considerations

## Current Version

Please Complete Each Section and provide explanations for both Yes and No answers.

Student Enrolment:
Student Enrolment Other Units: Additional Resources:

Teaching Loads:
Teaching Support Services:

Outside Support:

## Proposed Version

Please Complete Each Section and provide explanations for both Yes and No answers


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## Degree Details

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## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

Zone 1: Required I nformation


|  | Current Version | Proposed Version |
| :---: | :---: | :---: |
|  | Please Complete Each Section and provide explanations for both Yes and No answers. | Please Complete Each Section and provide explanations for both Yes and No answers. |
| Student Enrolment: |  | [?] |
| Student Enrolment Other Units: |  | [?] |
| Additional Resources: |  | [?] |
| Teaching Loads: |  | [?] |
| Teaching Support Services: |  | [?] |
| Outside Support: |  | [?] |

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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History) Change Type: New Version

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|  | QUALITY ASSURANCE | QUALITY ASSURANCE |
|  | Submitting a New/Change to a Program Proposal? | Submitting a New/Change to a Program Proposal? |
|  | Visit this link for the mandatory Quality | Visit this link for the mandatory Quality |
|  | Assurance Requirements | Assurance Requirements |
| Program Code: | MINOR.PHYS | MINOR.PHYS |
| AcademicLevel: | Undergraduate | Undergraduate |
| StartTerm: | Fall 2010 | Fall 2010F-W 2013-14 |
| EndTerm: | No Specified End Date | No Specified End Date [?] |
| InstitutionUnit: | - Lakehead University <br> - Faculty of Science and Environmental Studies | - Lakehead University <br> - Faculty of Science and Environmental Studies |
| Title: | Minor Program in Physics | Minor Program in Physics |
| Major: |  |  |
| Minor: |  |  |
| Specialization: |  |  |
| Rationale for this proposal: |  |  |
| Description: |  |  |
| Credits: |  |  |
| Requirements: |  |  |
|  | A student may obtain a minor in Physics if the following three full courses have been completed with a minimum overall average of $60 \%$ : | A student may obtain a minor in Physics if the following three full courses have been completed with a minimum overall average of 60\%: |
|  | (a) Physics 1101, or Physics 1113 and 1133 , or Physics 1010 and 1030 | (a) Physics 11011 1XXX and Physics II 1XXX, or Physics 1113 and 1133, or Physics 1010 and |
|  | (b) Two of: Physics 2111, 2151, 2211, 2311, | $1030$ |
|  | $\underline{2331}, \underline{2332}$ <br> (c) Two half-courses in Physics at the third or | (b) Two of: Physics 2111, 2151, 2211, 2311, 2331, 2332 |
|  | fourth year level. Students should be aware of the prerequisites in upper year courses when planning their program. | (c) Two half-courses in Physics at the third or fourth year level. Students should be aware of the prerequisites in upper year courses when planning their program. |

Zone 2: Budgetary Considerations

## Current Version

Please Complete Each Section and provide explanations for both Yes and No answers.

Student Enrolment:
Student Enrolment
Other Units:
Additional Resources:

Teaching Loads:
Teaching Support Services:

Outside Support:

## Proposed Version

Please Complete Each Section and provide explanations for both Yes and No answers.[?]
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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

Zone 1: Required I nformation

|  | Current Version | Proposed Version |
| :---: | :---: | :---: |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |
|  | Submitting a New/Change to a Program Proposal? Visit this link for the mandatory Quality Assurance Requirements | Submitting a New/Change to a Program Proposal? Visit this link for the mandatory Quality Assurance Requirements |
| Program Code: | BSCBED.PHYS.IS | BSCBED.PHYS.IS |
| AcademicLevel: | Undergraduate | Undergraduate |
| StartTerm: | Fall 1999 | Fall 1999F-W 2013-14 |
| EndTerm: | No Specified End Date | No Specified End Date [?] |
| InstitutionUnit: | - Lakehead University <br> - Faculty of Education | - Lakehead University <br> - Faculty of Education |
| Title: | BSc, BEd (Physics Major) I/S | BSc, BEd (Physics Major) I/S |
| DegreeType: | BSBED | BSBED |
| Major: | PHYS | PHYS |
| Minor: |  |  |
| Specialization: |  |  |
| Rationale for this proposal: |  | This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities." |
| Description: | BScBEd IS (Physics) | BScBEd IS (Physics) |
| Credits: |  |  |
| Requirements: |  |  |
|  | Four Year program <br> A cumulative average of $65 \%$ in all courses is required. See Department of Undergraduate Studies in Education, Academic Regulation \#2, regarding the average in the major. | Four Year program <br> A cumulative average of $65 \%$ in all courses is required. See Department of Undergraduate Studies in Education, Academic Regulation \#2, regarding the average in the major. |
|  | Students must choose two teachable subjects. See Department of Undergraduate Studies in Education, Levels and Teachables. | Students must choose two teachable subjects. See Department of Undergraduate Studies in Education, Levels and Teachables. |
|  | First Year: <br> (a) Physics 1101 <br> (b) Mathematics 1171 and 1172 <br> (c) Chemistry 1110, 1130 <br> (d) A minimum of one FCE in English, with at least one of the literature courses (English 1111 or 1112). For English Majors both English 1111 and English 1112 are required. <br> (e) Computer Science 0411 or 1411 <br> (f) One half-course Science elective | First Year: <br> (a) Physics 11011 1XXX and Physics II 1XXX <br> (b) Mathematics 1171 and 1172 <br> (c) Chemistry 1110, 1130 <br> (d) A minimum of one FCE in English, with at least one of the literature courses (English 1111 or 1112). For English Majors both English 1111 and English 1112 are required. <br> (e) Computer Science 0411 or 1411 <br> (f) One half-course Science elective |
|  | Second Year: <br> (a) Physics 2111, 2211, 2311, 2331, 2332 <br> (b) Mathematics 2111, 2131 <br> (c) One half- course elective <br> (d) Education 1499 and 2399 ( 0.5 FCE $\times 2=1$ FCE) | Second Year: <br> (a) Physics 2111, 2211, 2311, 2331, 2332 <br> (b) Mathematics 2111, 2131 <br> (c) One half- course elective <br> (d) Education 1499 and 2399 ( 0.5 FCE $\times 2=1$ FCE) |
|  | Third Year: <br> (a) Physics 2151, 3113, 3211 and 3231 <br> (b) One half-course in Physics at the third or fourth year level <br> (c) Mathematics 3131, 3133 <br> (d) One half-course elective <br> (e) Four Education electives (Education 2011 (0.5 <br> FCE) recommended) (see Electives in the <br> Department of Undergraduate Studies in <br> Education Courses list)* (. 25 FCE $\times 4=1$ FCE) <br> *Education 3239 may be taken for credit more than once if the topics are different. <br> Note: <br> Concurrent Education students should check the timetable for non-Professional Year course offerings. | Third Year: <br> (a) Physics 2151, 3113, 3211 and 3231 <br> (b) One half-course in Physics at the third or fourth year level <br> (c) Mathematics 3131, 3133 <br> (d) One half-course elective <br> (e) Four Education electives (Education 2011 (0.5 FCE) recommended) (see Electives in the Department of Undergraduate Studies in Education Courses list)* (. 25 FCE $\times 4=1$ FCE) *Education 3239 may be taken for credit more than once if the topics are different. <br> Note: <br> Concurrent Education students should check the timetable for non-Professional Year course offerings. |
|  | Fourth Year (Professional Year): <br> (a) Core: <br> (i) Education 4417, 4418 and 4470 (. 25 FCE $\times 2$ <br> +0.5 FCE $\times 1=.75$ FCE) <br> (ii) Education 4412, 4413, 4414 and 4416 (. 25 <br> FCE $\times 4=1$ FCE) <br> (b) Curriculum and Instruction in IntermediateSenior Education: <br> (i) Education 4213 or, if teachable is English, one | Fourth Year (Professional Year): <br> (a) Core: <br> (i) Education 4417, 4418 and 4470 (. 25 FCE $\times 2$ <br> +0.5 FCE $\times 1=.75$ FCE) <br> (ii) Education 4412, 4413, 4414 and 4416 (. 25 <br> FCE $\times 4=1$ FCE) <br> (b) Curriculum and Instruction in Intermediate- <br> Senior Education: <br> (i) Education 4213 or, if teachable is English, one |

Zone 2: Budgetary Considerations

## Current Version

Please Complete Each Section and provide explanations for both Yes and No answers.

Student Enrolment:
Student Enrolment Other Units: Additional Resources:

Teaching Loads:
Teaching Support Services:

Outside Support:

## Proposed Version

Please Complete Each Section and provide explanations for both Yes and No answers

|  | Current Version |
| ---: | :--- |
|  | Please Complete Each Section and provide <br> explanations for both Yes and No answers. |
| Student Enrolment: |  |
| Student Enrolment |  |
| Other Units: |  |$\quad$| exp |
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| Additional Resources: |
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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

|  | Current Version | Proposed Version |
| ---: | :--- | ---: | :--- |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |

Specialization:
Rationale for

```
this proposal:
```

Description: HBScBEd IS (Geol con Phys
Credits:

Requirements:

Five Year program
A five year program leading to a background suitable for those seeking a career in geophysics

## Prior to Entry into Professional Year

In concurrent education programs at the Intermediate/Senior level, students must meet and complete requirements of the partnering honours bachelor degree program prior to entry into the Professional Year including:

1. 1 FCE in English, French or an Indigenous language
2. Education 4417 and 4418 (. 25 FCE $\times 2=.5$ FCE)
3. Education $4412, \underline{4413}, 4416$ ( $.25 \times 3=.75$ FCE)
4. Three Education electives ( $.25 \times 3=.75$ FCE) (see Electives in the Department of Undergraduate Studies in Education Courses list) (Education 2011 ( 0.5 FCE ) is recommended)
5. A minimum cumulative and teachable average of $65 \%$ and a minimum major average of $70 \%$.
6. At least 5 FCEs in a first teachable subject and 3 FCEs in a second teachable subject, with at least one half-course (i.e., a minimum of 0.5 FCE) at the third or fourth-year level in each teachable subject ( 5 FCEs if the teachable is French, and a Computer Science, Music or Visual Arts degree if the teachable is Computer Studies, Music or Visual Arts). For recognized I/S teachable subjects and exceptions to the above regulation see Department of Undergraduate Studies in Education, Levels and Teachables section.
7. Students in the Honours BA, BEd (Indigenous Learning Major) are required to take one FCE in Native Language, Visual Arts 2060/Indigenous Learning 2060 and English 2702/Indigenous Learning 2702. Students are encouraged to take one FCE in English at the first-year level, including at least one of English 1111 or 1112, in the First Year. Students are encouraged to choose either Education 3235 or 3270 as their Education elective.

## Note:

For students in concurrent honours bachelor degree programs, 2 (two) FCEs of required Education courses will be taken instead of electives in the HBSc program, prior to entering the Professional Year.

## First Year:

(a) Geology 1111, 1131
(b) Physics 1101
(c) Chemistry 1110, 1130
(d) English 1011 and 1031
(e) Mathematics 1210 and 1230 or 1151 and 1152 or 1171 and 1172

## Note:

## 1. Mathematics

Students who lack high school MHF4U (Advanced Functions) or its equivalent must register for Mathematics 1051 and 1077.
Mathematics 1210 and 1230 or 1151 and 1152 or 1171 and 1172 is taken in Year 2.

This change is to fulfill the objective in the Acad "Restructure existing 1.0 FCE courses (not inclu project, thesis, or directed study type courses) i courses to remove unnecessary barriers for stud from colleges and/or other universities."

HBScBEd IS (Geol con Phys

Five Year program
A five year program leading to a background sui seeking a career in geophysics

Prior to Entry into Professional Year
In concurrent education programs at the Interm level, students must meet and complete require partnering honours bachelor degree program pr the Professional Year including:

1. 1 FCE in English, French or an Indigenous lan
2. Education 4417 and 4418 (. 25 FCE $\times 2=.5 \mathrm{~F}$
3. Education $4412,4413,4416(.25 \times 3=.75 \mathrm{~F}$ 4. Three Education electives ( $.25 \times 3=.75 \mathrm{FCE}$ ) the Department of Undergraduate Studies in Edı list) (Education 2011 ( 0.5 FCE ) is recommended 5. A minimum cumulative and teachable averag minimum major average of $70 \%$.
4. At least 5 FCEs in a first teachable subject an second teachable subject, with at least one halfminimum of 0.5 FCE) at the third or fourth-year teachable subject ( 5 FCEs if the teachable is Fre Computer Science, Music or Visual Arts degree i Computer Studies, Music or Visual Arts). For rec teachable subjects and exceptions to the above Department of Undergraduate Studies in Educat Teachables section.
5. Students in the Honours BA, BEd (Indigenous are required to take one FCE in Native Language 2060/Indigenous Learning 2060 and English 270 Learning 2702. Students are encouraged to tak English at the first-year level, including at least 1111 or 1112 , in the First Year. Students are en choose either Education 3235 or 3270 as their E

## Note:

For students in concurrent honours bachelor dec (two) FCEs of required Education courses will be electives in the HBSc program, prior to entering Year.

## First Year:

(a) Geology 1111, 1131
(b) Physics 11011 1XXX and Physics II 1XXX
(c) Chemistry 1110,1130
(d) English 1011 and 1031
(e) Mathematics 1210 and 1230 or 1151 and 11

Note:

1. Mathematics

Students who lack high school MHF4U (Advance equivalent must register for Mathematics 1051 ¢ Mathematics 1210 and 1230 or 1151 and 1152 1172 is taken in Year 2.

Zone 2: Budgetary Considerations

## Current Version

Please Complete Each Section and provide explanations for both Yes and No answers.

Student Enrolment:
Student Enrolment Other Units: Additional Resources:

Teaching Loads:
Teaching Support Services:

Outside Support:

## Proposed Version

Please Complete Each Section and provide explanations for both Yes and No answers

|  | Current Version |
| ---: | :--- |
|  | Please Complete Each Section and provide <br> explanations for both Yes and No answers. |
| Student Enrolment: |  |
| Student Enrolment |  |
| Other Units: |  |$\quad$| exp |
| :--- |
| Additional Resources: |
| Teaching Loads: |
| Teaching Support |
| Services: |
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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

|  | Current Version | Proposed Version |
| ---: | :--- | :--- |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |

Rationale for

```
this proposal:
```

Description: HBScBEdJI (Geol con Phys
This change is to fulfill the objective in the Acad "Restructure existing 1.0 FCE courses (not inclu project, thesis, or directed study type courses) i courses to remove unnecessary barriers for stud from colleges and/or other universities.

HBScBEdJI (Geol con Phys
Credits:
Requirements:

Five Year program
A five year program leading to a background suitable for those seeking a career in geophysics

## Prior to Entry into Professional Year

In concurrent education programs at the Junior/Intermediate level, students must meet and complete requirements of the partnering honours bachelor degree program prior to entry into the Professional Year including:

1. 1 FCE in English, French or an Indigenous language
2. 1 FCE in Science (General Science 1000 recommended) (see Concurrent Bachelor of Education, Concurrent Content Regulations, \#1 regarding eligible Science courses)
3. One half-cours in Music or Visual Arts (Visual Arts 0510 recommended)
4. Education 2011 (. 5 FCE
5. Education 4417 and 4418 (. 25 FCE $\times 2=.5$ FCE)
6. Education 4412, 4413, 4416, and one Education elective (see Electives in the Department of Undergraduate Studies in Education Courses list) (. $25 \times 4=1$ FCE)
7. At least 3 FCEs in a teachable subject, with at least on half-course (i.e., a minimum of 0.5 FCE) at the third or fourth-year level, 5 FCEs if the teachable is French, a Music or Visual Arts degree if the teachable is Music or Visual Arts, and a Compute Science degree if the teachable is Computer Studies. For recognized J/I teachable subjects and exceptions to the above regulation see Department of Undergraduate Studies in Education Levels and Teachables section.
8. A minimum cumulative and teachable average of $65 \%$ and a minimum major average of $70 \%$.
9. Students in the Honours BA, BEd (Indigenous Learning Major) are required to take one FCE in Native Language, Visual Arts 2060/Indigenous Learning 2060 and English 2702/Indigenous Learning 2702. Students should also take one FCE in English at the first-year level, including at least one of English 1111 or 1112, in the First Year. Students are encouraged to choose either Education $\underline{3235}$ or 3270 as their Education elective.

## Note:

For students in concurrent honours bachelor degree programs, 2 (two) FCEs of required Education courses will be taken instead of electives in the HBSc program, prior to entering the Professional Year.

## First Year:

(a) Geology 1111, 1131
(b) Physics 1101
(c) Chemistry 1110, 1130
(d) English 1011 and 1031
(e) Mathematics 1210 and 1230 or 1151 and 1152 or 1171 and 1172

## Note:

## 1. Mathematics

Students who lack high school MHF4U (Advanced Functions) or its

Five Year program
A five year program leading to a background sui seeking a career in geophysics

Prior to Entry into Professional Year
In concurrent education programs at the Junior/ students must meet and complete requirements honours bachelor degree program prior to entry Professional Year including

1. 1 FCE in English, French or an Indigenous lan 2. 1 FCE in Science (General Science 1000 recor Concurrent Bachelor of Education, Concurrent C \#1 regarding eligible Science courses)
2. One half-cours in Music or Visual Arts (Visua recommended)
3. Education 2011 (. 5 FCE
4. Education 4417 and 4418 (. 25 FCE $\times 2=.5 \mathrm{~F}$
5. Education 4412, 4413, 4416, and one Educat Electives in the Department of Undergraduate S Courses list) (. $25 \times 4=1$ FCE
6. At least 3 FCEs in a teachable subject, with a half-course (i.e., a minimum of 0.5 FCE) at the $t$ level, 5 FCEs if the teachable is French, a Music degree if the teachable is Music or Visual Arts, a Science degree if the teachable is Computer Stu recognized J/I teachable subjects and exception regulation see Department of Undergraduate Stı Levels and Teachables section.
7. A minimum cumulative and teachable averag minimum major average of $70 \%$
8. Students in the Honours BA, BEd (Indigenous are required to take one FCE in Native Languag 2060/Indigenous Learning 2060 and English 270 Learning 2702. Students should also take one F first-year level, including at least one of English the First Year. Students are encouraged to choo $\underline{3235}$ or $\underline{3270}$ as their Education elective.

## Note

For students in concurrent honours bachelor dec (two) FCEs of required Education courses will be electives in the HBSc program, prior to entering Year.

## First Year:

(a) Geology 1111, 1131
(b) Physics 110111 XXX and Physics II 1XXXX
(c) Chemistry 1110, 1130
(d) English 1011 and 1031
(e) Mathematics 1210 and 1230 or 1151 and 11

1172
Note:

1. Mathematics

Students who lack high school MHF4U (Advance

Zone 2: Budgetary Considerations

## Current Version

Please Complete Each Section and provide explanations for both Yes and No answers.

Student Enrolment:
Student Enrolment Other Units: Additional Resources:

Teaching Loads:
Teaching Support Services:

Outside Support:

## Proposed Version

Please Complete Each Section and provide explanations for both Yes and No answers

|  | Current Version |
| ---: | :--- |
|  | Please Complete Each Section and provide <br> explanations for both Yes and No answers. |
| Student Enrolment: |  |
| Student Enrolment |  |
| Other Units: |  |$\quad$| exp |
| :--- |
| Additional Resources: |
| Teaching Loads: |
| Teaching Support |
| Services: |
| Outside Support: |

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## My Curriculum

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## Degree Details

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## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

|  | Current Version | Proposed Version |
| ---: | :--- | :--- |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |

Rationale for

```
this proposal:
```

Description: HBScBEd PJ (Geol con Phys
This change is to fulfill the objective in the Acad "Restructure existing 1.0 FCE courses (not inclu project, thesis, or directed study type courses) courses to remove unnecessary barriers for stud from colleges and/or other universities.

Credits:

Requirements:

Five Year program
A five year program leading to a background suitable for those seeking a career in geophysics

## Prior to Entry into Professional Year

In concurrent Education programs at the Primary/Junior level, students must meet and complete requirements of the partnering honours bachelor degree program prior to entry into the Professional Year including:

1. 1 FCE in English, French or an Indigenous language
2. 1 FCE in Science (General Science 1000 recommended) (see Concurrent Bachelor of Education, Concurrent Content Regulations, \#1 regarding eligible Science courses)
3. One half-course in Music or Visual Arts Visual Arts 0510
recommended)
4. Education 2010 (.5 FCE
5. Education 4417 and 4418 (. 25 FCE $\times 2=.5$ FCE)
6. Education $4412,4413,4416$, and one Education elective (see Electives in the Department of Undergraduate Studies in Education Courses list) (. 25 FCE $\times 4=1$ FCE)
7. A minimum cumulative average of $65 \%$ and a minimum major average of $70 \%$
8. Students in the Honours BA, BEd (Indigenous Learning Major) are required to take one FCE in Native Language, Visual Arts 2060/Indigenous Learning 2060 and English 2702/Indigenous Learning 2702. Students should also take one FCE in English at the first-year level, including at least one of English 1111 or 1112, in the First Year. Students are encouraged to choose either Education 3235 or $\underline{3270}$ as their Education elective.

## Note:

For students in concurrent honours bachelor degree programs, 2 (two) FCEs of required Education courses will be taken instead of electives in the HBSc program, prior to entering the Professional Year

## First Year:

(a) Geology 1111, 1131
(b) Physics 1101
(c) Chemistry 1110, 1130
(d) English 1011 and 1031
(e) Mathematics 1210 and 1230 or 1151 and 1152 or 1171 and

1172

## Note:

1. Mathematics

Students who lack high school MHF4U (Advanced Functions) or its equivalent must register for Mathematics 1051 and 1077
Mathematics 1210 and 1230 or 1151 and 1152 or 1171 and
1172 is taken in Year 2.

## Second Year:

(a) Geology 2112, 2214, 2217, 2310, 2318
(b) Physics 2151, 2311
(c) Mathematics 2111

Five Year program
A five year program leading to a background su seeking a career in geophysics

Prior to Entry into Professional Year
In concurrent Education programs at the Primar students must meet and complete requirements honours bachelor degree program prior to entr Professional Year including:

1. 1 FCE in English, French or an Indigenous lan 2. 1 FCE in Science (General Science 1000 recor Concurrent Bachelor of Education, Concurrent C \#1 regarding eligible Science courses)
2. One half-course in Music or Visual Arts Visua recommended)
3. Education 2010 (.5 FCE)
4. Education 4417 and 4418 (. 25 FCE $\times 2=.5 \mathrm{~F}$
5. Education 4412, 4413, 4416, and one Educat

Electives in the Department of Undergraduate S Courses list) (. 25 FCE $\times 4=1$ FCE)
7. A minimum cumulative average of $65 \%$ and average of 70\%
8. Students in the Honours BA, BEd (Indigenous are required to take one FCE in Native Language 2060/Indigenous Learning 2060 and English $27 C$ Learning 2702. Students should also take one F first-year level, including at least one of English the First Year. Students are encouraged to choo 3235 or 3270 as their Education elective.

Note:
For students in concurrent honours bachelor dec (two) FCEs of required Education courses will be electives in the HBSc program, prior to entering Year.

First Year:
(a) Geology 1111, 1131
(b) Physics 11011 1XXX and Physics II 1XXX
(c) Chemistry 1110, 1130
(d) English 1011 and 1031
(e) Mathematics 1210 and 1230 or 1151 and 11

1172

## Note:

1. Mathematics

Students who lack high school MHF4U (Advance equivalent must register for Mathematics 1051 a Mathematics 1210 and 1230 or 1151 and 1152 1172 is taken in Year 2.

Second Year:
(a) Geology 2112, 2214, 2217, 2310, 2318
(b) Physics 2151, 2311
(c) Mathematics 2111

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| Current Version |
| :---: |
| $\begin{array}{c}\text { Please Complete Each Section and provide } \\ \text { explanations for both Yes and No answers. }\end{array}$ |
| $\begin{array}{c}\text { Student Enrolment: } \\ \text { Student Enrolment } \\ \text { Other Units: } \\ \text { Additional Resources: } \\ \text { Teaching Loads: } \\ \text { Teaching Support } \\ \text { Services: } \\ \text { Outside Support: }\end{array}$ |


| Current Version |
| :---: |
| $\begin{array}{c}\text { Please Complete Each Section and provide } \\ \text { explanations for both Yes and No answers. }\end{array}$ |
| $\begin{array}{c}\text { Student Enrolment: } \\ \text { Student Enrolment } \\ \text { Other Units: } \\ \text { Additional Resources: } \\ \text { Teaching Loads: } \\ \text { Teaching Support } \\ \text { Services: } \\ \text { Outside Support: }\end{array}$ |

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## My Curriculum

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## Degree Details

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## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

|  | Current Version | Proposed Version |
| :---: | :---: | :---: |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |
|  | Submitting a New/Change to a Program Proposal? Visit this link for the mandatory Quality Assurance Requirements | Submitting a New/Change to a Program Proposa the mandatory Quality Assurance Requirements |
| Program Code: | HBSCBED.PHYS.IS | HBSCBED.PHYS.IS |
| AcademicLevel: | Undergraduate | Undergraduate |
| StartTerm: | Fall 1999 | Fall 1999F-W 2013-14 |
| EndTerm: | No Specified End Date | No Specified End Date [?] |
| InstitutionUnit: | - Lakehead University <br> - Faculty of Education | - Lakehead University <br> - Faculty of Education |
| Title: | Honours BSc, BEd (Physics Major) I/S | Honours BSc, BEd (Physics Major) I/S |
| DegreeType: | HBSED | HBSED |
| Major: | PHYS | PHYS |

Specialization:

Rationale for this proposal:

Description:
HBScBEd IS (Physics)
Credits:

Requirements:

Five Year program
A cumulative average of $70 \%$ in all Physics courses is required
Prior to Entry into Professional Year
In concurrent education programs at the Intermediate/Senior level, students must meet and complete requirements of the partnering honours bachelor degree program prior to entry into the Professional Year including:

1. 1 FCE in English, French or an Indigenous language
2. Education 4417 and 4418 (. 25 FCE $\times 2=.5$ FCE)
3. Education $4412,4413,4416$ (. $25 \times 3=.75 \mathrm{FCE}$ )
4. Three Education electives ( $.25 \times 3=.75 \mathrm{FCE}$ ) (see Electives in the Department of Undergraduate Studies in Education Courses list) (Education 2011 ( 0.5 FCE ) is recommended) 5. A minimum cumulative and teachable average of $65 \%$ and a minimum major average of $70 \%$.
5. At least 5 FCEs in a first teachable subject and 3 FCEs in a second teachable subject, with at least one half-course (i.e., a minimum of 0.5 FCE) at the third or fourth-year level in each teachable subject ( 5 FCEs if the teachable is French, and a Computer Science, Music or Visual Arts degree if the teachable is Computer Studies, Music or Visual Arts). For recognized I/S teachable subjects and exceptions to the above regulation see Department of Undergraduate Studies in Education, Levels and Teachables section.
6. Students in the Honours BA, BEd (Indigenous Learning Major) are required to take one FCE in Native Language, Visual Arts 2060/Indigenous Learning 2060 and English 2702/Indigenous Learning 2702. Students are encouraged to take one FCE in English at the first-year level, including at least one of English 1111 or 1112, in the First Year. Students are encouraged to choose either Education 3235 or 3270 as their Education elective.

## Note:

For students in concurrent honours bachelor degree programs, 2 (two) FCEs of required Education courses will be taken instead of electives in the HBSc program, prior to entering the Professional Year.

## First Year:

(a) Physics 1101
(b) Mathematics 1171 and 1172
(c) Chemistry 1110, 1130
(d) One and one-half FCE elective.
(e) Computer Science 0411 or 1411

## Second Year:

(a) Physics 2111, 2151, 2211, 2311, 2331 and 2332
(b) Mathematics 2111 and 2131
(d) One FCE elective

## Third Year:

(a) Physics 3113, 3211 and 3231
(b) Physics 4113 or 4171
(c) Physics 3371 or 4211
(d) A Physics half-course elective at the third or fourth year level

## Proposed Version

QUALITY ASSURANCE
g a New/Change to a Program Proposa HBSCBED.PHYS.IS

Undergraduate
Fall 1999F-W 2013-14

- Lakehead University
nours BSc, BEd (Physics Major) I/S
HBSED

This change is to fulfill the objective in the Acad "Restructure existing 1.0 FCE courses (not inclu project, thesis, or directed study type courses) i courses to remove unnecessary barriers for stud from colleges and/or other universities.

HBScBEd IS (Physics)

Five Year program
A cumulative average of $70 \%$ in all Physics cour
Prior to Entry into Professional Year
In concurrent education programs at the Interm level, students must meet and complete require partnering honours bachelor degree program pr the Professional Year including:

1. 1 FCE in English, French or an Indigenous Ian 2. Education 4417 and 4418 (. 25 FCE $\times 2=.5 \mathrm{~F}$
2. Education $4412,4413,4416(.25 \times 3=.75 \mathrm{~F}$
3. Three Education electives ( $.25 \times 3=.75$ FCE) the Department of Undergraduate Studies in Edi Courses list) (Education 2011 (0.5 FCE) is recon 5. A minimum cumulative and teachable averag minimum major average of $70 \%$.
4. At least 5 FCEs in a first teachable subject an second teachable subject, with at least one halfminimum of 0.5 FCE) at the third or fourth-year teachable subject ( 5 FCEs if the teachable is Fre Computer Science, Music or Visual Arts degree it Computer Studies, Music or Visual Arts). For rec teachable subjects and exceptions to the above Department of Undergraduate Studies in Educat Teachables section.
5. Students in the Honours BA, BEd (Indigenous are required to take one FCE in Native Language 2060/Indigenous Learning 2060 and English 270 Learning 2702. Students are encouraged to tak English at the first-year level, including at least 1111 or 1112, in the First Year. Students are en choose either Education 3235 or $\mathbf{3 2 7 0}$ as their E

## Note

For students in concurrent honours bachelor dec (two) FCEs of required Education courses will be electives in the HBSc program, prior to entering Year.

First Year:
(a) Physics 11011 1XXX and Physics II 1XXX
(b) Mathematics 1171 and 1172
(c) Chemistry 1110, 1130
(d) One and one-half FCE elective.
(e) Computer Science 0411 or 1411

Second Year:
(a) Physics 2111, 2151, 2211, 2311, 2331 and $\underline{2}$
(b) Mathematics 2111 and $\underline{2131}$
(d) One FCE elective

Third Year:
(a) Physics 3113, 3211 and 3231
(b) Physics 4113 or 4171
(c) Physics 3371 or 4211
(d) A Physics half-course elective at the third or

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| Current Version |
| :---: |
| $\begin{array}{c}\text { Please Complete Each Section and provide } \\ \text { explanations for both Yes and No answers. }\end{array}$ |
| $\begin{array}{c}\text { Student Enrolment: } \\ \text { Student Enrolment } \\ \text { Other Units: } \\ \text { Additional Resources: } \\ \text { Teaching Loads: } \\ \text { Teaching Support } \\ \text { Services: } \\ \text { Outside Support: }\end{array}$ |


| Current Version |
| :---: |
| $\begin{array}{c}\text { Please Complete Each Section and provide } \\ \text { explanations for both Yes and No answers. }\end{array}$ |
| $\begin{array}{c}\text { Student Enrolment: } \\ \text { Student Enrolment } \\ \text { Other Units: } \\ \text { Additional Resources: } \\ \text { Teaching Loads: } \\ \text { Teaching Support } \\ \text { Services: } \\ \text { Outside Support: }\end{array}$ |

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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

|  | Current Version | Proposed Version |
| :---: | :---: | :---: |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |
|  | Submitting a New/Change to a Program Proposal? Visit this link for the mandatory Quality Assurance Requirements | Submitting a New/Change to a Program Proposa the mandatory Quality Assurance Requirements |
| Program Code: | HBSCBED.PHYS.JI | HBSCBED.PHYS.JI |
| AcademicLevel: | Undergraduate | Undergraduate |
| StartTerm: | Fall 2003 | Fall 2003F-W 2013-14 |
| EndTerm: | No Specified End Date | No Specified End Date [?] |
| InstitutionUnit: | - Lakehead University <br> - Faculty of Education | - Lakehead University <br> - Faculty of Education |
| Title: | Honours BSc, BEd (Physics Major) J/I | Honours BSc, BEd (Physics Major) J/I |
| DegreeType: | HBSED | HBSED |
| Major: | PHYS | PHYS |
| Minor: |  |  |

Specialization:

| Rationale for <br> this proposal: |  |
| ---: | :--- |
| Description: |  |
| Credits: |  |
| Requirements: |  |
|  | Five Year program |
|  | A cumulative average of $70 \%$ in all Physics courses is required. |
|  | Prior to Entry into Professional Year |

This change is to fulfill the objective in the Acad "Restructure existing 1.0 FCE courses (not inclu project, thesis, or directed study type courses) i courses to remove unnecessary barriers for stud from colleges and/or other universities."

HBScBEdJI (Physics)

Pror to Entry into Professional Year
In concurrent education programs at the Junior/Intermediate level, students must meet and complete requirements of the partnering honours bachelor degree program prior to entry into the Professional Year including:

1. 1 FCE in English, French or an Indigenous language
2. 1 FCE in Science (General Science 1000 recommended) (see

Concurrent Bachelor of Education, Concurrent Content Regulations, \#1 regarding eligible Science courses)
3. One half-course in Music or Visual Arts (Visual Arts 0510 recommended)
4. Education 2011 (. 5 FCE)
5. Education 4417 and 4418 (. 25 FCE $\times 2=.5$ FCE)
6. Education $4412,4413,4416$, and one Education elective (see Electives in the Department of Undergraduate Studies in Education Courses list) (. $25 \times 4=1$ FCE)
7. At least 3 FCEs in a teachable subject, with at least one half-course (i.e., a minimum of 0.5 FCE) at the third or
fourth-year level, 5 FCEs if the teachable is French, a Music or
Visual Arts degree if the teachable is Music or Visual Arts, and a
Computer Science degree if the teachable is Computer Studies. For recognized J/I teachable subjects and exceptions to the above regulation see Department of Undergraduate Studies in
Education, Levels and Teachables section.
8. A minimum cumulative and teachable average of $65 \%$ and a minimum major average of $70 \%$.
9. Students in the Honours BA, BEd (Indigenous Learning Major) are required to take one FCE in Native Language, Visual Arts 2060/Indigenous Learning 2060 and English 2702/Indigenous Learning 2702. Students should also take one FCE in English at the first-year level, including at least one of English 1111 or 1112, in the First Year. Students are encouraged to choose either Education 3235 or 3270 as their Education elective.

## Note:

For students in concurrent honours bachelor degree programs, 2 (two) FCEs of required Education courses will be taken instead of electives in the HBSc program, prior to entering the Professiona Year.

## First Year

(a) Physics 1101
(b) Mathematics 1171 and 1172
(c) Chemistry 1110, 1130
(d) One and one-half FCE elective
(e) Computer Science 0411 or 1411

## Second Year:

(a) Physics 2111, 2151, 2211, 2311, 2331 and 2332
(b) Mathematics 2111 and 2131
(d) One FCE elective

## Third Year:

Five Year program
A cumulative average of $70 \%$ in all Physics cour
Prior to Entry into Professional Year
In concurrent education programs at the J unior/ students must meet and complete requirements honours bachelor degree program prior to entry Professional Year including:

1. 1 FCE in English, French or an Indigenous Ian 2. 1 FCE in Science (General Science 1000 recor Concurrent Bachelor of Education, Concurrent C \#1 regarding eligible Science courses) 3. One half-course in Music or Visual Arts (Visua recommended)
2. Education 2011 (. 5 FCE)
3. Education 4417 and 4418 (. 25 FCE $\times 2=.5 \mathrm{~F}$
4. Education $4412,4413,4416$, and one Educat Electives in the Department of Undergraduate S Courses list) (. $25 \times 4=1$ FCE)
5. At least 3 FCEs in a teachable subject, with at half-course (i.e., a minimum of 0.5 FCE) at the $t$ fourth-year level, 5 FCEs if the teachable is Fren Visual Arts degree if the teachable is Music or Vi Computer Science degree if the teachable is Con recognized J/I teachable subjects and exception regulation see Department of Undergraduate St Education, Levels and Teachables section.
6. A minimum cumulative and teachable averag minimum major average of $70 \%$.
7. Students in the Honours BA, BEd (Indigenous are required to take one FCE in Native Language 2060/Indigenous Learning 2060 and English $27 C$ Learning 2702. Students should also take one F first-year level, including at least one of English the First Year. Students are encouraged to choo 3235 or 3270 as their Education elective.

## Note

For students in concurrent honours bachelor dec (two) FCEs of required Education courses will be electives in the HBSc program, prior to entering Year.

First Year:
(a) Physics 1101 IXXX and Physics II 1XXX
(b) Mathematics 1171 and 1172
(c) Chemistry 1110, 1130
(d) One and one-half FCE elective.
(e) Computer Science 0411 or 1411

Second Year:
(a) Physics 2111, 2151, 2211, 2311, 2331 and 2
(b) Mathematics 2111 and 2131
(d) One FCE elective

Third Year:

Zone 2：Budgetary Considerations
Current Version


Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |

Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |

Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |

Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |

Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |



| $\begin{aligned} \text { Student Enrolment：} \\ \text { Student Enrolment } \\ \text { Other Units：} \\ \text { Additional Resources：} \\ \text { Teaching Loads：} \\ \text { Teaching Support } \\ \text { Services：} \\ \text { Outside Support：}\end{aligned}$ | $[?]$ <br> $[?]$ <br> Back |
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User: Amanda Trevisanutto
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Edit Resources $\square$

## My Curriculum

| Assigned curriculum requests (28) | view |
| :---: | :---: |
| Submitted curriculum requests (0) | view |
| Your working folder contains: | view |
| - 0 curriculum requests <br> - 0 courses <br> - 0 degrees <br> - 0 programs |  |

## Quick Links

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Catalog Curriculum Admin

## Logout । Home

## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

|  | Current Version | Proposed Version |
| :---: | :---: | :---: |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |
|  | Submitting a New/Change to a Program Proposal? Visit this link for the mandatory Quality Assurance Requirements | Submitting a New/Change to a Program Proposa the mandatory Quality Assurance Requirements |
| Program Code: | HBSCBED.PHYS.PJ | HBSCBED.PHYS.PJ |
| AcademicLevel: | Undergraduate | Undergraduate |
| StartTerm: | Fall 2003 | Fall 2003F-W 2013-14 |
| EndTerm: | No Specified End Date | No Specified End Date [?] |
| InstitutionUnit: | - Lakehead University <br> - Faculty of Education | - Lakehead University <br> - Faculty of Education |
| Title: | Honours BSc, BEd (Physics Major) P/J | Honours BSc, BEd (Physics Major) P/J |
| DegreeType: | HBSED | HBSED |
| Major: | PHYS | PHYS |
| Minor: |  |  |

Specialization:

| Rationale for <br> this proposal: |  |
| :--- | :--- |
| Description: | HBScBEd PJ (Physics) |
| Credits: |  |
| Requirements: | Five Year program |
|  | A cumulative average of $70 \%$ in all Physics courses is required. |

This change is to fulfill the objective in the Acad "Restructure existing 1.0 FCE courses (not inclu project, thesis, or directed study type courses) courses to remove unnecessary barriers for stud from colleges and/or other universities.

HBScBEd PJ (Physics)

## Prior to Entry into Professional Year

In concurrent Education programs at the Primary/Junior level, students must meet and complete requirements of the partnering honours bachelor degree program prior to entry into the Professional Year including:

1. 1 FCE in English, French or an Indigenous language
2. 1 FCE in Science (General Science 1000 recommended) (see Concurrent Bachelor of Education, Concurrent Content Regulations, \#1 regarding eligible Science courses)
3. One half-course in Music or Visual Arts (Visual Arts 0510 recommended)
4. Education 2010 (. 5 FCE)
5. Education 4417 and 4418 (. 25 FCE $\times 2=.5$ FCE)
6. Education $4412,4413,4416$, and one Education elective (see Electives in the Department of Undergraduate Studies in Education Courses list) (. 25 FCE $\times 4=1$ FCE)
7. A minimum cumulative average of $65 \%$ and a minimum major average of $70 \%$
8. Students in the Honours BA, BEd (Indigenous Learning Major) are required to take one FCE in Native Language, Visual Arts 2060/Indigenous Learning 2060 and English 2702/Indigenous Learning 2702. Students should also take one FCE in English at the first-year level, including at least one of English 1111 or 1112, in the First Year. Students are encouraged to choose either Education $\underline{3235}$ or $\underline{3270}$ as their Education elective.

## Note:

For students in concurrent honours bachelor degree programs, 2 (two) FCEs of required Education courses will be taken instead of electives in the HBSc program, prior to entering the Professiona Year.

## First Year:

(a) Physics 1101
(b) Mathematics 1171 and 1172
(c) Chemistry 1110, 1130
(d) One and one-half FCE elective.
(e) Computer Science 0411 or 1411

## Second Year:

(a) Physics 2111, 2151, 2211, 2311, 2331 and 2332
(b) Mathematics 2111 and $\underline{2131}$
(d) One FCE elective

## Third Year:

(a) Physics 3113, 3211 and 323
(b) Physics 4113 or 4171
(c) Physics 3371 or 4211
(d) A Physics half-course elective at the third or fourth year leve
(e) Mathematics 3131 and 3133
(f) One FCE elective

Five Year program
A cumulative average of $70 \%$ in all Physics cour
Prior to Entry into Professional Year
In concurrent Education programs at the Primar students must meet and complete requirements honours bachelor degree program prior to entr Professional Year including.

1. 1 FCE in English, French or an Indigenous lan 2. 1 FCE in Science (General Science 1000 recor Concurrent Bachelor of Education, Concurrent C \#1 regarding eligible Science courses)
2. One half-course in Music or Visual Arts (Visua recommended)
3. Education 2010 (. 5 FCE)
4. Education 4417 and 4418 (. 25 FCE $\times 2=.5 \mathrm{~F}$
5. Education $4412,4413,4416$, and one Educat Electives in the Department of Undergraduate S Courses list) (. 25 FCE $\times 4=1$ FCE)
6. A minimum cumulative average of $65 \%$ and average of $70 \%$
7. Students in the Honours BA, BEd (Indigenous are required to take one FCE in Native Language 2060/Indigenous Learning 2060 and English 27 C Learning 2702. Students should also take one $F$ first-year level, including at least one of English the First Year. Students are encouraged to choo $\underline{3235}$ or 3270 as their Education elective.

## Note:

For students in concurrent honours bachelor dec (two) FCEs of required Education courses will be electives in the HBSc program, prior to entering Year.

## First Year:

(a) Physics 11011 1XXX and Physics II 1XXX
(b) Mathematics 1171 and 1172
(c) Chemistry 1110, 1130
(d) One and one-half FCE elective.
(e) Computer Science 0411 or 1411

Second Year:
(a) Physics 2111, 2151, 2211, 2311, 2331 and
(b) Mathematics 2111 and 2131
(d) One FCE elective

Third Year:
(a) Physics 3113, 3211 and 3231
(b) Physics 4113 or 4171
(c) Physics 3371 or 4211
(d) A Physics half-course elective at the third or
(e) Mathematics 3131 and 3133
(f) One FCE elective

Zone 2：Budgetary Considerations
Current Version


Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |

Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |

Student Enrolment：
Student Enrolment
Other Units：
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Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |

Student Enrolment：
Student Enrolment
Other Units：
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Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |

Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |



| $\begin{aligned} \text { Student Enrolment：} \\ \text { Student Enrolment } \\ \text { Other Units：} \\ \text { Additional Resources：} \\ \text { Teaching Loads：} \\ \text { Teaching Support } \\ \text { Services：} \\ \text { Outside Support：}\end{aligned}$ | $[?]$ <br> $[?]$ <br> Back |
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User: Amanda Trevisanutto
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## My Curriculum

| Assigned curriculum requests (28) | view |
| :---: | :---: |
| Submitted curriculum requests (0) | view |
| Your working folder contains: | view |
| - 0 curriculum requests <br> - 0 courses <br> - 0 degrees <br> - 0 programs |  |

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Discontinue Degree

Catalog Curriculum Admin

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## Degree Details

## Degree Details Requirements Supporting Documents

Justification: This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities."
Degree Status: In Workflow Request (View History)
Change Type: New Version

Zone 1: Required I nformation

|  | Current Version | Proposed Version |
| :---: | :---: | :---: |
|  | QUALITY ASSURANCE | QUALITY ASSURANCE |
|  | Submitting a New/Change to a Program Proposal? | Submitting a New/Change to a Program Proposal? |
|  | Visit this link for the mandatory Quality | Visit this link for the mandatory Quality |
|  | Assurance Requirements | Assurance Requirements |
| Program Code: | BSCBED.PHYS.JI | BSCBED.PHYS.JI |
| AcademicLevel: | Undergraduate | Undergraduate |
| StartTerm: | Fall 2003 | Fall 2003F-W 2013-14 |
| EndTerm: | No Specified End Date | No Specified End Date [?] |
| InstitutionUnit: | - Lakehead University <br> - Faculty of Education | - Lakehead University <br> - Faculty of Education |
| Title: | BSc, BEd (Physics Major) J/I | BSc, BEd (Physics Major) J/I |
| DegreeType: | BSBED | BSBED |
| Major: | PHYS | PHYS |
| Minor: |  |  |
| Specialization: |  |  |
| Rationale for this proposal: |  | This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/or other universities." |
| Description: | BScBEd JI (Physics) | BScBEd JI (Physics) |
| Credits: |  |  |
| Requirements: |  |  |
|  | Four Year program <br> A cumulative average of $65 \%$ in all courses is required. See Department of Undergraduate Studies in Education, Academic Regulation \#2, regarding the average in the major. | Four Year program <br> A cumulative average of $65 \%$ in all courses is required. See Department of Undergraduate Studies in Education, Academic Regulation \#2, regarding the average in the major. |
|  | Students must choose a teachable subject. See Department of Undergraduate Studies in | Students must choose a teachable subject. See Department of Undergraduate Studies in |
|  | Education, Levels and Teachables. | Education, Levels and Teachables. |
|  | First Year: <br> (a) Physics 1101 <br> (b) Mathematics 1171 and 1172 <br> (c) Chemistry 1110, 1130 <br> (d) A minimum of one FCE in English, with at least one of the literature courses (English 1111 or 1112). For English Majors both English 1111 and English 1112 are required. <br> (e) Computer Science 0411 or 1411 <br> (f) One half-course Science elective | First Year: <br> (a) Physics 11011 1XXX and Physics II 1XXX <br> (b) Mathematics 1171 and 1172 <br> (c) Chemistry 1110, 1130 <br> (d) A minimum of one FCE in English, with at least one of the literature courses (English 1111 or 1112). For English Majors both English 1111 and English 1112 are required. <br> (e) Computer Science 0411 or 1411 <br> (f) One half-course Science elective |
|  | Second Year: <br> (a) Physics 2111, 2211, 2311, 2331, 2332 <br> (b) Mathematics 2111, 2131 <br> (c) One half-course in Music or Visual Arts <br> (d) Education 1499 and 2399 ( 0.5 FCE $\times 2=1$ FCE) | Second Year: <br> (a) Physics 2111, 2211, 2311, 2331, 2332 <br> (b) Mathematics 2111, 2131 <br> (c) One half-course in Music or Visual Arts <br> (d) Education 1499 and 2399 ( 0.5 FCE $\times 2=1$ FCE) |
|  | Third Year: | Third Year: |
|  | (a) Physics 2151, 3113, 3211 and 3231 | (a) Physics 2151, 3113, 3211 and 3231 |
|  | (b) One half-course in Physics at the third or fourth year level | (b) One half-course in Physics at the third or fourth year level |
|  | (c) Mathematics 3131, 3133 | (c) Mathematics 3131, 3133 |
|  | (d) One half-course elective | (d) One half-course elective |
|  | (e) Education 2011 (0.5 FCE) | (e) Education 2011 (0.5 FCE) |
|  | (f) Two Education electives (see Electives in the | (f) Two Education electives (see Electives in the |
|  | Department of Undergraduate Studies in | Department of Undergraduate Studies in |
|  | Education Courses list)* ( 25 FCE $\times 2=0.5$ FCE) | Education Courses list)* ( 25 FCE $\times 2=0.5 \mathrm{FCE}$ ) |
|  | *Education 3239 may be taken for credit more than once if the topics are different. | *Education 3239 may be taken for credit more than once if the topics are different. |
|  | Note: Concurrent Education students should check the timetable for non-Professional Year course offerings. | Note: Concurrent Education students should check the timetable for non-Professional Year course offerings. |
|  | Fourth Year (Professional Year): <br> (a) Core: <br> (i) Education 4417, 4418 and 4470 (. 25 FCE $\times 2$ <br> +0.5 FCE $\times 1=.75$ FCE) <br> (ii) Education 4412, 4413, 4414, and 4416 (. 25 FCE $\times 4=1$ FCE) <br> (b) Curriculum and Instruction in JuniorIntermediate Education: <br> (i) Education 4112 and 4151 ( 0.5 FCE $\times 2=1$ FCE) | Fourth Year (Professional Year): <br> (a) Core: <br> (i) Education 4417, 4418 and 4470 (. 25 FCE $\times 2$ <br> +0.5 FCE $\times 1=.75$ FCE) <br> (ii) Education 4412, 4413, 4414, and 4416 (. 25 FCE $\times 4=1$ FCE) <br> (b) Curriculum and Instruction in JuniorIntermediate Education: <br> (i) Education 4112 and 4151 ( 0.5 FCE $\times 2=1$ FCE) |

Zone 2：Budgetary Considerations
Current Version


Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
| :--- |
| Back |

Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
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| Back |

Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
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Outside Support： $\quad$| $[?]$ |
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Student Enrolment：
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Other Units：
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Teaching Support
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Outside Support： $\quad$| $[?]$ |
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Student Enrolment：
Student Enrolment
Other Units：
Additional Resources：
Teaching Loads：
Teaching Support
Services：

Outside Support： $\quad$| $[?]$ |
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| Back |



| $\begin{aligned} \text { Student Enrolment：} \\ \text { Student Enrolment } \\ \text { Other Units：} \\ \text { Additional Resources：} \\ \text { Teaching Loads：} \\ \text { Teaching Support } \\ \text { Services：} \\ \text { Outside Support：}\end{aligned}$ | $[?]$ <br> $[?]$ <br> Back |
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| Assigned curriculum requests (28) | view |
| :---: | :---: |
| Submitted curriculum requests (0) | view |
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## Quick Links

Manage Courses
Add New Course
Search For Course

- Copy Course
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- Discontinue Course

Catalog Curriculum Admin

Course Details

| Course Details | Prerequisites | Corequisites | Exclusions | Cross Listed | Designations |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Supporting Documents |  |  |  |  |  |
| Course Status: In Workflow Request (View History) |  |  |  |  |  | Where Used Report |

Proposed Version
Code: Physics 1101
Title: I ntroductory Physics
InstitutionUnit:

- Lakehead University

StartTerm: Summer 2009
EndTerm: Spring 2010 [?]

Zone 2: Required Information - Detailed

## Proposed Version

Rationale for this proposal:
The Faculty of Science and Environmental Studies would like to see all full 1st year courses divided into two half courses. PHYS 1101 will have to be discontinued and replaced with two new courses.

RequiredorElective: Required [?]

Zone 3: Budgetary Considerations

## Proposed Version

Please Complete Each Section and Provide Explanations for Both Yes and No Answers
Student Enrolment: No student enrollment will not be affected. [?]
Student Enrolment Other Student enrollment in other departments will be affected. The transitional statement Units: addresses these issues. [?]

Teaching Loads: No change in teaching assignments. [?]

Course Details

| User: Amanda Trevisanutto |
| :--- | :--- |
| Manage Your Account |
| Edit Resources |

## Quick Links

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- Create New Version of Course
- Discontinue Course



## Zone1: Required Information

Current Version Proposed Version

InstitutionUnit:

- Lakehead University
- Faculty of Science and Environmental Studies

StartTerm: Summer 2009
EndTerm: Spring 2010
Code: Physics 1101
Title: Introductory Physics
AcademicLevel: Undergraduate
CreditWeight: 1.0
Lakehead University

- Faculty of Science and Environmental Studies

Summer 2009F-W 2013-14
Spring 2010No Specified End Date [?]
Physics 1101 [?]
Introductory Physics I
Undergraduate
10.05

Zone 2: Required I nformation - Detailed

Current Version
Course Description: A calculus-based course intended for students in the physical sciences, applied sciences and mathematics which includes the study of Newtonian mechanics for particles and rigid bodies, gravitation, oscillations, mechanical waves and sound, electricity, D.C. and A.C. circuits, electromagnetic waves and the wave properties of light, accompanied by related laboratory work. Note:

Rationale for this
proposal:

Required or Elective:

Cross List:
Offering: 3-3; 3-3
3-3; 30-30 [?]

Zone 3: Additional Information
Current Version Proposed Version
Prerequisites:
Corequisites: Mathematics 1160 or $1180 \quad$ Mathematics $1160-1151$ or 1180 Mathematics 1171

Students may receive credit for only one of Physics 1101 or $1113 / 1133$. PHYS 1030, 1101, 1XXX, 1113 [?]

| Zone 4: Budgetary Considerations |  |
| ---: | :--- |
| Current Version |  |
| Please Complete Each Section and Provide <br> Explanations for Both Yes and No Answers. | Proposed Version <br> Explanations for Both Yes and No Answers. |
| Student Enrolment: | No change in student enrollment. [?] |
| Student Enrolment |  |
| Other Units: | Splitting this one year course will have an affect <br> on other departments. [?] |
| Additional Resources: | No change in additional resources. [?] |
| Teaching Loads: | No change in teaching assignments. [?] |
| Teaching Support |  |
| Services: | No change in teaching support services [?] |
| Outside Support: | No change in outside support. [?] |

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My Curriculum

| Assigned curriculum <br> requests (28) | view |
| :--- | :---: |
| Submitted curriculum <br> requests ( 0 ) | view |
| Your working folder <br> contains: | view |
| -0 curriculum requests |  |
| -0 courses |  |
| -0 degrees |  |
| -0 programs |  |
|  |  |

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## Manage Courses

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Search For Course

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Course Details

| Course Details | Prerequisites | Corequisites | Exclusions | Cross Listed | Designations |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Supporting Documents |  |  |  |  |  |
| Course Status: In Workflow Request (View History) |  |  |  |  |  | Where Used Report |
| Change Type: New |  |  |  |  |  |  |


|  | Proposed Version |
| ---: | :--- |
| InstitutionUnit: | - Lakehead University |
|  |  |
| StartTerm: | F-w 2013-14 |
| EndTerm: | No Specified End Date [?] |
| Code: | PHYS 1XXX II [?] |
| Title: | Introductory Physics II |
| AcademicLevel: | Undergraduate |
| CreditWeight: | $\mathbf{0 . 5}$ |


|  | Proposed Version |
| :---: | :---: |
| Course Description: | A calculus-based course intended for students in the physical sciences and applied sciences which includes Oscillations, mechanical waves and sound, electric charge, electric field, Coulomb's law, Gauss's law, applications of Gauss's law, electric potential, capacitance, dielectrics, current, resistance, direct current circuit, magnetic field, electromagnetic induction, alternating current, electromagnetic waves and wave properties of light, accompanied by related laboratory work. |
| Rationale for this proposal: | This change is to fulfill the objective in the Academic Action Plan to "Restructure existing 1.0 FCE courses (not including special project, thesis, or directed study type courses) into 0.5 FCE courses to remove unnecessary barriers for students transferring from colleges and/ or other universities." |
| Required or Elective: | Required [?] |
| Cross List: |  |
| Offering: | 0-0;3-3 [?] |


|  | Proposed Version |
| :---: | :---: |
| Corequisites: | Mathematics $\mathbf{1 1 5 1}$ or Mathematics 1171 |
| Notes (Restrictions): | Notes: Students may receive credit for only one of Physics 1030, 1101, 1XXX, 1113 [?] |
| Zone 4: Budgetary Conside | tions |
|  | Proposed Version |
|  | Please Complete Each Section and Provide Explanations for Both Yes and No Answers. |
| Student Enrolment: | No this change is only needed to replace the request to split the original course PHYS 1101. [?] |
| Student Enrolment Other Units: | No this change is only needed to replace the request to split the original course PHYS 1101. [?] |
| Additional Resources: | The same resources for PHYS 1101 will be used. [?] |
| Teaching Loads: | The same teaching load for PHYS 1101 will be assigned. [?] |
| Teaching Support Services: | The same supports for PHYS 1101 will be used. [?] |
| Outside Support: | No outside support is required. [?] |

